



WAKE FOREST  
UNIVERSITY

COMBINED BULLETIN OF

The Undergraduate Schools,  
Graduate School of Arts and Sciences  
School of Divinity and School of Professional Studies



Announcements for 2023-2024

June 2023



THE UNDERGRADUATE SCHOOLS  
GRADUATE SCHOOL OF ARTS AND SCIENCES  
SCHOOL OF DIVINITY AND  
SCHOOL OF PROFESSIONAL SERVICES

ANNOUNCEMENTS FOR 2023-2024

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The course offerings and requirements of the undergraduate schools are continually under examination, and revisions are expected. This Bulletin presents the offerings and requirements in effect at the time of publication and in no way guarantees that the offerings and requirements will remain the same.

Every effort is made to provide advance information of any changes.

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# HOME

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The 2023-2024 Bulletin provides course descriptions and curricular requirements effective Fall 2023 as well as current information and policies for undergraduates in Wake Forest College and the School of Business and for graduate students in the Graduate School of Arts and Sciences, School of Divinity, and School of Professional Studies.

# THE UNIVERSITY

Wake Forest University is characterized by its commitment to the liberal arts and professional education, its strong sense of community and engagement in society, and its encouragement of advancing the spirit of *Pro Humanitate*.

As an institution which respects free inquiry and expression, the University is known for upholding the teacher-scholar ideal; expecting exceptional teaching and outstanding research, scholarship and creativity; and promoting faculty interaction with students both in and out of the classroom that nurtures their intellectual and personal development.

Wake Forest University also welcomes the challenges of cultural diversity and pluralism in all their forms and is committed to addressing these challenges through the cultivation of diverse learning communities that reflect the world in which students and faculty live, work and lead.

## Background

In 1834, Wake Forest Manual Labor Institute was founded by the Baptist State Convention of North Carolina. Re-chartered in 1838 as Wake Forest College, Wake Forest is one of the oldest institutions of higher learning in the state. The School of Law was established in 1894 and was followed by a two-year medical school in 1902. Wake Forest was a college for men until World War II, when women were admitted for the first time. In 1941, the medical school moved to Winston-Salem to become affiliated with North Carolina Baptist Hospital and was renamed the Bowman Gray School of Medicine.

In 1946, the trustees of Wake Forest and the Baptist State Convention of North Carolina accepted a proposal by the Z. Smith Reynolds Foundation to relocate the College to Winston-Salem, 100 miles to the west. Charles and Mary Reynolds Babcock donated much of the R.J. Reynolds family estate as the site for the campus, and building funds were received from many sources. From 1952 to 1956, the first 14 buildings were constructed in Georgian style on the new campus. The move to Winston-Salem took place in the summer of 1956; the original, or “old” campus, is now home to Southeastern Baptist Theological Seminary.

Following the move, Wake Forest grew considerably in enrollment, programs, and stature and became a university in 1967.

The Charles H. Babcock School of Business Administration, first established in 1948, admitted its first graduate students in 1971. In 1972, the school enrolled only graduate students and the name was changed to the Charles H. Babcock Graduate School of Management; departments of business and accountancy and economics were established in the College. In 1980, the Department of Business and Accountancy was reconstituted as the Wayne Calloway School of Business and Accountancy. In 2009, the Wayne Calloway School of Business and Accountancy and the Charles H. Babcock Graduate School of Management officially merged under the name Wake Forest University Schools of Business, and in 2013, the name was changed to the Wake Forest University School of Business.

The Division of Graduate Studies, established in 1961, is now organized as the Graduate School and encompasses advanced work in the arts and sciences on the Reynolda Campus, the Brookstown campus and the Wake Downtown campus.

In 1997, the medical school was renamed the Wake Forest University School of Medicine. The University in 2001 created a subsidiary entity, Wake Forest University Health Sciences, which operates the Medical School and is governed by a board of directors that includes in its membership University trustees and the Wake Forest University president. In 2016, the School of Medicine moved its medical education programs to Innovation Quarter in downtown Winston-Salem. In 2020, a health system integration arrangement was entered into with Charlotte-based Atrium Health, Inc. and plans were announced to add a second Medical School campus in Charlotte, which will welcome its first students in 2024.

The School of Divinity was established in 1999 and is located on the Reynolda Campus, and the School of Professional Studies was started in 2021 in Charlotte.

## Governance

University governance is by an independent Board of Trustees; there are advisory boards of visitors for Wake Forest College, each professional school and Z. Smith Reynolds Library.

## Campuses

The College, the School of Business, the School of Law, the Graduate School and the School of Divinity are located on the Reynolda Campus in northwest Winston-Salem. The Wake Forest School of Medicine is located in Innovation Quarter, four miles from the Reynolda Campus, in downtown Winston-Salem. The Brookstown Campus, also located in downtown Winston-Salem, houses select Graduate School programs. The Wake Forest University Charlotte Center, located in that city’s acclaimed uptown business district, is home to select graduate business programs and the newly-formed School of Professional Studies, established in 2021. The University also offers instruction regularly at Casa Artom in Venice, at Worrell House in London, at Flow House in Vienna, in Wake Washington on Dupont Circle in Washington, D.C., and in several other places around the world.

## Academic Offerings

The College offers courses in more than 40 fields of study leading to the baccalaureate degree.

The School of Divinity offers the master of divinity degree and joint degree programs in law, education, counseling and sustainability in conjunction with other divisions of the University.

The Wake Forest School of Business offers a four-year bachelor of science degree, with majors in accountancy, business and enterprise management, finance, and mathematical business (offered jointly with the Department of Mathematics); and four graduate degree programs: master of science in accountancy (MSA), master of arts in management (MA), master of business administration (MBA), and master of science in business analytics (MSBA).

The School of Law offers the juris doctor, doctor of juridical science degree (SJD), master of studies in law degree (MSL), and master of laws in American law degrees. The school also offers joint JD programs with the School of Business, the School of Divinity and the Graduate School.

In addition to the doctor of medicine degree, the Wake Forest School of Medicine offers, through the Graduate School, programs leading to the master of science and doctor of philosophy degrees in biomedical

sciences. The School of Medicine and the School of Business offer a joint MD/MBA program.

The Graduate School confers the master of arts, master of arts in education, master of arts in liberal studies, and master of science degrees in the arts and sciences and the doctor of philosophy degree in biology, chemistry and physics. The Graduate School also offers an MFA in documentary film and dual degree programs with the School of Medicine and the School of Business. Additionally, the school also offers joint degree programs with the School of Law and the School of Divinity.

As the newest school at Wake Forest, the School of Professional Studies provides graduate degree and non-degree programs, including certificates and other credentials, focused on supporting today's working professionals with the skills and knowledge to take their careers to the next level. It also offers custom educational programs to corporate partners to support talent development needs.

### Equity in Athletics

The Higher Education Act requires that institutions of higher education make available by October 15 of each year a copy of the Equity in Athletics Disclosure Act annual report to any student who requests one. Please contact the Athletic Department to request a copy of this document.

## University Mission and Purpose Statement of Mission and Purpose

Wake Forest is a university dedicated to the pursuit of excellence in the liberal arts and in graduate and professional education. Its distinctiveness in its pursuit of its mission derives from its private, coeducational, and residential character; its size and location; and its Baptist heritage. Each of these factors constitutes a significant aspect of the unique character of the institution.

The University is now comprised of seven constituent parts: Wake Forest College, the Graduate School of Arts and Sciences, the School of Law, the School of Medicine, the School of Business, the School of Divinity, and the School of Professional Studies. It seeks to honor the ideals of liberal learning, which entail commitment to transmission of cultural heritages; teaching the modes of learning in the basic disciplines of human knowledge; developing critical appreciation of moral, aesthetic and religious values; advancing the frontiers of knowledge through in-depth study and research; and applying and utilizing knowledge in the service of humanity.

Wake Forest has been dedicated to the liberal arts for over a century and a half; this means education in the fundamental fields of human knowledge and achievement, as distinguished from education that is technical or narrowly vocational. It seeks to encourage habits of mind that ask "why," that evaluate evidence, that are open to new ideas, that attempt to understand and appreciate the perspectives of others, that accept complexity and grapple with it, that admit error, and that pursue truth. Wake Forest College has by far the largest student body in the University, and its function is central to the University's larger life. The College and the Graduate School are most singularly focused on learning for its own sake; they therefore serve as exemplars of specific academic values in the life of the University.

Beginning as early as 1894, Wake Forest accepted an obligation to provide professional training in a number of fields, as a complement to its primary mission of liberal arts education. This responsibility is fulfilled

in the conviction that the humane values embodied in the liberal arts are also centrally relevant to the professions. Professional education at Wake Forest is characterized by a commitment to ethical and other professional ideals that transcend technical skills. Like the Graduate School, the professional schools are dedicated to the advancement of learning in their fields. In addition, they are specifically committed to the application of knowledge to solving concrete problems of human beings. They are strengthened by values and goals which they share with the College and Graduate School, and the professional schools enhance the work of these schools and the University as a whole by serving as models of service to humanity.

Wake Forest was founded by private initiative, and ultimate decision-making authority lies in a privately appointed Board of Trustees rather than in a public body. Funded to a large extent from private sources of support, it is determined to chart its own course in the pursuit of its goals. As a co-educational institution it seeks to "educate together" persons of both sexes and from a wide range of backgrounds—racial, ethnic, religious, geographical, socio-economic and cultural. Its residential features are conducive to learning and to the pursuit of a wide range of co-curricular activities. It has made a conscious choice to remain small in overall size; it takes pride in being able to function as a community rather than a conglomerate. Its location in the Piedmont area of North Carolina engenders an ethos that is distinctively Southern, and more specifically North Carolinian. As it seeks further to broaden its constituency and to receive national recognition, it is also finding ways to maintain the ethos associated with its regional roots.

Wake Forest is proud of its Baptist and Christian heritage. For more than a century and a half, it has provided the University an indispensable basis for its mission and purpose, enabling Wake Forest to educate thousands of ministers and lay people for enlightened leadership in their churches and communities. Far from being exclusive and parochial, this religious tradition gives the University roots that ensure its lasting identity and branches that provide a supportive environment for a wide variety of faiths. The Baptist insistence on both the separation of church and state and local autonomy has helped to protect the University from interference and domination by outside interests, whether these be commercial, governmental, or ecclesiastical. The Baptist stress upon an uncoerced conscience in matters of religious belief has been translated into a concern for academic freedom. The Baptist emphasis upon revealed truth enables a strong religious critique of human reason, even as the claims of revelation are put under the scrutiny of reason. The character of intellectual life at Wake Forest encourages open and frank dialogue and provides assurance that the University will be ecumenical and not provincial in scope, and that it must encompass perspectives other than the Christian. Wake Forest thus seeks to maintain and invigorate what is noblest in its religious heritage.

## History and Development

Since 1834, Wake Forest has been an institution dedicated to providing a quality education to young people interested in using their knowledge and talents to better the world around them. Characterized by exceptional teaching, outstanding research and scholarship, and meaningful connection with one another, a Wake Forest education is designed to help develop leaders of character intent on working and living in the spirit of Pro Humanitate (for humanity).

The brief history of Wake Forest is useful in understanding the University as it is today and appreciating the process through which it developed. For more information and a detailed timeline illuminating Wake Forest's

history, please visit WFU Timeline (<https://zsr.wfu.edu/special/collections/archives/wfu-timeline/#event-college-building-construction>).

## Chronological History of Wake Forest University

Year	Event
1834	Founded in the town of Wake Forest, North Carolina, as Wake Forest Manual Labor Institute by the Baptist State Convention of North Carolina. <b>Samuel Wait, president</b>
1838	Named Wake Forest College
1845	<b>William Hooper, president</b>
1849	<b>John Brown White, president</b>
1854	<b>Washington Manly Wingate, president</b>
1879	<b>Thomas Henderson Pritchard, president</b>
1884	<b>Charles Elisha Taylor, president</b>
1894	School of Law established
1902	Two-year School of Medicine established
1905	<b>William Louis Poteat, president</b>
1921	First summer session
1927	<b>Francis Pendleton Gaines, president</b>
1930	<b>Thurman D. Kitchin, president</b>
1941	Relocation of the School of Medicine to Winston-Salem and eventual change of name to Bowman Gray School of Medicine and association with the North Carolina Baptist Hospital
1942	Women admitted as undergraduate students
1950	<b>Harold Wayland Tribble, president</b>
1953	Wake Forest becomes a founding member of the Atlantic Coast Conference
1956	Move to Winston-Salem, 100 miles west, in response to an endowment from the Z. Smith Reynolds Foundation. No American college has picked up roots as deep and moved them so far.
1961	Graduate School of Arts and Sciences established
1962	First major private university in the South to integrate with the enrollment of Edward Reynolds
1967	<b>James Ralph Scales, president</b>
1967	Change of name to Wake Forest University
1969	Charles H. Babcock Graduate School of Management established
1974	Purchased Casa Artom in Venice to serve as an academic international house for students

1977	Purchased Worrell House in London to serve as an academic international house for students
1983	<b>Thomas K. Hearn Jr., president</b>
1984	Sesquicentennial anniversary
1986	Established governing independence from the Baptist State Convention of North Carolina
1994	Carnegie Foundation recognizes Wake Forest as a Doctoral II institution, an upgrade that qualifies the University for consideration as a National University according to U.S. News & World Report rankings
1995	School of Business and Accountancy is renamed the Wayne Calloway School of Business and Accountancy
1996	Wake Forest becomes the first college in the history of the U.S. News rankings to advance from classification as a Regional University to a Top-30 National University. It remains the only school to make this jump.
1997	Change of name to Wake Forest University School of Medicine
1998	Purchased Flow House in Vienna to serve as an academic international house for students
1999	Divinity School founded
2005	<b>Nathan O. Hatch, president</b>
2008	Wake Forest announces it will become the first Top-30 National University to no longer require admission applicants to submit standardized test scores. This is a distinction we still hold.
2009	The Wayne Calloway School of Business and Accountancy and the Charles H. Babcock Graduate School of Management officially merged under the name Wake Forest University Schools of Business (now named Wake Forest University School of Business)
2010	Wake Forest begins a 10-year, \$625 million construction effort that enhances academic, residential and athletic facilities.
2012	Opening of Wake Forest University Charlotte Center in uptown Charlotte, N.C.
2013	Farrell Hall opens to house the Wake Forest University School of Business; the first of 10 presidential endowed chairs was created to recognize faculty who represent the teacher-scholar ideal.



2014	Thrive, a comprehensive wellbeing initiative, was launched.
2015	Summer Immersion Program opens for high school students.
2016	The School of Medicine moves its medical education programs to Innovation Quarter in downtown Winston-Salem.
2017	Opening of Wake Downtown, home to new biomedical sciences and engineering programs; opening of the Wake Washington Center at One Dupont Circle, Washington, D.C.; start of a study-abroad program for first-year students in Copenhagen; Wake Forest receives \$70 million for scholarships from the late Porter Byrum (JD '42), the largest gift in the University's history; a new residence hall honoring Maya Angelou (LHD '77) is dedicated; Program for Leadership and Character launched.
2018	Reynolda Cabinet expands to include the chief diversity officer; a three-year project to transform the 1950s Reynolds Gym into a health and wellbeing center is complete.
2019	The President's Commission on Race, Equity and Community is formed to illuminate the University's history and guide action moving forward; the University ranks 4th among U.S. doctoral colleges and universities in percentage of students studying abroad.
2020	President Nathan Hatch, on behalf of the University, apologizes for the University's role in the institution of slavery; Wake Will Lead campaign exceeds its \$1 billion goal, having created more than 50 endowed professorships, funded renovations and new buildings, provided scholarship dollars to 1 in 5 undergraduates, lowered student debt by 30% and added nearly \$400 million to the endowment; a health system integration arrangement is entered into with Charlotte-based Atrium Health, Inc. and plans are announced to add a second Medical School campus in Charlotte.
2021	School for Professional Studies opens in Charlotte; <b>Susan R. Wentz takes office as president on July 1.</b>

2022

Atrium Health joins with Advocate Aurora Health, a leading healthcare organization in Chicago and Milwaukee, to create a new entity called Advocate Health, headquartered in Charlotte. The role of Wake Forest Baptist Medical Center and Wake Forest University School of Medicine as the academic core of Atrium Health will be expanded to serve Advocate Health.

## Accreditation

**Wake Forest University** is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, and doctorate degrees. Questions about the accreditation of Wake Forest University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website ([www.sacscoc.org](http://www.sacscoc.org) (<https://www.sacscoc.org/>)).

**The College of Arts and Sciences** has a number of program-level accreditations, including the following.

- The Department of Chemistry's BS programs are approved by the American Chemical Society (ACS).
- The School Counseling Program and the Clinical Mental Health Program are accredited by CACREP (Council on Accreditation of Counseling and Related Programs). Additionally, the School Counseling Program is accredited by the Council for Accreditation of Education Preparation (CAEP) and by the North Carolina Department of Public Instruction (NCDPI).
- Teacher licensure programs in the Department of Education are approved by the North Carolina Department of Public Instruction (NCDPI).
- The Department of Engineering's BS Engineering degree is ABET Accredited by the Engineering Accreditation Commission (EAC).

**The School of Business** is accredited by the Association to Advance Collegiate School of Business (AACSB International).

**The School of Divinity** is accredited by the Commission on Accrediting of the Association of Theological Schools in the United States and Canada (ATS).

**The Graduate School** has a number of program-level accreditations, including the following.

- The Genetic Counseling Program is accredited by the Accreditation Council for Genetic Counseling.
- The School Counseling Program and the Clinical Mental Health Program are accredited by CACREP (Council on Accreditation of Counseling and Related Programs). Additionally, the School Counseling Program at Wake Forest University is accredited by the Council for Accreditation of Education Preparation (CAEP) and by the North Carolina Department of Public Instruction (NCDPI).

**The School of Law** is accredited by the American Bar Association (ABA). The School of Law is a member of the Association of American Law Schools, and is listed as an approved school by the Council of the Section of Legal Education and Admissions to the Bar of the American Bar

Association and by the Board of Law Examiners and the Council of the North Carolina State Bar.

**The School of Medicine** is a member of the Association of American Medical Colleges and has a number of program-level accreditation, including the following.

- The Doctorate of Medicine Program is accredited by the Liaison Committee on Medical Education (LCME), the joint accrediting body of the Association of American Medical Colleges and the American Medical Association.
- The Nurse Anesthesia Program (NAP) is accredited by the Council on Accreditation for Nurse Anesthesia Educational Programs (COA).
- The Physician Assistant program is accredited by the Accreditation Review Commission on Education for the Physician Assistant Inc. (ARC-PA).

#### Internship/Residency

The American Dental Association, Commission on Dental Accreditation accredits Post-Doctoral-Advanced dental education programs (advanced education in general dentistry and general practice residency).

The American Psychological Association, Commission on Accreditation accredits Professional Psychology (IPSY).

**Wake Forest University is a member of many major institutional organizations and associations** at the national, regional and statewide levels, including the following: The American Council on Education, the Association of American Colleges, the National Association of Independent Colleges and Universities, the Council of Graduate Schools in the United States, the Commission on Colleges of the Southern Association of Colleges and Schools, Oak Ridge Associated Universities, Southern Universities Conference, the North Carolina Conference of Graduate Schools, the North Carolina Association of Colleges and Universities, the North Carolina Department of Public Instruction and North Carolina Independent Colleges and Universities. In addition, many offices of the University are members of associations which focus on particular aspects of university administration.

Wake Forest has chapters of the principal national social fraternities and sororities, professional fraternities and honor societies, including Phi Beta Kappa and Sigma Xi. There is an active chapter of the American Association of University Professors on campus.

## Degrees and Certificates Offered

### Biomedical Sciences

Code	Title	Hours
	Addiction Research and Clinical Health	MS
	Biochemistry and Molecular Biology	BS, PhD
	Biomedical Engineering	MS, PhD
	Biomedical Informatics	MS
	Biomedical Science	MS
	Cancer Biology	PhD
	Clinical Research Management	MS-online
	Clinical and Translational Investigation	Certificate
	Comparative Medicine	MS
	Genetic Counseling	MS
	Health Disparities in Neuroscience-related Disorders	MS

Healthcare Leadership	MHL-online
Integrative Physiology and Pharmacology	PhD
Learning Health System Science	Certificate
Medical Physics	MS, PhD, Certificate
Microbiology and Immunology	PhD
Molecular Genetics and Genomics	PhD
Molecular Medicine and Translational Science	MS, PhD, PhD/MMS
Neuroscience	MS, PhD, MS/BS, MS/BA
Translational Biotechnology	MS, Certificate
Translational & Health System Science	MS, MS/MD
Dual Degree	PhD*/MD, PhD*/MBA

### Business and Management

Code	Title	Hours
	Accountancy	BS, MS, MSA
	Finance	BS
	Business Analytics	MSBA
	Business and Enterprise Management	BS
	Business Administration and Management	MBA, MSM
	Mathematical Business	BS
	Dual Degree	PhD*/MBA

### Counseling

Code	Title	Hours
	Counseling	MA
	Counseling	MA-online
	Human Services	MAHS-online
	Dual Degree	MDiv/MA

### Computer and Information Sciences

Code	Title	Hours
	Computer Science	BA, BS, BS/MS, MS
	Data Science	Certificate

### Education

Code	Title	Hours
	Education	BA, MAEd
	Elementary Education	BA
	Curriculum, Instruction, and Assessment	Certificate

Dual Degree	MDiv/ MAEd
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## Engineering

Code	Title	Hours
Engineering		BS

## Foreign Languages

Code	Title	Hours
Chinese Language and Culture		BA
Japanese Language and Culture		BA
French Studies		BA
German		BA
German Studies		BA
Greek		BA
Latin		BA
Russian		BA
Spanish		BA

## Humanities

Code	Title	Hours
Classical Languages		BA
Classical Studies		BA
English		BA, MA
History		BA
Philosophy		BA
Religious Studies		BA, MA, JD/MA

## Interdisciplinary Programs

Code	Title	Hours
African American Studies		BA
Bioethics		Certificate, MA
Biomedical Research Ethics		Certificate
Clinical Bioethics		Certificate
Combined Bioethics		BS/BA and MA, MDiv/MA, JD/MA, MD/MA
Environmental Science		BA
Environmental and Sustainability Studies		BA
Intercultural Services in Healthcare		MA, Certificate
Interdisciplinary Major		BA, BS
Interpreting and Translation Studies		MA
Interpreting Studies		Certificate
Medieval & Early Modern Studies		Certificate
Sustainability		MA, Certificate
Teaching of Interpreting		MA, Certificate

Translation Studies	Certificate
Women's, Gender and Sexuality Studies	BA

## Law

Code	Title	Hours
Law		JD, LL.M., MSL- online, SJD
Dual Degree		JD/MA in Bioethics, JD/MA in Religious Studies, JD/MA in Sustainability, JD/MBA, JD/MDiv
Business Law & Compliance		Certificate
Health Law & Policy		Certificate
Human Resources		Certificate
Workplace Legal Fundamentals		Certificate

## Liberal Studies

Code	Title	Hours
Liberal Arts Studies		MA

## Life and Physical Sciences

Code	Title	Hours
Biology		BA, BS, MS, PhD
Chemistry		BA, BS, MS, PhD
Health and Exercise Science		BS, MS
Physics		BA, BS, MS, PhD
Biophysics		BS
Structural and Computational Biophysics		Certificate

## Mathematics and Statistics

Code	Title	Hours
Applied Mathematics		BS
Applied Statistics		BS
Statistics		BA, BS, MS
Mathematics		BA, BS, MS
Mathematical Business		BS
Mathematical Economics		BS

## Medicine

Code	Title	Hours
Medicine		MD, MD/ PhD*, MD/ MA in Bioethics,

	MD/MS in Translational and Health System Science	MDiv/ MA in Bioethics, MDiv/ MA in Counseling, MDiv/ MA in Sustainability
Nurse Anesthesia	DNP	
Nursing Practice	DNP	
Physician Assistant	MMS, MMS/ PhD in Molecular Medicine and Translational Science	

Professional Studies

Code	Title	Hours
Agile Leadership		Certificate
Communications		MCOM
Curriculum and Instruction		MCI
Digital Marketing		MDM
Digital Marketing and Analytics		Certificate
Educational Leadership		MEL
Ethical and Inclusive Leadership		Certificate
FinTech		Certificate
Financial Technology and Analytics		MFTA
Health Administration		MHA
Health Informatics		MHI
Project Management		MPM, Certificate

Social and Behavioral Sciences

Code	Title	Hours
Anthropology		BA
Communication		BA, MA
Critical and Creative Media		BA
Economics		BA
Politics and International Affairs		BA
Psychology		BA, MA
Sociology		BA

Theology

Code	Title	Hours
Divinity		MDiv
Dual Degree		MDiv/ JD, MDiv/ MAEd,

Visual and Performing Arts

Code	Title	Hours
Art History		BA
Studio Art		BA
Music		BA
Theatre		BA
Documentary Film		MA, MFA

\* Dual degrees that include the PhD are available in all disciplines in which the PhD is offered.

Buildings and Grounds

The *Reynolda Campus* of Wake Forest, which opened in the summer of 1956 upon the institution’s move from its original home near Raleigh, is situated on approximately 340 acres. Its physical facilities consist of more than 80 buildings, most of which are of modified Georgian architecture and constructed of Old Virginia brick trimmed in granite and limestone.

The main Quadrangle, *Hearn Plaza*, is named for Wake Forest’s 12th president, Thomas K. Hearn Jr., who served from 1983 to 2005. *Manchester Plaza*, named for benefactors and Wake Forest parents Doug Manchester (P ’03, P ’06) and Elizabeth Manchester (P ’03, P ’06), is located on south campus. The *Reynolda Gardens complex*, consisting of about 128 acres and including *Reynolda Woods*, *Reynolda Village*, *Reynolda Gardens*, and *Reynolda House and Museum of American Art*, is adjacent to the campus. The *Graylyn International Conference Center* is nearby.

*Wait Chapel*, named in memory of Samuel Wait, the first president of the College, seats 2,227. The *Wait Chapel* tower contains the Janet Jeffrey Carlile Harris Carillon, an instrument of 48 bells.

*Divinity and Religious Studies Building* houses the Department for the Study of Religions and the School of Divinity.

*Reynolda Hall*, across the upper plaza from Wait Chapel, houses most of the administration, including offices of the President, the Provost, the Dean of the College, the Center for Global Programs and Studies, the Office of Personal and Career Development, and the University Chaplain. It is also home of a large dining facility for the Reynolda Campus.

*Benson University Center*, named for the father of benefactor Clifton Linwood Benson Jr. (’64), houses the Student Union and is the central hub for student activities, services, and events. The bottom floor of Benson is the home to Pugh Auditorium movie theater and several food venues, and the LGBTQ Center is located on the second floor.

*Z. Smith Reynolds Library* and its *Edwin Graves Wilson Wing*, named in honor of the Class of 1943 graduate who became a distinguished English professor and administrator at his alma mater, house the main collection



of books and documents on the Reynolda Campus. Along with eight floors of open stacks, it has reading and reference rooms for study.

*Carswell Hall*, named in honor of alumnus and benefactor Guy T. Carswell (1922, LLD '62), houses the Department of Communication and the Annenberg Forum, a large multimedia lecture space.

*Winston Hall* houses the Department of Biology and *Salem Hall* is home to the Department of Chemistry. Both buildings have laboratories as well as classrooms and special research facilities. The *Olin Physical Laboratory* houses the Department of Physics.

*Harold W. Tribble Hall*, named for Wake Forest's 10th president, accommodates primarily humanities departments. It has seminar rooms, a philosophy library, and a multimedia lecture space, DeTamble Auditorium.

*The Timothy S.Y. Lam Museum of Anthropology*, named for alumnus, parent, and benefactor Timothy See Yiu Lam ('60, P '93, P '98) houses North Carolina's only museum dedicated to the study of world cultures.

*Calloway Center for Mathematics and Computer Science* was named in honor of former University Trustee Wayne Calloway ('59, LLD '88, P '95). The building houses the Departments of Mathematics, Statistical Sciences, and Computer Science in Manchester Hall and the Departments of Politics and International Affairs, Economics, and Sociology in Kirby Hall.

*Farrell Hall*, named for Wake Forest parents and benefactors Michael (LLD '13, P '10) and Mary (P '10) Farrell, broke ground in April 2011 and is home to the School of Business. It hosted its first classes in July 2013 and was formally dedicated in November 2013.

*William B. Greene Jr. Hall*, named for alumnus and benefactor Bill Greene ('59), houses the Departments of Psychology, German and Russian, French Studies, and Spanish.

*James R. Scales Fine Arts Center*, named for James Ralph Scales, Wake Forest's 11th president, supports the functions of studio art, theatre, musical and dance performances, and instruction in art history, drama and music. Off its main lobby is the *Charlotte and Philip Hanes Gallery*, a facility for special exhibitions. The art wing includes spacious studios for drawing, painting, sculpture, and printmaking, along with a smaller gallery and classrooms. Adjacent to the art wing is a dance studio for performances and rehearsals. The theatre wing has design and production areas and two technically complete theatres, the larger of traditional design and the smaller for ring productions. The music wing contains classrooms, practice rooms for individuals and groups, the offices of the Department of Music and Brendle Recital Hall for concerts and lectures.

*Worrell Professional Center*, named for alumnus and benefactor T. Eugene Worrell ('40, LHD '79), houses the School of Law. Recent additions to Worrell in 2016 provided a new home for instruction in the Department of Health and Exercise Science.

The *ROTC Building* is home to the Wake Forest Reserve Officers Training Corps program and military science studies.

*Wake Forest Wellbeing Center*, comprised of the *Sutton Center* and the *Historic W.N. Reynolds Gymnasium*, was reimagined and officially dedicated in 2018. The *Sutton Center*, named for alumnus and benefactor Ben Sutton ('80, JD '83, P '14, P '16, P '19), provides a large venue for wellbeing, social and academic gatherings; and *Historic W.N. Reynolds Gymnasium*, named for a prominent member of the family that helped

bring the campus to Winston-Salem, has courts for indoor sports, a swimming pool, and Student Health Service.

Wake Forest is home to outstanding athletics facilities designed to enhance the health, wellbeing, and competitive excellence of all Demon Deacon teams.

Adjacent to the *Wellbeing Center* is *Kentner Stadium*, *Manchester Athletic Center*, and the *Kenneth D. Miller Center*, all of which are named for University benefactors. *Kentner* is home to the Demon Deacon field hockey team and the *Manchester* and *Miller Centers* house athletics administration.

The newest facilities on campus opened in September 2019. The *Sutton Sports Performance Center*, also named for Ben Sutton, and the *Shah Basketball Performance Center*, honoring benefactor and alumnus Mit Shah ('91), are dedicated to the strength, conditioning, sport-specific practice, and nutrition of student-athletes.

*Spry Stadium*, home of Wake Forest men's and women's soccer, is situated across from North Campus housing. Named for the father of benefactor William D. Spry, Jr. (P '97), the facility is one of the best in the country.

*McCreary Field House*, named for alumnus and benefactor Bob McCreary ('61), opened in 2016, providing indoor practice facilities and weightlifting for all of Wake Forest's intercollegiate sports teams.

The *Arnold Palmer Golf Complex*, named in honor of benefactor and Life Trustee Arnold Palmer ('51, LLD '70), includes the *Dianne Dailey Golf Learning Center*, which opened in 2010 and is named for the coach who led the women's golf program for 30 years, and the *Haddock Golf Center*, completed in 2016 and named for Jesse Haddock ('52, P '68), who coached the Deacons to three NCAA championships in his 32 years of service.

The three largest athletics venues are located 1.3 miles off the Reynolda Campus. *BB&T Field* is the home of the football team; basketball teams play in *Lawrence Joel Veterans Memorial Coliseum*, named after a decorated Vietnam War veteran from Winston-Salem; and baseball's home is *David F. Couch Ballpark*, named for a 1984 graduate and benefactor.

*Alumni Hall* houses University Advancement, the University Police Department, and the Department of Parking and Transportation.

*Porter B. Byrum Welcome Center*, named for alumnus and benefactor Porter B. Byrum (JD '42), is at the entrance to Wake Forest. The building allows prospective students and their families an opportunity to learn more about the University and to meet with admissions staff.

The Wake Forest campus has a wide variety of housing options available to students in residence halls named for alumni, faculty, benefactors, and Wake Forest presidents: *Babcock Hall*, *Bostwick Hall*, *Collins Hall*, *Davis Hall*, *Efird Hall*, *Huffman Hall*, *Johnson Hall*, *Kitchin Hall*, *Luter Hall*, *Martin Hall*, *North Campus Apartments*, *Palmer Hall*, *Piccolo Hall*, *Polo Hall*, *Poteat Hall*, *Student Apartments*, *South Hall* and *Taylor Hall*. *Dogwood and Magnolia Residence Halls* opened in August 2013 and are coeducational by floor, wing, or apartment. In January 2014, the *North Dining* facilities opened adjacent to the new residence halls providing alternative dining options to the north side of campus. In January 2017, *Maya Angelou Residence Hall*, named in honor of the distinguished Wake Forest faculty member and internationally acclaimed poet, opened. It is also home to the Office of Residence Life and Housing and the Deacon OneCard Office.

In January 2017, converted tobacco warehouses became the home of new degree programs in biomedical sciences and engineering. Known as *Wake Downtown*, this academic extension is located a 13-minute shuttle ride from the Reynolda Campus. That same year, the University opened *Wake Washington Center*, a home of academic operations on DuPont Circle in Washington, D.C.

Wake Forest is the only Top-30 national university to own academic-residential houses in three foreign countries. The University purchased *Casa Artom*, located on the Grand Canal in Venice and named for beloved medical school professor Dr. Camillo Artom, in 1974. Three years later, it acquired a London facility and named it *Worrell House* in honor of benefactor T. Eugene Worrell ('40, LHD '79) and his wife, Anne Worrell. And in 1998, *Flow House*, located in Vienna and named in honor of alumnus, benefactor, and Life Trustee Victor I. Flow ('52, P '83) and his wife, Roddy Flow (P '83), became part of the Wake Forest family.

## Enrollment

### All Schools—Fall 2022

School	Men	Women	Total
Undergraduate Schools	2445	3002	5447
The Graduate School (Reynolda Campus)	227	566	793
The Graduate School (Bowman Gray Campus)	158	242	400
The School of Law	242	316	558
Divinity School	28	37	65
School of Business (Graduate)	452	348	800
The Wake Forest School of Medicine (Includes Physician Assistant, Nurse Anesthesia and Doctor of Nursing Practice)	294	544	838
University Totals	3,876	5,087	8,963

Geographic Distribution—Undergraduates

### By State (2022)

State	Number
Alabama	35
Alaska	2
Arizona	8
Arkansas	7
California	204
Colorado	55
Connecticut	210
Delaware	24
District of Columbia	31
Florida	318
Georgia	247
Hawaii	2
Idaho	2
Illinois	225
Indiana	20
Iowa	4
Kansas	8

Kentucky	48
Louisiana	35
Maine	14
Maryland	244
Massachusetts	239
Michigan	20
Minnesota	48
Mississippi	4
Missouri	44
Montana	3
Nebraska	2
Nevada	5
New Hampshire	13
New Jersey	368
New Mexico	3
New York	494
North Carolina	885
North Dakota	0
Ohio	89
Oklahoma	8
Oregon	6
Pennsylvania	193
Rhode Island	10
South Carolina	127
South Dakota	3
Tennessee	120
Texas	176
Utah	2
Vermont	6
Virginia	232
Washington	25
West Virginia	15
Wisconsin	15
Wyoming	2

### Countries Represented (Fall 2022)

- Argentina
- Austria
- Bahamas
- Bahrain
- Bolivia
- Brazil
- Canada
- China
- Colombia
- Croatia
- Cyprus
- France
- Germany
- Guatemala
- Iceland
- India

- Indonesia
- Ireland
- Italy
- Japan
- Mexico
- Netherlands
- New Zealand
- Oman
- Pakistan
- Peru
- Philippines
- Russia
- South Africa
- South Korea
- Spain
- Sweden
- Switzerland
- Taiwan
- Tunisia
- Turkey
- United Kingdom
- Unknown
- Vietnam

International Students: 466

## University Policies

- Family Educational Rights and Privacy Act
- Intellectual Property and Copyright Policies
- Non-Discrimination Statement
- Policy on Sexual Harassment
- Summary of Computing Rights and Responsibilities

**Wake Forest University endorses, as a basic principle of University life, the concept of responsible student freedom**, which carries with it the recognition by each student of the rights and obligations of other members of the University community.

The University encourages students to conduct themselves as mature men and women and invites them to participate in the formation of rules and to assume major responsibility in judicial decisions. At the same time, all participants in University life must remember that, by the charter of the University, the board of trustees is ultimately responsible for the University and for its operation. Wake Forest also expects its students to abide by local, state, and federal laws, as well as by generally accepted moral standards. Although the University's role is not to duplicate civil law enforcement or judicial action, it may exercise authority for reasons appropriate to its function as an educational institution.

In keeping with its historic concern for students individually and corporately, Wake Forest has a legitimate interest in their welfare in and out of class, on campus and off. The University is concerned with student actions that are inconsistent with student obligations to the educational community. When, in the opinion of the University, the conduct of a student at any place is reprehensible or detrimental to the best interests

of that student, his or her fellow students, or the University, appropriate disciplinary action will be taken.

Wake Forest believes in individual freedom, not as a right, but as a responsibility: freedom to be and to become. Attendance at Wake Forest is a privilege, not a right. The University's traditions and principles, accepted by each student in his or her voluntary registration, evolve from the core of this individual concept of freedom and responsibility. Therefore, it is assumed that the student who elects to come to Wake Forest does so with the intent of being, in fact and in spirit, a cooperating member of this community.

## Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

Directory information may be disclosed by Wake Forest for any purpose in its discretion without the consent of the student. Students have the right to refuse to permit the designation of any or all of the above information as directory information. In that case, this information will not be disclosed except with the consent of the student, or as otherwise allowed by FERPA. Any student refusing to have any or all of the designated directory information disclosed must file written notification to this effect with this institution at the Office of the Registrar. Forms are available at that office. If a refusal is not filed, Wake Forest assumes that a student does not object to the release of the directory information designated.

1. **Right to inspect and review the student's education records within 45 days of the day the University receives a request for access.** Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the students of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be made.
2. **The right to request amendment of the student's education records that the student believes are inaccurate or misleading.** Students may ask the University to amend a record that they believe is inaccurate or misleading. The student should write the University official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. **The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosures without consent.** One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement personnel and health staff); a person serving on the board of trustees; a student serving on an official committee,

such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks; or a person, company, or governmental unit with whom the University has contracted to perform duties or services involving education records. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

The following information regarding students is considered directory information:

- a. name
  - b. address
  - c. telephone number
  - d. electronic mail addresses
  - e. date and place of birth
  - f. major field of study
  - g. enrollment status (undergraduate or graduate, full or part-time)
  - h. grade level
  - i. participation in officially recognized activities and sports
  - j. weight and height of members of athletic teams
  - k. dates of attendance
  - l. degrees and awards received
  - m. the most recent previous educational agency or institution attended by the student, and
  - n. other similar information such as a photograph.
4. **The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA.** The name and address of the Office that administers FERPA is:  
 Family Policy Compliance Office, U.S. Department of Education  
 400 Maryland Avenue S.W.  
 Washington, DC 20202-4605.

## Intellectual Property and Copyright Policies

### Intellectual Property Policy

Review the policy here (<https://policy.wfu.edu/reynolda-campus-intellectual-property-policy/>).

### Copyright Policy

Review the policy here (<https://policy.wfu.edu/copyright-policy/>).

### Non-Discrimination Statement

Wake Forest University is committed to diversity, inclusion and the spirit of its motto, *Pro Humanitate*. In adherence with applicable laws and as provided by University policies, the University prohibits discrimination in its employment practices and its educational programs and activities on the basis of race, color, religion, national origin, sex, age, sexual orientation, gender identity and expression, genetic information, disability and veteran status.

The following person has been designated to handle inquiries regarding the University's non-discrimination policies:

Title IX Coordinator

Section 504/ADA Coordinator  
 titleixcoordinator@wfu.edu  
 Reynolda Hall 307 Winston-Salem, NC 27106  
 336-758-7258

Assistant Vice President Human Resources  
 AskHR@wfu.edu  
 2958 Reynolda Road, Winston-Salem, NC 27106  
 (336)758-4700

Deputy Title IX Coordinators have also been designated and represent various University schools/divisions. Contact information for each Deputy Coordinator can be obtained from the University's Title IX Coordinator.

Inquiries concerning the application of anti-discrimination laws may be referred to the individuals listed above or to the Office for Civil Rights, United States Department of Education. For further information on notice of non-discrimination, visit the Office of Civil Rights website (<https://ocras.ed.gov/contact-ocr/>) for the address and phone number of the U. S. Department of Education office that serves your area, or call 1-800-421-3481.

## Policy on Sexual Harassment

Wake Forest University expects all members of its community to act in respectful and responsible ways towards each other. Wake Forest University is committed to providing programs, activities and an educational environment free from sex discrimination. This Student Sexual Misconduct Policy sets forth resources available to students, describes prohibited conduct, and establishes procedures for responding to reports of sexual misconduct (including sexual assault, sexual harassment, and other unwelcome sexual behavior).

As a recipient of Federal funds, Wake Forest is required to comply with Title IX of the Higher Education Amendments of 1972, 20 U.S.C. § 1681 et seq. ("Title IX"), which prohibits discrimination on the basis of sex in education programs or activities. Sexual misconduct, as defined in this Policy, is a form of sex discrimination prohibited by Title IX.

This policy addresses complaints of sexual misconduct where the accused is a student of Wake Forest University. Complaints relating to sexual misconduct by a member of the University faculty or staff may be reported to the University's Title IX Coordinator. Details regarding Wake Forest's policy directed at sexual harassment by employees may be found at <http://www.wfu.edu/hr/policies/II-3.pdf>.

## Summary of Computing Rights and Responsibilities

The policy applies to all computer and computer communication facilities owned, leased, operated, or contracted by the University. This includes, but is not limited to, tablets, personal computers, laptops, smart phones, computer networks, computer peripherals, and software, whether used for academic, administration, research or other purposes. This also includes use of University data or access to computer systems by personal devices such as computers, tablets, and smart phones by faculty, staff, students and guests. The policy extends to any use of University facilities to access computers elsewhere.

Wake Forest University provides each of its students and faculty with an email account. Outside of the classroom, email is an important means of communication between faculty, staff, and students. It is the



responsibility of the student to regularly monitor his or her Wake Forest email account for University communications.

**Basic Principles.** The University's computing resources are for administrative, instructional, educational, and research use by the students, faculty, staff, vendors and contractors of Wake Forest University. Ethical standards which apply to other University activities (Honor Code, Social Regulations and Policies, and all local, state, and federal laws) apply equally to use of University computing resources.

As in all aspects of University life, users of the University's computing resources should act honorably and in a manner consistent with ordinary ethical obligations. Cheating, stealing, making false or deceiving statements, plagiarism, vandalism, and harassment are just as wrong in the context of computing resources as they are in all other domains.

Use of campus resources is restricted to authorized users. For the purposes of this policy, an "authorized user" is defined as an individual who has been assigned a login ID and authentication credentials such as a password for use of computing resources. Authorized users are responsible for the proper use of the accounts assigned to them under their login ID and authentication credentials. Users are also responsible for reporting any activities which they believe to be in violation of this policy, just as students are responsible for reporting Honor Code violations.

Use of these resources must be done:

- *In a manner consistent with the terms under which they were granted access*
- *In a way that respects the rights and privacy of other users; so as not to interfere with or violate the normal, appropriate use of these resources; and*
- *In a responsible manner and consistent with University policies and the workplace and educational environment.*

For faculty, staff, vendors, contractors, and other non-students, limited personal use of University issued computing resources is authorized so long as it does not impact University computers, network, or interfere with work related activities and is not prohibited by this or other policies.

For students, personal activity is allowed as long as it does not interfere with other University computers or network bandwidth and is not prohibited by this or other policies.

**Systems Monitoring.** This statement serves as notice to all users of campus computing resources that regular monitoring of system activities occurs and users should have no expectation of privacy while on the WFU network or computer systems. Only people engaged in supporting University computing resources are authorized to perform monitoring of systems and only for systems under their control.

**Policy Violations.** Suspected violation of this policy will be handled through the appropriate University process or office, such as administrative procedures, The Honor and Ethics Council, the Graduate Council, Dean's office, or Human Resources.

Violation of this policy may result in one or more of the following, in addition to any other actions deemed appropriate by the applicable authority:

- *Suspension of one's ability to perform interactive logins on relevant machines on campus.*
- *Suspension of one's ability to use the University's computing resources.*

- *Suspension of one's ability to send or receive email.*
- *Increased monitoring of further computer activity (beyond normal systems monitoring).*

**Locating Computing Policy Information and Policy Updates.** The above summary is based on the "Policy on Ethical and Responsible Use of Computing Resources". These policies may be updated, shortened, or expanded from time to time.

Full policies can be reviewed online (<https://is.wfu.edu/services/policies-and-standards/>).

## University Services

- Global Affairs
- Information Systems
- Libraries
- Parking and Transportation
- Student Health and Wellbeing
- University Police and Safety Services

## Global Affairs

- Center for Global Programs & Studies (GPS)
- Center for Immigration Services & Support (ISS)
- Center for Research on Abroad and International Student Engagement (RAISE)

## Center for Global Programs & Studies (GPS)

The Center for Global Programs and Studies (GPS) advances a global campus community and cultivates global mindsets through collaborative initiatives, programs, and services for the entire University. A complete list of programs and services offered by GPS is available here (<http://global.wfu.edu>).

Contact Information:

The Center for Global Programs and Studies  
Reynolda Hall, Room 116  
Phone: 336-758-5938

## Global Abroad and Away

Global Abroad and Away (<http://studyabroad.wfu.edu/>) manages the extensive offerings of Wake Forest and Affiliate study abroad/away programs and provides advising to all students pursuing these academic opportunities. Other programs and services include:

- Study abroad/away scholarships (<http://studyabroad.wfu.edu/funding/>)
- Passport Assistance
- Community-Based Global Learning (CBGL) programs (<https://global.wfu.edu/staff/international-service/>)
- Cross-Cultural Engagement (CCE) program (<https://global.wfu.edu/global-abroad/cross-cultural-engagement/>)
- Contemporary Global Studies Minor coordination and support (<https://global.wfu.edu/global-campus/international-minors/>)

- Global Trade and Commerce Studies Minor coordination and support (<https://global.wfu.edu/global-campus/international-minors/global-trade-commerce-studies/>)

## Global Campus Programs

The Global Campus Programs (GCP) team is responsible for the planning, design, and implementation of programs focused on building a global campus community. The GCP team is both proactive and responsive to developing collaborative programming based on the needs of students, faculty, staff, and campus partners with the goal of enhancing global mindsets. Hallmark programs include: Global Village Living and Learning Community (<https://global.wfu.edu/global-campus/global-villages/>), Global Laureates Academy (<https://global.wfu.edu/global-laureates-academy/>), and the WISE Conference (<https://global.wfu.edu/global-campus/wise-conference/>) for International Educators.

## Center for Immigration Services & Support (ISS)

The Center for Immigration Services & Support (ISS) (<https://global.wfu.edu/iss/>) provides visa processing and immigration support to international students, faculty, and staff during their time at Wake Forest and beyond. Through maintaining compliance with immigration regulations and accurate reporting to several federal government agencies, the ISS team ensures Wake Forest can continue to host international students, faculty, and staff on its campuses. The ISS staff are the only Designated School Officials (DSO) for Wake Forest University, meaning we are your resources for all immigration-related guidance. ISS organizes many cultural activities and immigration information sessions throughout the year to educate campus stakeholders on various processes and procedures. The experts in ISS also advocate for services that will enhance the experience of our international population on campus. You may contact ISS by email at [iss@wfu.edu](mailto:iss@wfu.edu).

## Center for Research on Abroad and International Student Engagement (RAISE)

The RAISE Center (<https://raisecenter.wfu.edu/>) seeks to understand and enhance the experiences, engagement, and development of abroad and international students. Composed of researchers across multiple institutions, the RAISE Center provides the following opportunities for WFU faculty, staff, and students to engage in research and practice in international education:

- Research on International Student Engagement (<https://raisecenter.wfu.edu/projects/project-rise/>) (Project RISE)
- Academic Research on Education Abroad (<https://raisecenter.wfu.edu/projects/area-database/>) (AREA) Database
- Global Accelerator Program (<https://global.wfu.edu/global-outreach/wfugap/>) provides faculty cross-cultural teaching opportunities in China

For more information, please contact [raise@wfu.edu](mailto:raise@wfu.edu)

## Information Systems

The Office of Information Systems (<https://is.wfu.edu/>) (IS) is the primary resource for all things computing at Wake Forest University (WFU). Our

mission is to empower the WFU community in the use of information and digital technologies towards intellectual exploration, informed institutional decisions, and the creation and dissemination of knowledge. Driven by the core values of innovation, collaboration, and leadership, IS provides secure, reliable, and integrated technology resources that advance Wake Forest students' academic goals.

All students are given a WFU Account. This account is maintained as long as the student is enrolled and provides access to networked computer resources such as email, client software packages, various courseware applications, and administrative services. Students are able to reset their forgotten password or change their expired password through a self-service password management portal, [account.wfu.edu](https://account.wfu.edu) (<https://account.wfu.edu/pwm/public/>). Eduroam provides a secured WiFi network for visiting students to use their home institution's WiFi credentials to access WiFi network services. Our students can take advantage of this service by using their Wake Forest credentials when visiting other eduroam participating institutions.

All undergraduate students are required to have a laptop with minimum configuration requirements to be able to handle all academic software. Students have the choice to bring their own device or purchase a laptop through the WakeWare (<http://wakeware.wfu.edu/>) program. WakeWare provides students the opportunity to purchase a specially selected laptop configured to run academic technology at a negotiated price, bundled with extended warranties and protection, and provided with on-campus support. WakeWare evaluates new models, as available, to offer the most up-to-date technology to our students. WakeWare (<http://wakeware.wfu.edu/>) laptops have been thoroughly tested to ensure compatibility with academic software. Students receiving institutional aid qualify for a grant to cover the full cost of the WakeWare Standard computer and have two years to redeem their grant.

The IS Service Desk, located on the main floor of the Z. Smith Reynolds Library, provides on-campus support for all IT-related questions and assistance. The Tech Shop, located in the IS Service Desk, is an authorized Apple, Dell, Lenovo ThinkPad, and Microsoft Surface service center. With extended Service Desk hours, the online help portal, AskDeac (<https://help.wfu.edu/>), as well as Live Chat, there are extensive options for getting IT help. In addition, the IS website (<https://is.wfu.edu/>) provides timely announcements and in depth service-related content.

All students have free access to licensed software and tools, via Software@WFU (<http://software.wfu.edu/>), for coursework, degree projects, and research. Available software includes Adobe Creative Cloud (Photoshop, Illustrator, Premiere, InDesign and others), Canvas, Google Workspace, Maple, MatLab, Microsoft Office 365 and more.

For advanced software with high computing requirements, WFU offers cloud-based virtualization. Engineering, among other departments, utilize a performance Workspace to run software, such as AutoCAD and COMSOL, needed for their Capstone Projects. The Wake Forest University Distributed Environment for Academic Computing (DEAC) cluster, a Linux-based High Performance Computing cluster, provides supercomputing services for academic research and coursework. These systems are available to students 24 hours a day through the Wake Forest University Network.

Information Systems maintains an extensive array of online resources, the Wake Information Network (WIN), Workday, Banner, and more, that support University admissions, student registration, grade processing, and other academic applications.

Wake Forest has a student-run makerspace, named the WakerSpace (<https://is.wfu.edu/academic-technology/wakerspace/>). The space allows students to not only build physical projects using technology such as 3D printers, laser cutters, and solder stations, but also to learn skills such as podcasting, knitting, sewing, and woodworking through workshop partnerships with Facilities, Information Systems, and other resources across campus. By offering both academic and non-academic programs, the WakerSpace serves a broad range of interests across campus. Students also have unlimited access and full-time support using the One Button Studio (<https://is.wfu.edu/services/one-button-studio/>), a fully automated video production facility, located in Z. Smith Reynolds Library behind the IS Service Desk.

Information Systems supports cable television and streaming services. All residence hall rooms are equipped with cable TV connections and/or the ability to stream cable TV. Cable and/or streaming services provide access to campus information, news, weather, select HDTV channels and DVR recording via Stream2 (<https://is.wfu.edu/services/stream2/>).

The expanded cybersecurity strategy (<https://is.wfu.edu/infosec/>) and policies (<https://policy.wfu.edu/>), including an annual awareness campaign and KnowBe4 security awareness training maximizes Information Systems' ability to keep the campus community and its assets safe while delivering all the necessary tools and support to ensure successful learning and teaching.

Students have access to additional computing resources outside the University. The University is a member of:

- The Inter-University Consortium for Political and Social Research (ICPSR), located at the University of Michigan. Membership in ICPSR provides faculty and students with access to a large library of data files, including public opinion surveys, cross-cultural data, financial data, and complete census data.
- EDUCAUSE, a national consortium of colleges and universities concerned with computing issues.
- Eduroam, a global wireless network access service, available on thousands of partner campuses (<https://incommon.org/eduroam/eduroam-u-s-locator-map/>) for research and education, accessed using Wake Forest credentials.

## Libraries

### Overview

The libraries of Wake Forest University support instruction and research at the undergraduate level and in the disciplines awarding graduate degrees. The libraries of the University hold membership in the Association of Southeastern Research Libraries.

The Wake Forest University libraries include the Z. Smith Reynolds (ZSR) Library (<https://zsr.wfu.edu/>), located on the Reynolda Campus and supports the undergraduate College, the Wake Forest School of Business, the Graduate School of Arts and Sciences, and the School of Divinity. The Law Library (<http://library.law.wfu.edu/>), housed in the Worrell Professional Center on the Reynolda Campus, serves the School of Law. The Coy C. Carpenter Library (<https://school.wakehealth.edu/Carpenter-Library/>) serves the Wake Forest School of Medicine and is located on the Bowman Gray Campus.

### Collections

The three library collections total over 2.7 million titles, including over 1.7 million e-books, more than 150,000 electronic journals and

over 15,000 DVDs as well as streaming media and other formats. The ZSR Library serves as a congressionally designated selective federal depository. The Law Library holds over 45,000 volumes and the Coy C. Carpenter Library holds over 35,000 volumes. The three libraries share an online search portal, which provides access to books, electronic resources, journals and databases. Through interlibrary loan service (<https://zsr.wfu.edu/delivers/ill/>), students, faculty and staff may obtain materials from other libraries at no charge.

## Z. Smith Reynolds Library

The Z. Smith Reynolds Library (ZSR) provides comprehensive reference and research services (<https://zsr.wfu.edu/research/>) in-person and online. Research Librarians work with individual classes across the disciplines on research papers and library users can request personal research sessions (<https://zsr.wfu.edu/research/support/sessions/>) with Research Librarians at all phases of their research process. Library faculty also teach elective courses in the fundamentals of research and information literacy and upper-level courses geared towards research in the disciplines and special topics in information. The Digital Initiatives & Scholarly Communication (<https://zsr.wfu.edu/digital-scholarship/>) librarians and staff support and empower faculty scholarship through digital tools, methods, publication, and preservation.

Special Collections & Archives (SCA) (<https://zsr.wfu.edu/special/about/>) in the ZSR Library is the repository for the Baptist Historical Collection of North Carolina, Manuscripts, the Rare Book Collection, and the University Archives (<https://zsr.wfu.edu/special/collections/archives/>). The Baptist Historical Collection contains significant books, periodicals, manuscripts, and church records relating to North Carolina Baptists, as well as the personal papers of prominent ministers, educators, and government officials with ties to Wake Forest. SCA's Manuscripts include the papers of alumnus Harold Hayes (editor of Esquire magazine in the 1960s and 1970s) and other alumni, the Maya Angelou Film & Theater Collection, and the records of the Irish Dolmen Press. The Rare Books Collection, which includes the collections of Charles H. Babcock, Charles Lee Smith, and other donors, has collection strengths in 18th-20th century British, American, and Irish literature, African-American history and literature, and the history of material texts. SCA maintains the University Archives which serves as the primary repository for the historical records of Wake Forest University. The University Archives collects, describes, preserves, and exhibits University records (including electronic and born-digital) that contain historical, administrative, legal, or fiscal value. The records include documentation of the student experience, departmental records, and the papers of faculty. All are welcome to use the SCA collections, many of which are available online in SCA Digital Collections (<https://zsr.wfu.edu/special/collections/digital/>). Please contact [archives@wfu.edu](mailto:archives@wfu.edu) for access to the collections by appointment or submitting a specific question.

### Spaces

The Z. Smith Reynolds library has group study rooms equipped with large screen monitors and individual study carrels that can be booked online (<https://wfu.libcal.com/reserve/>). Publicly available Windows and Macintosh computers are available in the Scholars Commons, and media viewing stations are available in the Media Room. Multimedia equipment, Chromebooks, tablets, and other technology devices may be reserved for checkout. Reference (<https://zsr.wfu.edu/research/support/>) and online chat (<https://zsr.wfu.edu/chat/>) are available to help library visitors to find resources and research assistance. The library has a 118-seat auditorium that is available for use by Wake Forest community groups for programs, lectures, and film screenings.

ZSR houses the Information Systems Service Desk (<https://is.wfu.edu/>), the Center for the Advancement of Teaching (<https://cat.wfu.edu/>), and The Writing Center (<http://writingcenter.wfu.edu/>). The Center for the Advancement of Teaching is a resource center for Wake Forest faculty at all stages of their careers. The Writing Center provides help to guide students through their writing process.

## Access

ZSR library is committed to creating an accessible, enriching, and welcoming community space for all.

The library's hours vary by semester and can be found at <https://zsr.wfu.edu/calendar/>. A room located to the right of the entrance to the library and may be accessed by keycard when the library is closed, offering access to multifunctional printers/copiers/scanners, and the library's bank of touchless smart lockers for pickup of requested materials. The study room on the left of the entrance houses the Coffee Shop (<https://dining.wfu.edu/locations/starbucks-zsr-library/>). Check out the hours and events calendar (<https://zsr.wfu.edu/calendar/>) to stay up to date. See a full description of the ZSR Library resources and services at [zsr.wfu.edu](https://zsr.wfu.edu/) (<https://zsr.wfu.edu/>).

## Bowman Gray Campus and Innovation Quarter

All faculty, staff and students in the Wake Forest University Graduate School of Arts and Sciences have full and unrestricted access to the Coy C. Carpenter Library of Wake Forest School of Medicine at its main facility on the first floor of the Gray Building. The Library is centrally located within the Wake Forest-affiliated hospital (Wake Forest Baptist Medical Center), and most of the resources are available online.

## Parking and Transportation

### Motor Vehicle Registration and Fees

Anyone affiliated with the university as faculty, staff or student and wishes to park a vehicle in a university parking lot at any time of day or night, including after 4:00 p.m. weekdays, on weekends and during academic breaks, must register that vehicle with the Transportation and Parking Services office. Alumni and visitors coming to WFU more than once need to register their vehicle. For registration purposes, students, faculty, staff and alumni are defined as:

**Student** – Anyone enrolled in any class or program at Wake Forest University, including study-abroad programs. Unless formally withdrawn or graduated from the university, students are considered an active student.

**Faculty** – Assigned teaching responsibilities at Wake Forest University (Does not include students who are teaching assistants).

**Staff** – Non-faculty Wake Forest employee contracted to work on campus.

**Alumni** – Graduated from WFU and is not enrolled in a graduate program

Parking permits are not transferable from vehicle to vehicle or person to person. A vehicle is not considered registered until permits have been ordered, picked up and placed on the vehicle, as instructed on the permits.

A person may be asked to relinquish a permit due to a change in the permit holder's role at WFU or due to misuse of the permit.

## Parking Options

- First-year students are required to register their vehicle and park off campus in Lot Z5 in the designated area.
- Sophomore students are required to register their vehicle and park off campus in Lot Z2, which is located on the north side of Polo Rd. Parking in the sophomore parking lot (Z2) is limited.
- Junior and senior resident students are required to register their vehicle.
- Commuting upper-class students are required to register their vehicle and have the option to park on campus (on-campus commuter permits are limited and sold on a first-come first-serve basis), off campus (Winston-Salem First and the designated lot in Reynolda Village). Commuting upper-class students may also purchase an evening permit. A waitlist will be available, if/when on-campus or Winston Salem First/Reynolda Village commuter permits sell out. If Parking Services determines space is available in either of these areas at a later time. Additional permits may be offered to those on the waitlist, if your waitlist number is chosen. Students are encouraged to register for a permit, even if on the waitlist. There is no guarantee the waitlist will be honored.
- The evening parking permit is available to those who ride the shuttle to campus from apartment complexes or students who otherwise reside in off-campus housing and walk or bike to campus between 8:00 a.m. and 4:00 p.m., Monday-Friday. The permits must be placed on the vehicle to be considered registered to park on campus after 4:00 p.m. on weekdays and on weekends.

Fees for parking options can be found online (<https://parking.wfu.edu/parking-info/student-parking-information/>) during the vehicle registration process.

### Online Registration and Permit Distribution

All permits can be ordered online (<https://wfuparking.t2hosted.com/cmn/>). WFU IDs are required to pick up permits.

### First Year Students Permit Distribution Information

- Permits ordered on or before August 16, 2023:
  - **Pickup Date:** August 23, 2023
  - **Pickup Time:** 8:00 a.m. – 4:00 p.m.
  - **Pickup Date:** LJVM Coliseum (2825 University Parkway)
- Permits ordered after August 16, 2023:
  - **Pickup Date:** August 25 - August 27
  - **Pickup Time:** 10:00 a.m. – 3:00 p.m.
  - **Pickup Location:** First Assembly Christian School (3730 University Parkway) located on the north side of the church
  - Your Wake Forest ID is required to pick up your permit.
- Permits ordered after August 16, 2023 OR you did not pick up permits on the above dates:
  - **Pickup Date:** Monday, August 28, 2023 and thereafter
  - **Pickup Time:** Mon. – Thurs. 8:30 a.m. – 4:30 p.m. and Friday 8:30 a.m. – 3:00 p.m.
  - **Pickup Location:** Transportation and Parking Services Office in Alumni Hall.
  - Your Wake Forest ID is required to pick up your permit.
  - **First-year students Permits Will Not Be Mailed to a Campus P.O. Box.**



## Sophomore Students Permit Distribution Information

- Permits ordered on or before August 18, 2023:
  - Pickup Date:** August 25 - August 27
  - Pickup Time:** 10:00 a.m. – 3:00 p.m.
  - Pickup Location:** First Assembly Christian School (3730 University Parkway) located on the north side of the church
  - Your Wake Forest ID is required to pick up your permit.
- Permits ordered after August 18, 2023 OR you did not pick up permits on the above dates:
  - Pickup Date:** Monday, August 28, 2023 and thereafter
  - Pickup Time:** Mon. – Thurs. 8:30 a.m. – 4:30 p.m. and Friday 8:30 a.m. – 3:00 p.m.
  - Pickup Location:** Transportation and Parking Services Office in Alumni Hall.
  - Your Wake Forest ID is required to pick up your permit.
  - Sophomore students Permits Will Not Be Mailed to a Campus P.O. Box.**

## Resident Upper-class Students Permit Distribution Information

- Permits ordered on or before August 17, 2023:
  - Pickup Date:** August 25 - August 27
  - Pickup Time:** 10:00 a.m. – 3:00 p.m.
  - Pickup Location:** First Assembly Christian School (3730 University Parkway) located on the north side of the church
  - Your Wake Forest ID is required to pick up your permit
- Permits ordered after August 17, 2023 OR you did not pick up permits on the above dates:
  - Pickup Date:** Monday, August 28, 2023 and thereafter
  - Pickup Time:** Mon. – Thurs. 8:30 a.m. – 4:30 p.m. and Friday 8:30 a.m. – 3:00 p.m.
  - Pickup Location:** Transportation and Parking Services Office in Alumni Hall.
  - Your Wake Forest ID is required to pick up your permit.
  - Resident students Permits Will Not Be Mailed to a Campus P.O. Box.**

## Undergraduate Commuter, Arts and Sciences Graduate Student or Divinity Student

- Permits ordered on or before August 21, 2023:
  - Pickup Date:** August 25 - August 27
  - Pickup Time:** Between 10:00 a.m. and 3:00 p.m.
  - Pickup Location:** First Assembly Christian School (3730 University Parkway) located on the north side of the church
  - Your Wake Forest ID is required to pick up your permit.
- Permits ordered after August 21, 2023 OR you did not pick up permits on the above dates:
  - Pickup Date:** Monday, August 28, 2023 and thereafter
  - Pickup Time:** Monday through Thursday 8:30 a.m. – 4:30 p.m. and Friday 8:30 a.m. – 3:00 p.m.
  - Pickup Location:** Transportation and Parking Services Office in Alumni Hall.
  - Your Wake Forest ID is required to pick up your permit.

Fines are assessed for violating parking regulations and range from \$25 to \$250. Visitors are subject to all parking rules and regulations (<https://parking.wfu.edu/policies-procedures-forms/>). Students are responsible for their visitors. Students will be held financially responsible for citation fines issued to vehicles driven by family members or by friends who use

a Wake Forest student's vehicle. Visitors who plan to park on campus for more than one day require a visitor parking pass. Visitor parking passes can be obtained from the Transportation and Parking Services office.

The Transportation and Parking Services office is located in Alumni Hall, Suite 138. Office hours are 8:30 a.m. to 4:30 p.m., Monday through Thursday and 8:30 a.m. and 3:00 p.m. on Friday.

For more information call 336-758-PARK or email ([parking@wfu.edu](mailto:parking@wfu.edu)).

## Alternative Transportation

Wake Forest Transportation and Parking Services adopted an app that it encourages all shuttle riders to download and begin using immediately. The app, The TransLoc Rider, is designed to make the shuttle service more convenient for all riders.

### Deacon's Downtown Shuttle

During the academic year, Deacons Downtown provides evening service beginning at 9:30 p.m. on Thursday. The last downtown pick up is between 1:30 a.m. and 1:45 p.m. Service stops at 2am.

### Bicycle

To register your bicycle, go here (<https://parking.wfu.edu/alternative-modes-transportation/bicycle-resources/>).

### Zipcar

Wake Forest offers a car-sharing program as an alternative to bringing your own car to campus. Zipcars are an affordable option that are available by the hour or by the day. Cars are parked on campus near the first-year residence halls, Parking Lots C and W1.

## Student Health and Wellbeing

- Campus Recreation
- CARE Team
- Center for Learning, Access, and Student Success
- Chaplain's Office and Religious Life
- Office of Wellbeing
- Student Health
- University Counseling Center

## Campus Recreation

### Campus Recreation

**The Office of Campus Recreation seeks to enrich the quality of life for students, faculty, and staff** by providing a broad program of sports, outdoor, and fitness activities for men and women of all ability levels. Such programs include intramural sports, club sports, Outdoor Pursuits, open recreation, group fitness, and personal training. Campus Recreation is also responsible for managing the Miller Fitness Center and all of the activities within Reynolds Gymnasium. Campus Recreation provides a healthy outlet for every student, and a convenient option for every staff and faculty member in a safe place where the whole person is central each and every day. In support of the gym and the University's extensive wellbeing center facilities, the University is introducing wellness center membership fees for some community members starting September 1. The wellness fee for full-time, Reynolda campus students will be \$150 per semester. Graduate students may opt to have the fee waived online through the Wake Information System (WIN). Graduate students who elect to opt out of the wellness fee will not have access to

campus wellness, recreation and fitness facilities, equipment and related programs, including intramural sports and club sports.

The spouses and live-in partners of Wake Forest University students who have a wellness membership may purchase their own wellness center membership through Campus Recreation.

**The Miller Fitness Center** houses Campus Recreation's one large group fitness studio. The fitness studio is located on the 4th floor. The Miller Center has two gender-specific locker rooms, each has 12 day-use only lockers and one shower available.

**Reynolds Gymnasium** is the home of Campus Recreation as well as the Office of Wellbeing, Student Health Service, and the Varsity Athletics Gym. The newly renovated state of the art facility includes the following: Welcome Lobby Desk, Living Room lounge space, Indoor Swimming Pool and Whirlpool, Classrooms, 2 Multipurpose Activity Courts (MAC) with dasher boards and goals, Boulderling and Climbing Wall, 5 Cardio and Strength Training Fitness Spaces, and Locker Rooms.

**The Sutton Center** is an expansion of Reynolds Gymnasium. Opened in January, 2016 this expansion includes: two full sized gymnasiums with state of the art sound systems, Outdoor Pursuits retail and rental center, Two connector atriums with an abundance of natural light, digital signage, and lounge areas for student interactions. The gymnasiums are lined to accommodate basketball, volleyball and badminton but can be transformed to host receptions, unique competitions and other university & community events.

**Intramural sports** are competitions between students, faculty, and staff. With undergraduates and graduate students participating every year, competitive games of all levels are offered.

## CARE Team

### CARE Team

**The Campus Assessment, Response and Evaluation (CARE) Team serves the Wake Forest University community by evaluating and responding to disruptive, troubling, or threatening behaviors brought to the attention of the Team.** As a part of this work the Team also seeks to help identify members of the Wake Forest community who are in need of support, guidance, or other intervention and to refer them to appropriate campus and community resources. The CARE Team is empowered by the University President to make decisions and take appropriate action in fulfillment of its mission. The Vice President for Campus Life provides administrative oversight for the Team. The CARE Team is composed of representatives from throughout the University who have specific expertise and professional training in the assessment of, and intervention with, individuals who may present a threat to themselves and/or the University community. The CARE Team serves to follow up with persons who display behaviors of concern and connect them with supportive resources as warranted. The CARE Team also educates the campus community about how to identify and promptly report concerning behaviors.

The CARE Team is not tasked with responding to emergencies. If this is an emergency and you are in need of immediate assistance or consultation, contact WFU Police at 336.758.5911 or 911 from a campus phone.

**CARE Team Contact Information:**  
Email (CARE@wfu.edu)  
Website (<http://careteam.wfu.edu>)

CARE Team Case Manager – 336.758.2464

## Center for Learning, Access, and Student Success

**Wake Forest is an equal access institution that admits qualified applicants without regard to disability.** When a student with a disability is admitted, the University seeks to accommodate those needs that are determined to be reasonable and that do not compromise the integrity of the curriculum.

The Center for Learning, Access, and Student Success (CLASS) provides study skills training and counseling. Students can learn to read critically, take notes effectively, manage their time, improve their motivation, increase their reading speed, and prepare for tests. Assistance is provided through counseling and individual and group tutoring. Students with a wide range of learning and other documented disabilities may also receive academic support, training, and advocacy through the Center for Learning, Access, and Student Success. Our hours of operation are Monday-Friday, 8:30am-5:00pm (excluding Holidays).

Students with a disability who require accommodations should submit a request and documentation to one of the individuals listed below, depending on the nature of the accommodation requested. The information a student provides will be treated confidentially and will be shared with other administrators or faculty members only to the extent necessary to reach decisions and take actions on requests for accommodations.

Please make an appointment at the Center for Learning, Access, and Student Success once you arrive on campus.

Additional information on disability services is available on the Center's website (<https://class.wfu.edu/>).

If an accommodation is granted, students are responsible for obtaining copies of the accommodation letter from the Center for Learning, Access, and Student Success and for delivering a copy of the letter to their professors at the beginning of each semester.

### Regarding medical or mobility issues:

Cecil D. Price, M.D.  
Student Health Service  
P.O. Box 7386  
Winston-Salem, NC 27109  
Email ([price@wfu.edu](mailto:price@wfu.edu))  
Phone: 336.758.5218

### Regarding learning issues:

Michael Shuman, Ph.D., Director  
Center for Learning, Access, and Student Success  
P.O. Box 7283  
Winston-Salem, NC 27109  
Email ([shumanmp@wfu.edu](mailto:shumanmp@wfu.edu))  
Phone: 336.758.5929

## Chaplain's Office and Religious Life

**The Office of the Chaplain and Religious Life seeks to support a diversity of beliefs through the multifaceted character of the chaplaincy** and its relationship to some 16 religious life affiliates. The office acknowledges the importance of faith, both in our individual and collective lives,



and strives to provide opportunities for members of the Wake Forest community to express and explore their faith in a supportive community. The core work of chaplaincy is rooted in the care of the whole person – body, soul and spirit. As such, a key aspect of our office is to make available pastoral care and advisement for any member of the Wake Forest community – students, staff, faculty, and alumni. This can happen through individual counsel, programming on critical spiritual themes, intervention in medical emergencies, mortality concerns and presiding at key life rituals.

The University Chaplains and Campus Ministers are available for pastoral counseling on a variety of issues. If ongoing counseling is deemed appropriate, referrals to clinically trained therapists in the University Counseling Center may be made.

Chaplains and Campus Ministers also offer spiritual direction or guidance to members of the Wake Forest community seeking to discern God's call in the midst of everyday life and assistance to persons wishing to grow closer to God through disciplines such as prayer, spiritual reading, and meditation.

Location: Suite 8 Reynolda Hall  
Phone: 336.758.5210

## Office of Wellbeing

### Office of Wellbeing

**Thrive is a campus-wide initiative – owned by every member of the Wake Forest University community.** The Office of Wellbeing leads the campus in making wellbeing a part of every experience in the lives of our students, faculty, and staff. Wellbeing is about much more than physical health. It includes the eight dimensions of wellbeing - emotional, environmental, financial, intellectual, occupational, physical, social, and spiritual.

Wake Forest created Thrive to give students, faculty, and staff, the skills, knowledge, and perspective to maintain a healthy, balanced life. Programs include monthly focus on specific dimensions, bystander interventions, dimension champion awards, Gold Apron cooking, WFU Certified Peer Education Program, mindfulness resources, Signs of Stress, and many other initiatives.

## Student Health

### Student Health Service

The mission of Student Health Service (SHS) is to ***promote and advance the health and wellbeing for all students***. A physician-directed medical staff offers primary care services, urgent care, illness care, physical examinations, counseling, limited psychiatric care, allergy injections, immunizations, radiology, gynecological services, pharmacy, laboratory, sports medicine clinic, referral to specialists, and medical information and vaccinations related to travel to international destinations.

### Student Health Portal

Students can schedule most appointments online through the Student Health Portal (<https://wfu.studenthealthportal.com/PyramedPortal/>).

The portal serves as a secure place to make appointments, view published labs, print off a copy of your immunization history on file, print receipts, and securely communicate with our clinic. Notifications of appointment reminders and secure messages from the clinic will be sent to your WFU email address. Students should book an appointment before coming to our clinic either through the Student Health Portal, or

by contacting us at [apptshs@wfu.edu](mailto:apptshs@wfu.edu) or 336.758.5218. SHS cannot guarantee the availability of a medical provider if you choose to come to the clinic without an appointment.

### Medical Charges

Most services at SHS are covered by the Student Health Fee (learn more (<https://shs.wfu.edu/services/fees/>)). In addition, there are discounted "fee-for-service" charges for medications, laboratory tests, observation care, procedures, and some supplies. Payment can be made via cash, check, Deacon OneCard, Student Blue Insurance (<https://shi.wfu.edu/>), or the charge can be transferred to the student's account in Office of Financial and Accounting Services. Each student is given a copy of the medical charges incurred on the date of service which can be used for insurance filing. SHS does not participate in nor file insurance claims on behalf of the patient.

### Radiology

Through a partnership with Atrium Health/Wake Forest Baptist, SHS offers on site X-rays. Through this arrangement, Atrium Health, Wake Forest Baptist will be able to bill your medical insurance for these services. All billing will be handled by Atrium Health/Wake Forest Baptist and the remaining portion after your insurance processes the claim will be your responsibility.

#### Confidentiality

Student medical records are confidential. Medical records and information contained in the records may be shared with therapists and physicians who are involved in the student's care, and otherwise will not be released without the student's permission except as allowed by law. Students who wish to have their medical records or information released to other parties should complete a release of information form at the time of each office visit or service.

### Class Excuses

The responsibility for excusing students from class rests with the faculty. Consequently SHS does not issue excuse notes for students. Students who are evaluated at SHS are encouraged to discuss their situations with their professors. A receipt documenting visits is available to students at checkout. Information concerning hospitalization and prolonged illnesses is sent, with the student's permission, to the appropriate Dean.

### Student Insurance Program

Health insurance is required as a condition of enrollment for all degree-seeking\* students at Wake Forest University. Students who demonstrate comparable coverage to WFU's health insurance plan and meet our criteria may waive the coverage provided by WFU. \*Specific information about the policy plan, process instructions and full information regarding eligibility can be found at [shi.wfu.edu](https://shi.wfu.edu) (<https://shi.wfu.edu/>).

### Inclement Weather

When the University is closed due to inclement weather, SHS may have limited staff and may be able to provide care only for injuries and urgent illnesses. Appointments may be rescheduled.

### Retention of Medical Records

Student medical records are retained for 10 years after the last treatment, after which time they are destroyed. Immunization records are kept longer.

\*

Certain part-time students are not eligible.

## Student Health Information and Immunization Form

All new undergraduate and graduate students are required to be up to date with required vaccines. You and your healthcare physician need to complete the health information and immunization forms (HIIF) available in your Student Health Portal (<https://wfu.studenthealthportal.com/PyramedPortal/>). For steps to upload your documentation visit the Student Health website (<https://shs.wfu.edu/new-students/immunization-requirements/#20230414143115>).

## Immunization Policy

North Carolina State Law (G.S. 130A-152) and Wake Forest University policy require documentation of certain immunizations for students attending Wake Forest. Students must submit certification of the immunizations set forth below or request and receive approval for a medical or religious exemption PRIOR TO REGISTRATION.

The statute applies to all students except the following:  
Students residing off-campus and registering for any combination of:

- Off-campus courses
- Evening courses (classes beginning after 5 p.m.)
- Weekend courses
- No more than four day credit hours in on-campus courses

Read the complete immunization policy at [go.wfu.edu/shs-vaccine](https://go.wfu.edu/shs-vaccine) (<https://go.wfu.edu/shs-vaccine/>)

## University Counseling Center

### University Counseling Center

The University Counseling Center, located in 118 Reynolda Hall (Reynolda Campus), provides short-term, time limited counseling and consultation to currently enrolled Reynolda Campus students. All services are confidential, and no fees are charged to students. The Center offers counseling for a variety of concerns including depression, anxiety, personal adjustment, disordered eating, managing stress, sexuality, and relationship issues. The Center is open Monday-Friday from 8:30 a.m. to 5 p.m. (excluding holidays). For more information or to schedule an appointment, call the center at 336.758.5273. More information is also available online (<http://counselingcenter.wfu.edu>). For life-threatening emergencies call 911 from a campus phone or 336.758.5911.

## University Police and Safety Services

### University Police

To report an emergency dial 911 (on-campus phone) or 336.758.5911.

The Student's Right-to-Know and Campus Security Act requires institutions of higher learning to issue an annual report describing campus security procedures, facilities, policies, crime prevention programs, statistics, and other information. The purpose of the report is to give individuals in the University community the information they need for their personal safety and security while on campus. A copy of this annual report is available online at [www.wfu.edu/police](http://www.wfu.edu/police) (<http://www.wfu.edu/police/>). For further information regarding this policy, please call 336.758.3567.

## Safety Services

If a safety escort is required after 3 a.m., one can be provided by calling University Police at 336.758.5911, calling 911 from a campus telephone, or utilizing one of the "call-box" telephones found around campus. The safety escort service is provided by either a police officer in a patrol car or a walking security officer. The timeliness of a safety escort's arrival is dependent on the availability of personnel and the number of high-priority calls to which they may already be committed.

Persons requiring ADA assistance or other special transportation needs that prohibit them from using one of the regular shuttle stops should call University Police at 336.758.5911 (ext. 911 on campus) for alternate arrangements.

Wake Forest University provides a safety app, powered by LiveSafe that can be downloaded to your phone or tablet. LiveSafe is a free personal mobile application for Wake Forest University students, staff, and faculty to engage in a two-way conversation with WFU police. With LiveSafe, you can use your cell phone as a personal security device that allows direct access to police, 911 emergency services, emergency location sharing, information sharing with quick tips, and a peer-to-peer SafeWalk tool. Registration with a Wake Forest University email address is encouraged.

Features:

**Summon Help** – Trigger 911 or the WFU Police Department with the press of a button. Based on your cell phone signal and if your location services is enabled a GPS locator is activated during your call.

**SafeWalk** (a peer-to-peer tool) – Invite friends and family to temporarily follow your location on a real-time map. They will see your approximate location as you walk to your destination and will know when you get there safely.

**Share information** – Submit tips or reports about campus safety concerns and live chat with campus safety officials. You can attach a picture, video, or audio and even send it anonymously if you choose.

**Access Campus Resources and Emergency Information** – Access campus resources, emergency information, and important phone numbers.

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### The Board of Trustees

*\*Effective as of July 1, 2023*

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*Terms Expiring June 30, 2024*

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*Terms Expiring June 30, 2025*

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**Chairperson:** Mark Boyce, *Matthews, NC*

*Terms expiring June 30, 2026*

Ann Brinson, *High Point, NC*  
Alexis B. Johnson, *Weston, CT*  
Brandon C. Jones, *Madison, MS*  
Nathan E. Kirkpatrick, *Durham, NC*  
Jared G. Lilly, *New York, NY*  
Amy Palmer, *Austin, TX*  
Elizabeth O. Seely, *Columbus, OH*

*Terms expiring June 30, 2025*

Darryl W. Aaron, *Greensboro, NC*  
Cassandra M. Baker, *Macon, NC*  
Jerry H. Baker, *Macon, NC*  
Shelmer D. Blackburn Jr., *Purlear, NC*  
Mark Boyce, *Matthews, NC*  
Tabetha Childress, *Kernersville, NC*  
M. Beth Hopkins, *Winston-Salem, NC*  
Emily Hull McGee, *Winston-Salem, NC*  
Leigh Longhurst, *Winston-Salem, NC*  
Alan Sherouse, *Greensboro, NC*

*Terms expiring June 30, 2024*

Kellie J. Browne, *Winston-Salem, NC*  
Molly Brummett Wudel, *Durham, NC*  
Margaret A. Finnerud, *Riverside, CT*  
Paul T. Flick, *Raleigh, NC*  
Amber T. Harris, *Winston-Salem, NC*  
Richard T. Howerton III, *Winston-Salem, NC*  
Paul Jeanes III, *Princeton, NJ*  
J. Lynn Killian, *Hendersonville, NC*  
A. Maria Nkonge Mugweru, *Chapel Hill, NC*  
Forrest Truitt II, *Winston-Salem, NC*  
Mary Lynn Wigodsky, *Winston-Salem, NC*  
George Williamson, *Katonah, NY*

## The Administration

*Administration reflects leadership as of July 1, 2023. Year following name indicates year of hire.*

### Administration—Reynolda Cabinet

Susan R. Wente (2021)  
President  
BS, University of Iowa; PhD, University of California, Berkeley

Michele K. Gillespie (1999)  
Provost  
BA, Rice University; MA, PhD, Princeton University

Ashleigh Brock (2021)  
Chief of Staff, President's Office  
BA, University of Richmond; MA, Michigan State University; PhD, The College of William and Mary

Andrew R. Chan (2009)

Vice President, Office of Personal and Career Development  
BA, MBA, Stanford

John Currie (2019)  
Director of Athletics  
BA, Wake Forest University; MS University of Tennessee

James J. Dunn (2009)  
Special Assistant to the President & CEO, Verger Capital Management, LLC  
BS, Villanova University

Charles Iavocou (2001)  
Dean, School of Professional Studies and Vice Provost for Charlotte Programs  
BS, University of Vermont; PhD, University of British Columbia

Julia Jackson-Newsom (2021)  
Senior Advisor for Planning and Partnerships  
BA, Wake Forest University; MS, PhD, Penn State University

Shea Kidd Brown (2022)  
Vice President for Campus Life  
BA, University of Southern Mississippi; MEd, University of Georgia; PhD, University of Memphis

Andrew R. Klein (2023)  
Dean, School of Law  
BA, University of Wisconsin; JD, Emory University School of Law

Jackie Krasas (2023)  
Dean of the College and Graduate School of Arts & Sciences  
BA, Lehigh University; PhD, University of Southern California

Eric Maguire (2019)  
Vice President for Enrollment  
BA, Muhlenberg College; MS, Indiana University

Mark A. Petersen (2008)  
Vice President for University Advancement  
BA, Brandeis University; MA, University of Southern California

Annette L. Ranft (2022)  
Dean, School of Business  
BS, Appalachian State University; MS, Georgia Institute of Technology; PhD, University of North Carolina Chapel Hill

Jacqueline Travisano (2023)  
Executive Vice President and CFO  
BS, Robert Morris University; MBA, Chatham University; EdD Nova Southeastern University

José Villalba (2011)  
Vice President for Diversity and Inclusion and Chief Diversity Officer  
BS, MEd, EdS, PhD, Florida

Corey D.B. Walker (2020)  
Interim Dean, School of Divinity  
BS, Norfolk State University; MTS, Harvard University; MDiv, Virginia Union University; PhD, The College of William and Mary

Brian White (2023)  
Vice President and General Counsel  
BA, JD, University of Iowa

## College

Jackie Krasas (2023)

Dean of the College and Graduate School of Arts & Sciences  
BA, Lehigh University; PhD, University of Southern California

Anthony P. Marsh (1996)

Senior Associate Dean of Faculty  
BPE, MEd, Western Australia; PhD, Arizona State

Rebecca W. Alexander (2000)

Associate Dean for Research and Community Engagement and Director  
of Academic Planning for Wake Downtown  
BS, Delaware University; PhD, University of Pennsylvania

Karen M. Bennett (1985)

Assistant Dean for Academic Advising  
BS, Winston-Salem State University; MA, Wake Forest University

Jane H. Caldwell (1999)

Senior Associate Athletic Director; Assistant to the Dean of the College,  
Student Athlete Academic Services  
BS, UNC-Greensboro; MS, Wake Forest University

T. Nathaniel French (1995)

Director, Magnolia Scholars  
BA, Wake Forest University; MA, PhD, UNC-Chapel Hill

Adam Friedman (2007)

Director of Academic and Instructional Technology  
BA, State University of New York (Geneseo); MAEd, PhD, University of  
Virginia

Laura Giovanelli (2014)

Associate Dean for Learning Spaces  
BA, UNC-Chapel Hill; MFA, North Carolina State University

Mike Haggas (2010)

Assistant Dean of College Development  
BA, Clark University

Eric Ashley Hairston (2019)

Associate Dean for Academic Advising  
BA, Wake Forest University; MA, PhD, University of Virginia; JD, UNC-  
Chapel Hill

Cherise James (2009)

Director of Orientation, New Student, and Transitions Programs  
BS, University of Florida; MS, Nova Southeastern University; PhD, UNC-  
Greensboro

Seneca Rudd (2011)

Director of Finance and Administration  
BS, Appalachian State University

Jackie Sheridan (2020)

Director of Wake Forest Scholars Program  
AB, University of Notre Dame; MA, Georgetown University

Erica Still (2007)

Associate Dean for Faculty Recruitment, Diversity, and Inclusion  
BA, Temple University; MA, PhD, University of Iowa

Eric Stottlemeyer (2012)

Associate Dean for Interdisciplinary Programs and Experiential Learning

BA, Ohio State University; MA, San Diego State University; PhD, University  
of Nevada

David F. Taylor (2005)

Assistant Dean for Global Study Away Programs, Center for Global  
Programs and Studies  
BA Princeton; MALS, Wake Forest University

Kimberly Wieters (2007)

Assistant Dean for Finance and Administration  
BS, College of Charleston

## Provost

Michele K. Gillespie (1999)

Provost  
BA, Rice; MA, PhD, Princeton University

Keith D. Bonin (1992)

Vice Provost for Research and Scholarly Inquiry and Professor of Physics  
BS, Loyola University; PhD, University of Maryland

Kenneth Gilson (2020)

Assistant Provost for Academic Administration and University Registrar  
BA, Wheaton College (IL); MS, UIC John Marshall Law School; EdD,  
University of Southern California

Philip G. Handwerk (2013)

Assistant Provost of Institutional Research  
BA, Wake Forest University; MS, NC State; PhD, University of  
Pennsylvania

Anne E. Hardcastle (2002)

Associate Provost for Academic Affairs and Associate Professor of  
Spanish  
BA, Texas A&M University; MA, PhD, University of Virginia

J. Kline Harrison (1990)

Vice Provost for Global Affairs and Kemper Professor of Business  
BS, Virginia; PhD, Maryland

Beth Hoagland (2004)

Senior Assistant Provost for Budget and Administration  
BA, UNC-Charlotte

Michael Lamb (2016)

Director of the Program for Leadership and Character  
BA, Rhodes College; BA, University of Oxford (UK); PhD, Princeton  
University

Matthew Phillips (2009)

Senior Advisor for Strategic Initiatives and Exxon-Calloway Fellow in the  
School of Business  
BA, JD, Wake Forest University; MDiv, Duke University

Christina T. Soriano (2006)

Vice Provost for Arts and Interdisciplinary Initiatives, Director of Dance  
and Professor  
BA, Trinity College; MFA, Smith College

José Villalba (2011)

Vice President for Diversity and Inclusion and Chief Diversity Officer  
BS, MEd, EdS, PhD, Florida



## Graduate School

Dwayne Godwin (1997)

Dean, Bowman Gray Campus

BA, University of West Florida; PhD, University of Alabama (Birmingham)

Jennifer Rogers (2012)

Associate Dean for Students, Reynolda Campus

BFA, BA, University of North Carolina at Greensboro; MA, Wake Forest

University; PhD, Syracuse University

Ron Von Burg (2012)

Associate Dean for Academic Initiative, Reynolda Campus

BS, BA, Arizona State University; MA, PhD, University of Pittsburgh

Dixie Ross (2008)

Assistant Dean of Finance and Administration

BS, MBA, Vanderbilt University

## School of Business

Annette L. Ranft (2022)

Dean, School of Business

BS, Appalachian State University; MS, Georgia Institute of Technology;

PhD, University of North Carolina at Chapel Hill

Jeffrey D. Camm (2015)

Senior Associate Dean for Faculty

BS, Xavier University; PhD, Clemson University

Mark E. Evans (2014)

Area Chair and Associate Dean of Accountancy

BBA, MBA, Radford University; PhD, Duke University

Mercy Eyadiel (2011)

Chief Corporate Engagement Officer

BA, Southern Nazarene University; MEd, Oklahoma City University

Darrell Farrell (2021)

Executive Director, Finance and Administration

BA, College of Charleston; MBA, Waynesburg University

Keith Gilmer (2015)

Chief Administrative Officer

BS, Lander University; MBA Vanderbilt University

Sylvia Green (2009)

Chief Marketing Officer

BS, University of Colorado

Kenneth C. Herbst (2007)

Associate Dean of the Undergraduate Business Program

BA, Wake Forest University; MA, PhD, University of North Carolina at

Chapel Hill

Matt W. Imboden (2018)

Chief Student Services Officer

BA, MA Wake Forest University

Norma R. Montague (2010)

Senior Associate Dean of Academic Programs

BA, MA, North Carolina State University; PhD, University of South Florida

John Montana (2011)

Executive Director, Online Strategy and Instructional Technology

Innovation

BA Hartwick College; MEd Northeastern University; MBA Wake Forest University

Sherry Moss (2005)

Associate Dean of MBA Programs

BS, PhD, Florida State University

Elizabeth B. Nolan (1996)

Chief Academic Operations Officer

BS, University of North Carolina at Chapel Hill; MSL, Wake Forest

University

Ajay Patel (1993)

Area Chair of Finance and Economics

BS, St. Josephs College; MBA, University of Baltimore; PhD, University of

Georgia

Stacie Petter (2022)

Area Chair of Analytics, Information Systems, Marketing, and Operations Management

BS, Berry College; MBA, PhD Georgia State University

Scott M. Shafer (1998)

Chief Academic Operations Officer

BBA, BS, PhD, University of Cincinnati

T.J. Truskowski (2015)

Chief Development Officer, School of Business

BA - Eastern Michigan University; MBA Davenport University

J. Bren Varner (2006)

Assistant Dean for the Master of Science in Management

BS, Wake Forest University; MBA, University of Virginia

Julie H. Wayne (1998)

Area Chair of Strategy, Management, Law, and Entrepreneurship

BA, Furman University; MS, PhD, University of Georgia

## School of Divinity

Jonathan Lee Walton (2019)

Dean

BA, Morehouse College; MDiv, PhD, Princeton Theological Seminary

Kevin Jung (2007)

Associate Dean of Academic Affairs

BA, Seoul Theological University; MDiv, Princeton Theological Seminary;

STM, Yale Divinity School; PhD, University of Chicago

## School of Law

Andrew R. Klein (2023)

Dean of the School of Law

BA, University of Wisconsin; JD, Emory University School of Law

Tanya Marsh (2010)

Vice Dean

BA, Indiana University; JD, Harvard Law School

Richard C. Schneider (1992)

Associate Dean for International Affairs and Professor of Law

BA, Colorado; MA, Yale; JD, New York

Ronald Wright (1988)

Associate Dean of Research

AB, William and Mary; JD, Yale

Christopher Knott (2012)

Associate Dean for Information Services and Technology and Professor of Law

BA, Iowa; MLIS, Indiana; JD, Michigan

Simone Rose (1993)

Associate Dean for Innovation and Entrepreneurship

BS, University of Pennsylvania; JD, University of Maryland

Aurora Edenhart-Pepe (2020)

Chief Administrative Officer

BS, West Chester

## Wake Forest School of Medicine

Julie A. Freischlag (2018)

CEO, Wake Forest Baptist Medical Center, Dean of Wake Forest School of Medicine and Chief Academic Officer of Atrium Health Enterprise

BS, University of Illinois; MD, Rush University

Evelyn (Lynn) Y. Anthony (2017)

Senior Associate Dean of Faculty Affairs

BS, University of North Carolina, Chapel Hill; MD, Duke University School of Medicine

C. Randall Clinch (2011)

Associate Dean for MD Program Academic Affairs (Interim); Associate

Dean Faculty Development; Medical Director, Employee Health; and

Professor of Family and Community Medicine

BS, College of New Jersey; DO, University of Medicine and Dentistry of New Jersey - School of Osteopathic Medicine; MS, Wake Forest University

Michael T. Fitch (2018)

Associate Dean for Faculty Affairs, Professor and Vice Chair for Academic Affairs, Emergency Medicine

BS, College of William and Mary; PhD, Case Western Reserve School of Medicine; MD, Case Western Reserve School of Medicine

Beth Gianopulos (2018)

Associate Dean of Faculty Relations and Retention, Senior Counsel, Wake Forest Baptist Medical Center Legal Department, and Assistant Professor of Surgery

JD, Wake Forest University

Gregory L. Burke, MD, MSc (2017)

Senior Associate Dean for Research and Professor of Public Health Sciences and Chief Science Officer

MD, MSc, University of Iowa

Stephen Kritchevsky (2012)

Associate Dean of Research Development and Director of the Sticht Center on Aging

MSPH, PhD, University of North Carolina, Chapel Hill

Donald A. McClain (2016)

Associate Dean for Clinical and Translational Science

MD, PhD, The Rockefeller University, Cornell Medical College

Lynne Wagenknecht (2013)

Associate Dean for Interdisciplinary Research

BS, Lenoir-Rhyne, Dr PH, Alabama-Birmingham

Terry L. Hales, Jr. (2014)

Senior Vice President, Academic Administration and Operations & Executive Vice Dean

BSBA, Appalachian State; MBA, Wake Forest University

Christopher O'Byrne, (2016)

Vice President and Associate Dean of Research Administration and Operations

BA, Stonehill College; MS, Northeastern University

Terri S. Yates (2015)

Vice President and Associate Dean, Healthcare Education Administration

BS, MA, Wake Forest University; PhD, University of North Carolina-Greensboro

James Hoekstra (2018)

Senior Vice President and Associate Dean, Clinical and Academic Network Development

MD, University of Michigan Medical School

Michael P. Lischke (2001)

Associate Dean of Continuing Medical Education and Richard Janeway,

MD Distinguished Director, Northwest Area Health Education Center

BA, MPH, Emory; EdD, Temple

Brenda Latham-Sadler (2012)

Associate Dean of Student Inclusion and Diversity

BS, Pace; MD, Wake Forest University

Marcia M. Wofford (2013)

Associate Dean of Student Affairs

BA, Millsaps College; MD, University of Mississippi Medical Center

Avinash (Avi) Shetty, (2015)

Associate Dean of Global Health

MBBS, University of Bombay; MD, University of Bombay

Mitchell Sokolosky (2014)

Associate Dean of Graduate Medical Education, ACGME Designated

Institutional Official, Associate Professor, Emergency Medicine

MD, West Virginia University School of Medicine

Daryl Rosenbaum (2019)

Associate Dean of Admissions and Student Financial Aid

BA, University of Michigan; MD, Wake Forest University

Modupeola Akinola (2019)

Assistant Dean of Admissions and Student Financial Aid

BS, MB, University of Ibadan Medical School - Nigeria

Marquita Hicks (2019)

Assistant Dean of Student Inclusion and Diversity

Ba, Hendrix College; MD, University of Kansas

## Admissions and Financial Aid

Eric Maguire (2019)

Vice President for Enrollment

BA, Muhlenberg College; MA, Indiana University

Karen Vargas (2017)

Dean of Admissions

BA, Haverford College; MSM Rosemont College

Dawn E. Calhoun (1999)

Sr. Associate Dean of Admissions - Admissions Programming

BA, MA, Wake Forest University

Sheena Ramirez (2021)

Sr. Associate Dean of Admissions – Admissions Operations  
BM, Oberlin College & Conservatory; MM, New England Conservatory of Music; DMA, James Madison University

Paul M. Gauthier (2003)

Associate Dean of Merit-Based Scholarships  
BA, Wake Forest University; MA, St. Louis University

Nicole McInteer (2015)

Associate Dean of Admissions  
BA, Wake Forest University; PhD, Penn State

Adrian Greene (2018)

Associate Dean of Admissions  
BA, MA, Wake Forest University; PhD, UNC-Chapel Hill

Janessa Dunn (2021)

Associate Dean of Admissions  
BA, Georgia Southern University; Med, Vanderbilt University; EdD, Vanderbilt University

Susan Faust (2014)

Assistant Dean of Admissions  
BA, MA, University of Arkansas at Fayetteville

Lowell Tillett (2014)

Assistant Dean of Admissions  
BA, Wake Forest University; JD, Quinnipiac University

Thomas Ray (2014)

Assistant Dean of Admissions, Diversity Admissions  
BA, Wake Forest University

Rose Brown (2022)

Assistant Dean of Admissions  
BA, UNC-Chapel Hill; MS, John Hopkins University

Magdalena Perez Vicente (2022)

Assistant Dean of Admissions  
BA, Wake Forest University; MA, Duke University

Jeremiah Fields (2023)

Assistant Dean of Admissions  
BS, Winston Salem State University

Matthew Avara (2017)

Admissions Counselor  
BS, Wake Forest University

Cesar Grisales (2019)

Admission Counselor  
BA, Wake Forest University

Jessie Birnbaum (2022)

Admissions Counselor  
BA, Wake Forest University

Eric Haddleton (2022)

Admissions Counselor  
BA, Wake Forest University

Jarrett Hall (2022)

Admissions Counselor

BA, Wake Forest University

Danielle Key (2022)

Admissions Counselor  
BA, Wake Forest University

Ikira Terrell (2022)

Admissions Counselor  
BA, Wake Forest University

Kavasia Heath (2022)

Admissions Counselor  
BA, Wake Forest University

Christopher R. Franklin (2013)

Admissions Business/Systems Analyst  
BS, University of Maryland

Terri E. LeGrand (2005)

Director of Enrollment Compliance & Technology  
BS, Iowa State; JD, Wake Forest University

Kenya Lee (2023)

Enrollment Data Analyst

Thomas P. Benza Jr. (2006)

Director of Financial Aid  
BA, BS, Appalachian State; MA, Wake Forest University

Dionnia Brown (2021)

Associate Director of Financial Aid  
BA, Wake Forest University; MAEd, McKendree University

Milton W. King (1992)

Associate Director of Financial Aid  
BA, MBA, Wake Forest University

Jarrett Zongker (2009)

Associate Director of Financial Aid  
BA, University of North Florida

Roberta L. Powell (2007)

Assistant Director of Financial Aid  
BA, Asbury College; MS, Kentucky

Lauren Trethaway (2013)

Assistant Director of Financial Aid & Student Employment Coordinator  
BS, North Carolina State University

Elizabeth G. Sandy (2013)

Coordinator for Study Abroad, External Scholarships & State Grants  
BS, MA, Rider University

Courtney Kim (2020)

Financial Aid Counselor & VA Specialist  
BA, University of Pittsburgh

Lisa A. Myers (1996)

Financial Aid Counselor

Marisa Hancock-Hernández (2020)

Financial Aid Counselor  
BA, University of North Carolina at Chapel Hill; MSM Wake Forest University

Erneatka Webster (2021)

Financial Aid Counselor  
BS, Wesley College; MSM, Wilmington University

Brittany Ray  
Financial Aid Assistant  
UNCG

John Royal (2017)  
Data Coordinator  
BA, Western Carolina University

Rhonda Myrick (2008)  
Reporting Analyst III  
BS, High Point University; MA, Appalachian State University

## Athletics

John Currie (2019)  
Director of Athletics  
BA, Wake Forest University; MS, Tennessee

Lindsey Babcock (2020)  
Deputy Director of Athletics, Chief Operating Officer  
BS, Elmira College; MS, West Virginia University

Pete Paukstelis (2019)  
Counsel/Senior Athletics Strategy Advisor  
BA, University of Kansas; JD, University of Michigan

Jane Caldwell (1999)  
Senior Associate Athletics Director for Student-Athlete Services and Assistant to the Dean of the College  
BS, UNC-Greensboro; MA, Wake Forest University

Randy Casstevens (2012)  
Executive Associate Athletics Director, Chief Financial Officer  
BS, MBA, Wake Forest University

Barry Faircloth (2001)  
Executive Associate Athletics Director, Development and Sales  
BS, Wake Forest University

Arin Dunn (2022)  
Senior Associate Athletics Director, Development and Sales  
BS, Wake Forest University

Brendan Jones (2023)  
Senior Associate Athletics Director, Chief Revenue Officer  
BS, Clemson; MS, Southern Mississippi

Darern Koudele (2021)  
Senior Associate Athletics Director, Compliance & Administration  
BS, Kansas State University; MS, Wichita State University; JD, West Virginia University

Annette Medalie (2020)  
Senior Associate Athletics Director, Finance  
BS, Syracuse; MBA, Florida Atlantic

Will Pantages (2019)  
Senior Associate Athletics Director, Communications & Content (FB)  
BA, Baldwin Wallace University

Michael Piscetelli (2005)  
Senior Associate Athletics Director, Development

BA, Wake Forest University

Ellie Shannon (2012)  
Senior Associate Athletics Director, Administration and Strategic Operations  
BS, Grand Valley State; MS, Kansas State

Craig Zakrzewski (2002)  
Senior Associate Athletics Director, Capital Projects and Operations  
BA, Wake Forest University

## Campus Life

Shea Kidd Brown (2022)  
Vice President for Campus Life  
BA, University of Southern Mississippi; MEd, University of Georgia; PhD, University of Memphis

Andrea Bohn (1997)  
Associate Vice President, Campus Life Finance & Operations  
BS, Gardner Webb University

Abigail Brumfield (2022)  
Director for Strategic Initiatives  
BA, University of Arkansas; MA, University of Tennessee, Knoxville

Matthew Clifford (2010)  
Assistant Vice President & Dean of Residence Life and Housing  
BA, Davidson College; MEd, University of South Carolina; EdD, University of North Florida

Adam Goldstein (2014)  
Associate Vice President & Dean of Students  
BA, Indiana University of PA; MEd, University of Georgia; PhD, University of Georgia

Regina G. Lawson (1989)  
Chief of University Police  
BS, UNC-Wilmington

Warrenetta Mann (2021)  
Director, University Counseling Center  
BA, Vanderbilt University; MA, University of Louisville; PsyD, Spalding University

Shana Atkins (2011)  
Director of Strategic Communications & Marketing  
BA, University of North Carolina at Greensboro

Timothy L. Auman (2001)  
University Chaplain  
BA, Wofford College; MDiv, Duke University; PhD, Interfaith Seminary

Chauncey Bowers  
Emergency Services Manager  
BS, University of Maryland Eastern Shore

James Byrd (2012)  
Director of Deacon One in the Office of Physical Security Technology  
BA, Gardner-Webb University; MA, New Orleans Baptist Theological Seminary

Stephanie Carter (2017)  
Director of Residency Life and Housing

BA, Florida State University; MEd, University of Georgia; EdD, Capella University

Aishah Casseus (2020)  
Title IX Director  
BS, Troy University; JD, North Carolina Central University

Joseph Cassidy (2016)  
Executive Director for Campus Fitness & Recreation  
BA, Bellarmine University; MS, Eastern Illinois University; MBA, University of Notre Dame

Denisha Champion (2010)  
Director of University Counseling Center  
BA, Clemson University; MA, University of North Carolina at Greensboro; PhD, University of North Carolina at Greensboro

Candice Epps Jackson (2021)  
Associate Dean of Students for Community Response and Caring Outreach  
BS, North Carolina State University; MS and EdS, University of Chapel Hill at Greensboro; PhD, University of Chapel Hill at Greensboro

Ashleigh Hala (2021)  
Director, Office of Wellbeing  
BSW, Wheelock College; MSW, Boston University

Cathy Higginbotham (2023)  
Executive Director of Student Health Service  
BS, University of Charleston West Virginia; MA, East Carolina University;

Marianne Magjuka (2011)  
Assistant Dean of Students, Executive Director  
BA, University of Notre Dame; MEd, University of Notre Dame; EdD, University of Pennsylvania

Cherise James (2009)  
Associate Director of Orientation and Lower Division Programming  
BS, University of Florida; MA, Nova Southeastern University; PhD, University of North Carolina at Greensboro

Jim Settle (2019)  
Associate Dean, Student Conduct  
BS, Pittsburgh State University; MA, Bowling Green State University; PhD, University of Missouri at Saint Louis

Michael P. Shuman (1997)  
Director, Learning Assistance Center and Disability Services  
BA, Furman University; MEd, University of South Carolina; PhD, UNC-Greensboro

Tim Wilkinson  
Senior Associate Dean of Students  
BA, West Chester University; MA, Rider University; EdD, Appalachian State University

Harriet Williams (2019)  
Director of Campus Life Talent Management  
BA, Stonybrook University; MA, Stonybrook University, EdD, University of Vermont

## Chaplain's Office

Timothy L. Auman (2001)  
Chaplain

BA, Wofford College; MDiv, Duke University; PhD, Interfaith Seminary

Kellee Monet (K. Monet) Rice (2012)  
Associate Chaplain  
BA, Louisiana State; MDiv, Princeton Theological Seminary

Elizabeth Orr (2014)  
Associate Chaplain, Spiritual Formation  
BA, Stonehill College; MA, Boston College School of Theology and Ministry

Gail H. Bretan (2014)  
Associate Chaplain, Jewish Life  
BS, Temple University; BBA, Northwood University; MS, University of Arizona; PhD, UNC-Greensboro

Naijla Faizi (2017)  
Associate Chaplain, Muslim Life  
BS, Wake Forest University; MS University of Pennsylvania

## Finance and Administration

Jacqueline Travisano (2023)  
Executive Vice President and CFO  
BS, Robert Morris University; MBA, Chatham University; EdD Nova Southeastern University

Kenneth Basch (2008)  
Executive Director, Wake Forest Properties  
BA, Ohio State; MBA, Case Western Reserve

Dedee DeLongpré Johnston (2009)  
Vice President, Human Resources and Sustainability  
BS, Southern California; MBA, Presidio

Mur K. Muchane (2015)  
Vice President, Information Technology/CIO  
BA, Warren Wilson College; MS, University of Tennessee

Emily G. Neese (2006)  
Vice President, Finance, Strategy and Planning  
BS, Wake Forest University

John J. Shenette (2014)  
Vice President, Facilities & Campus Services  
BS, Central New England College

John K. Wise (2002)  
Associate Vice President, Hospitality & Auxiliary Services  
BS, Wisconsin (Stout)

## Global Wake Forest

J. Kline Harrison (1990)  
Associate Vice President  
Associate Provost for Global Affairs and Kemper Professor of Business  
BS, Virginia; PhD, Maryland

Leigh Hatchett Stanfield (1999)  
Executive Director of Global Engagement and Administration  
BA, Wake Forest University

David F. Taylor (2005)  
Assistant Dean of Global Study Away  
BA, Princeton; MALS, Wake Forest University

Jessica A. Francis (2007)  
Director of Global Abroad Programs  
BA, St. Edward's; MALS, Wake Forest University

Nelson Brunsting (2008)  
Director of Global Research & Assessment  
BA, Wake Forest University; MA, Victoria University of Wellington, New Zealand; PhD, UNC-Chapel Hill

Kelia Hubbard (2016)  
Director of International Student & Scholar Services  
BA, UNC-Charlotte; MPA, Grand Canyon University

Steve Seaworth (2017)  
Executive Director, INSTEP-WFU Programs  
BA (Hons), University of Redlands; MA, University of California - Riverside

Regina George (2022)  
Associate Director of International Student & Scholar Services  
BA, University Southern Mississippi

Patrick Bingham (2021)  
Research Coordinator  
BA, Virginia Commonwealth University, George Mason University; MA, PhD, University of East Anglia

Janice W. Claybrook (2006)  
Assistant Director & Program Coordinator for Global AWAKEnings  
BA, UNC-Chapel Hill; MS, UNC-Greensboro

Sandra Lisle McMullen (2012)  
Assistant Director for Global Campus Programs  
BS, Ball State; MA, Wake Forest University

Silvia Correa (2014)  
Assistant to the Associate Provost of Global Affairs  
AA, LaGuardia Community College

Tara Grischow (2016)  
Senior Advisor for International Students and Scholars  
BA, Youngstown State; MA Youngstown State

Greta Smith (2018)  
Senior Advisor for International Students and Scholars  
BA, UNC-Greensboro

Rayna Minnigan (2017)  
International Student Advisor  
BS, Shaw University; MS, Georgetown University

Lori Crouse (2009)  
Coordinator, Center for Immigration Services & Support (ISS)  
Forsyth Tech

Cody Ryberg (2016)  
Senior Study Abroad Advisor  
BA, Luther College; MS, St. Cloud State

Anna Marter (2016)  
Senior Study Abroad Advisor  
BFA, Tisch-New York University; MA, SIT Graduate Institute

Sean McGlynn (2017)  
Senior Study Abroad Advisor  
BA, Plymouth State

Christina Canon (2022)  
Study Abroad Advisor  
BA, MA, UNC Greensboro

Taylor Favale (2022)  
Study Abroad Advisor  
BA, Xavier University (OH)

Timothy Dykes (2023)  
Study Abroad Advisor  
BS, Florida State University

Kylie Holloway (2022)  
Center Coordinator  
BS, Appalachian State University

Robbye Ramirez (2021)  
Administrative Assistant  
BS, NC State University

Kim Snipes (2008)  
Project Coordinator for Global Campus Programs  
Attended Bob Jones

Sarah Dale (2018)  
Data and Records Specialist  
BA, Rollins; MS, University of Texas, Austin

Christina Deloglos (2019)  
Office Administrator  
BA, National Louis University

## Graylyn International Conference Center

John K. Wise (2002)  
Associate Vice President for Hospitality and Auxiliary Services  
BS, Wisconsin (Stout)

Alex Crist (2010)  
Director Parking and Transportation  
BS, University of Indianapolis

T. Matthew Pack (2004)  
Director of Conference Services  
BA Kentucky Wesleyan; MA, Murray State

Alyssa Armenta (2015)  
Marketing Manager  
BA, Salem College

Roger Brown (2015)  
Director of Food and Beverage  
Northern Arizona University

Shelley Brown (2010)  
Director of Sales  
BA, Austin Peay State

Mark McFetridge (2006)  
Director of Rooms  
BS, University of Florida

## Information Systems

Mur Muchane (2015)  
Vice President for Information Technology & CIO



BA, Warren Wilson College; MS, University of Tennessee

Mary Jones (2015)  
Executive Director of IT Finance & Administration  
BA, UNC-Chapel Hill

Amy Triana (2022)  
Director, Client Services  
BA, College of Charleston; MS, University of Georgia

Rob Smith (2017)  
Executive Director of IT Infrastructure  
BA, College of William & Mary, USC-Columbia

Odi Iancu (2009)  
Executive Director, Enterprise Systems  
PhD, Delft University of Technology, the Netherlands

David Eaton (2019)  
Executive Director, Analytics and Data Governance  
BS Business Administration, University of North Carolina - Greensboro;  
MBA, Queens University

Steve Bertino (2018)  
Chief Information Security Officer  
BA, Rochester Institute of Technology; AAS, Monroe Community College

Hannah Inzko (2017)  
Executive Director, Academic Technology  
BA, Pennsylvania State University; MEd, University of Miami

Brent Babb (2015)  
Associate Director IT Infrastructure  
AA, ECPI

Will Tomlinson (2014)  
Assistant Director of IT Infrastructure  
BA, Elon University

Sarah Wojcik-Gross (2007)  
Assistant Director Client Services  
BA, Mansfield University; MEd, Elmira College

Mike Greco (2015)  
Principal Client Engagement Specialist  
BS, Lenoir-Rhyne College

Anthony Hughes (2010)  
Assistant Director Enterprise Systems  
BS, Southern Illinois University

Jeffrey Teague (2011)  
Associate Director Information Security  
BS, MS, North Carolina State University

Greg Collins (2013)  
Associate Director of Client Services  
BS, East Carolina University

Phil May (1996)  
Assistant Director Enterprise Systems & Cloud Platforms  
BS, MBA, Wake Forest University

George Campbell (2019)  
Assistant Director Analytics & Data Governance

BA, Wake Forest University; MA, Indiana University-Bloomington

Eudora Struble (2015)  
Assistant Director Technology Accessibility  
BA, University of Colorado - Boulder; MA, University of Chicago

Paul Whitener (2007)  
Assistant Director Digital Fabrication & Maker Education  
BA, University of North Carolina - Greensboro; AA, Forsyth Technical College

## Institutional Research

Philip G. Handwerk (2013)  
Assistant Provost of Institutional Research  
BA, Wake Forest University; MS, NC State; PhD, University of Pennsylvania

Adam Shick (2001)  
Senior Associate Director of Institutional Research  
BS, US Merchant Marine Academy; MA, Wake Forest University

Sara Gravitt (1996)  
Assistant Director of Institutional Research  
BS, High Point University

Ande Thompson (2021)  
Data Scientist  
BS, DePaul University; MA Wake Forest University

Nicole Brocato (2014)  
Senior Assessment and Analytics Scientist  
PhD, University of Maryland, Baltimore County

## Legal Department

Brian White (2023)  
Vice President and General Counsel  
BA, JD, University of Iowa

William K. Davis (2012)  
Senior Counsel  
AB, Davidson; MBA, UNC-Chapel Hill; LLB, Wake Forest University

Anita M. Conrad (1999)  
Counsel and Assistant Secretary of the Board of Trustees  
BA, Akron; JD, Wake Forest University

Dina J. Marty (2001)  
Deputy General Counsel  
BA, Drake; JD, Wake Forest University

K. Carter Cook (2004)  
Counsel  
BS, MBA, JD, Wake Forest University

Brian J. McGinn (2007)  
Associate Counsel  
BA, JD, Wake Forest University

Peter J. Paukstelis (2019)  
Associate Counsel  
BA, University of Kansas; JD, University of Michigan

## Libraries

Timothy Pyatt (2015)

Dean, Z. Smith Reynolds Library  
AB, Duke University; MLIS, NC Central

Rodrigo Castro (2021)  
Director of Public Services, Z. Smith Reynolds Library  
MA, University of South Florida

Lauren Corbett (2008)  
Director, Resource Services, Z. Smith Reynolds Library  
BA, Davidson College; MLIS, UNC-Greensboro

Thomas P. Dowling (2012)  
Director, Technologies, Z. Smith Reynolds Library  
BM, MLIS, University of Michigan

Molly Keener (2006)  
Director, Digital Initiatives & Scholarly Communication, Z. Smith Reynolds Library  
BA, UNC-Chapel Hill; MLIS, UNC-Greensboro

Christopher Knott (2012)  
Associate Dean for Information Services and Technology, Professional Center Library  
BA, Iowa; JD, Michigan; MLIS, Indiana

Mary Beth Lock (2007)  
Associate Dean, Z. Smith Reynolds Library  
BS, Wayne State; MLS, NC Central; MALS, Wake Forest University

Joel Rivera (2022)  
Assistant Director, Library and College Development, Z. Smith Reynolds Library  
BS, University of Florida

Rosalind Tedford (1994)  
Director, Research and Instruction, Z. Smith Reynolds Library  
BA, MA, Wake Forest University; MLIS, UNC-Greensboro

E. Parks Welch III (1991)  
Director of the Coy C. Carpenter Library  
BS, UNC-Chapel Hill; MBA, Wake Forest University; MLS, UNC-Greensboro

Tanya Zanish-Belcher (2013)  
Director, Special Collections and University Archives, Z. Smith Reynolds Library  
BA, Ohio Wesleyan; MA, Wright State

## Personal and Career Development

Andrew Chan (2009)  
Vice President, Office of Personal and Career Development  
BA, MBA, Stanford

Vicki L. Keslar (2009)  
Office Operations Manager & Executive Assistant to the Vice President  
BS, Indiana University of PA; MPM, Carnegie Mellon

Allison McWilliams (2010)  
Director, Mentoring Resource Center & Alumni Career Development  
BA, Wake Forest University; MA, PhD, Georgia

Amy Willard (2011)  
Assistant Director, Career Education & Coaching  
BA, NC State

Caleigh McElwee (2011)

Associate Director, Career Coaching, School of Business  
BA, Wake Forest University; MS, EdS, UNC-Greensboro

Shan Woolard (2001)  
Assistant Director, Career Education and Coaching  
BA, Salem College; MS, UNC-Greensboro

Jessica Long (2014)  
Assistant Director, Career Education & Coaching  
BA Wake Forest, MS, UNCG

Cheryl Hicks (2014)  
Assistant Director, Career Education & Coaching  
BS, Texas A&M

Lauren Beam (2010)  
Associate Director, Mentoring Resource Center & Alumni Career Development  
BA, Wake Forest University; MS, UNC-Greensboro

Patrick Sullivan (1997)  
Interim Director, Career Education & Coaching  
BA, MBA, Wake Forest University

Heidi Robinson (2011)  
Part-time Associate Professor of the Practice in Education  
BA, Washington State; MA, Wake Forest University

Dana Hutchens (1991)  
Employer Experience Manager  
BS, UNC-Greensboro

Amy Bull (2013)  
Employer Experience Manager  
BS, Grove City College

Amy Wagner (1986)  
Office Manager

ShaShawna McFarland (2010)  
Receptionist  
BS, Winston-Salem State

Rhonda Stokes (2007)  
Associate Director, Family Business Center- Charlotte Metro  
BA, Georgia

Polly Black (2010)  
Director, Center for Innovation, Creativity and Entrepreneurship  
BA, Vassar College; MA, Columbia; MBA, Virginia

Elisa Burton (1998)  
Program Coordinator, Office of Innovation, Creativity and Entrepreneurship  
BA, High Point

Michael A. Crespi (2004)  
Sr. Associate Director, Career Coaching, School of Business  
BA, BS, New Hampshire; MBA, Wake Forest University

Lori Sykes (2004)  
Associate Director, Corporate Relations  
BS, MBA, Appalachian State

Lisa Simmons (2002)  
Associate Director, Employer Experience

BS, Rollins College; MALS, Wake Forest University

Mercy Eyadiel (2011)

Associate Vice President, Career Development & Executive Director  
Corporate Engagement

BA, Southern Nazarene; MAEd, Oklahoma City

## University Advancement

Mark A. Petersen (2008)

Vice President for University Advancement  
BA, Brandeis; MA, Southern California

Robert T. Baker (1978)

Senior Associate Vice President, University Development  
BA, MS, George Peabody (Vanderbilt)

Melissa N. Combes (1996)

Associate Vice President, Presidential Advancement and Liaison to the  
Trustees

BA, Washington College; MBA, Wake Forest University

Brett Eaton (2010)

Senior Associate Vice President, Communications and External Relations  
and Executive Director of Wake Will Lead  
BA, Clemson; MBA, American

Michael Haggas (1994)

Assistant Dean of Development, College  
BA, Clarke University

Maria Henson (2010)

Associate Vice President and Editor-at-Large Wake Forest Magazine  
BA, Wake Forest University

Shaida Horner (1993)

Associate Vice President, Gift Planning  
BA, UNC-Chapel Hill; M.Acct., UNC-Chapel Hill; JD, Wake Forest University

Linda Luvaas (2009)

Associate Vice President, Corporate and Foundation Relations  
BA, Allegheny College; MA, Duke

Minta A. McNally (1978)

Associate Vice President, Office of Family Engagement  
BA, Wake Forest University

William T. Snyder (1988)

Associate Vice President, Alumni and Donor Services  
BA, Wake Forest University

Mary Tribble (1982)

Associate Vice President and Senior Advisor for Engagement Strategies  
BA, MA, Wake Forest University

T.J. Truskowski (2002)

Executive Director of Development, School of Business  
BS, Eastern Michigan University; MBA, Davenport University

Sheila Virgil (1988)

Assistant Dean of Development, School of Divinity  
BA, St. John's College; MNO, Case Western Reserve University

Logan Roach (2015)

Assistant Dean of Development, School of Law

BS, Wake Forest University

## University Registrar

Kenneth Gilson (2020)

Assistant Provost for Academic Administration and University Registrar  
BA, Wheaton College (IL); MS, UIC John Marshall Law School; EdD,  
University of Southern California

Michael Moore (2019)

Senior Associate Registrar  
BA, Ohio University; MBA, Strayer University; PhD, Old Dominion  
University

Sasha Suzuki (2006)

Associate Registrar  
BA, MA, Wake Forest University

Candace Speaks (2010)

Office Manager

Shemeka Ceasar (2008)

Assistant Registrar  
BA, East Tennessee State University; MA, Strayer University

Grace Lee-Seo (2022)

Assistant Registrar  
BS, Baylor University; MS, PhD, University of North Carolina at Greensboro

Fagueye Ndiaye-Dalmadge (2008)

Assistant Registrar  
BS, MBA, Southern Illinois

Damian Patterson (2019)

Data Services Specialist  
BA, Bridgewater College

Susan Parrott (2007)

Certification Officer  
BA, Duke University; JD, University of North Carolina at Chapel Hill

Leah Farrow Steele (2021)

Assistant Registrar  
BS, High Point University

Richard Titus (2019)

Assistant Registrar  
BA, MA, University of North Carolina at Greensboro

Alicia Trent (2022)

Assistant Registrar  
BS, Radford University; MS, University of North Carolina at Greensboro

## University Theatre

Jonathan Christman (2019)

Director of University Theatre  
AB, Franklin & Marshall College; MFA, University of Massachusetts at  
Amherst

Evan Shuster (2019)

Technical Director  
BA, Susquehanna University; MFA Virginia Tech

Leslie Spencer (2001)

Audience Services Coordinator

BA, Salem College

Alice Barsony (2012)  
Costume Studio Supervisor  
BFA, Rhode Island School of Design; MFA, UNC School of the Arts

Clare Parker (2018)  
Costume and Wardrobe Assistant  
BFA, Southern Oregon University; MFA, UNC School of the Arts

Faculty Director of Flow House (Vienna)  
BA, MA, University of California-Los Angeles; PhD, Ohio State University

## Other Administrative Offices

Jarrod Atchison (2010)  
Director of Debate  
BA, MA, Wake Forest University; PhD, Georgia

Sam L. Beck (2008)  
Director, Student Professional Development (EY Professional  
Development Center, School of Business)  
BA, MA, Wake Forest University

Paul Bright (2004)  
Director of Art Galleries and Programming  
BFA, South Carolina

Jessica Burlingame (2007)  
Collections Manager  
BA, Edinboro University of Pennsylvania; MA, UNC-Greensboro

Brian Gorelick (1984)  
Director of Choral Ensembles  
BA, Yale; MM, Wisconsin-Madison; DMA, Illinois

Andrew W. Gurstelle (2015)  
Academic Director of the Museum of Anthropology  
BA, University of Wisconsin-Madison; MA, PhD, University of Michigan

David Hagy (1995)  
Director of Orchestra  
BM, Indiana; MM, MMA, DMA, Yale

Katy J. Harriger (1995)  
Faculty Director of the Wake Washington Program (Washington, D.C.)  
BA, Edinboro State University; MA, PhD, University of Connecticut

Peter D. Kairoff (1988)  
Program Director of Casa Artom (Venice)  
BA, California (San Diego); MM, DMA, Southern California

Benjamin T. King (2007)  
Director of Interdisciplinary Programs (School of Business)  
BA, Virginia; MBA, Wake Forest University

Martine Sherrill (1985)  
Visual Resources Librarian and Curator of Print Collection  
BFA, MLS, UNC-Greensboro

Peter M. Siavelis (1996)  
Faculty Director of the Southern Cone Program (Argentina and Chile)  
BA, Bradley; MA, PhD, Georgetown

Kathy Smith (1981)  
Faculty Director of Worrell House (London)  
BA, Baldwin-Wallace University; MA, PhD, Purdue University

Rebecca Thomas

# UNDERGRADUATE

## Wake Forest College

### *and the School of Business of Wake Forest University*

Announcements for 2023/2024

The course offerings and requirements of the undergraduate schools are continually under examination, and revisions are expected. This Bulletin presents the offerings and requirements in effect at the time of publication and in no way guarantees that the offerings and requirements will remain the same.

Every effort is made to provide advance information of any changes.

- Wake Forest College
- Academic Calendar
- Procedures
- Financial Aid
- Special Programs
- Center for Global Programs and Studies
- Requirements for Degrees
- Departments/Programs
- Wake Forest University School of Business
- Wake Forest College Faculty
- School of Business Faculty
- Emeriti

## Wake Forest College

Wake Forest College of Wake Forest University is the center of the University's academic life. Through it, the University carries on the tradition of preparing young people to develop their knowledge and hone their skills as they become leaders of character intent on working and living in the spirit of *Pro Humanitate*.

Wake Forest College embraces the liberal arts tradition within the context of an internationally recognized research university by upholding the teacher-scholar idea; expecting exceptional teaching and outstanding research, scholarship and creativity; and promoting faculty engagement with students both in and out of the classroom that nurtures their intellectual and personal development. Wake Forest College also welcomes the challenges of cultural diversity and pluralism in all their forms and is committed to addressing these challenges through the cultivation of inclusive, equitable learning communities that reflect the world in which all our students and faculty live.

Wake Forest continually examines its educational purpose and evaluates its success in fulfilling it. A formal statement of purpose was prepared as part of the school's decennial reaccreditation process and was adopted by the Board of Trustees.

## The Undergraduate Schools

The undergraduate schools, Wake Forest College and the Wake Forest School of Business, are governed by the Board of Trustees, the University administration and by their respective faculties. Responsibility for academic administration is delegated by the president and trustees to the provost, who is the chief academic officer of the University. The deans

of the schools report to the provost and are responsible for academic planning and administration for their schools.

In the past several years, Wake Forest College has undertaken bold initiatives, such as leading the adoption of test-optional admissions; developing new programs to educate the whole person; integrating the cultivation of leadership and character; reinventing personal and career development; establishing an engineering program rooted in the liberal arts; and building greater community within the residential college setting.

## Honor System

Wake Forest University upholds the ideals of honor and integrity. The Honor System is central to University life; its essence is a commitment by each person to do what is right and abide by community standards. Each student is pledged to be trustworthy in all matters, and a violation of that trust is an offense against the community as a whole. In the specific terms of the Honor Code, a student pledges in all phases of life not to cheat, plagiarize, engage in other forms of academic or social misconduct, deceive, or steal. The strength of the Honor System derives from the commitment of each and every student to uphold its ideals.

The undergraduate student conduct system is jointly administered by the Office of the Dean of the College, the Office of the Dean of Student Services, and the Judicial Council. Complete details are available at the Offices of the Dean of the College and the Dean of Students.

- Honor Code
- Rights and Responsibilities: Code of Conduct

## Honor Code

The Wake Forest Undergraduate Honor Code (the "Honor Code") is grounded in a fundamental commitment from each member of our community to honesty and integrity. Adherence to the Honor Code enables our community to live and to work together with a shared sense of trust and respect. Violations of the Honor Code are treated with the utmost seriousness because they undermine both personal integrity and community standards. Specific offenses under the Honor Code include cheating, plagiarism, stealing, and deception in both academic and non-academic settings.

Alleged academic violations of the Honor Code will be heard by and in accordance with procedures set by the Honors and Ethics Council.

Alleged non-academic violations of the Honor Code are Code of Conduct Violations and will be heard by and in accordance with procedures set by the Office of the Dean of Students.

## Rights and Responsibilities: Code of Conduct

In keeping with its historic concern for students, Wake Forest has a legitimate interest in student welfare in and out of class, on campus and off campus. The Wake Forest University Undergraduate Student Code of Conduct (the "Code of Conduct") is grounded in concern for student actions that are inconsistent with obligations as members of the educational community. The Code of Conduct establishes standards of behavior to support the values of the University and uphold the best interests of students. If a student or organization has violated these standards of behavior, appropriate outcomes will be imposed. The



resulting findings and outcomes may become part of the conduct record for individual students or organizations.

Student Conduct supports the mission of Wake Forest University through the use of learning-focused, procedurally sound accountability processes designed to facilitate the development of responsible global citizens and find the truth, while valuing the individuality of each person and their lived experiences.

Alleged violations of the Code of Conduct will be heard by and in accordance with procedures set by the Office of the Dean of Students. To review the Code of Conduct, go to: <https://studentconduct.wfu.edu/undergraduate-student-handbook/>

## Student Complaints

Situations may arise in which a student believes that they have not received fair treatment by a representative of the University or has a complaint about the performance, actions, or inaction of the staff or faculty affecting a student. There are mechanisms in place for the reporting and resolution of complaints regarding specific types of concern (student conduct, honor system, bias, grade dispute, harassment and discrimination, for instance), and these should be fully used where appropriate. Students are encouraged to seek assistance from faculty advisers, deans' offices in the College or Business School, or the Office of the Dean of Students when evaluating the nature of their complaints and deciding on an appropriate course of action.

The complaint process outlined below is meant to answer and resolve issues arising between individual students and the University and its various offices when a mechanism for reporting and resolution of the specific type of concern is not already in place. A complaint cannot be filed on behalf of another person. A complaint should first be directed as soon as possible to the person or persons whose actions or inactions have given rise to the problem—not later than three months after the event.

For complaints in the academic (i.e., classroom) setting, the student should talk personally with or send a written complaint explaining the concern directly to the instructor. Should the student and instructor be unable to resolve the conflict, the student may then turn to the chair of the involved department (in the Wake Forest School of Business, this would be the dean) for assistance. The chair (or dean) will communicate with both parties, seek to understand their individual perspectives, and within a reasonable time, reach a conclusion and share it with both parties. If the student's complaint is not resolved by these procedures, the student should consult with the Office of Academic Advising for assistance. The Associate Dean for Academic Advising will consult with the parties to obtain a resolution. Finally, a student may appeal to the Committee on Academic Affairs which will study the matter, taking input from all parties, and reach a final decision concerning resolution.

For complaints outside the academic setting, the student should talk personally with or send a written complaint explaining the concern directly to the individual involved. Should the student and individual be unable to resolve the concern, the student may then turn to the appropriate administrative channel for assistance, which may be an immediate supervisor, department head, or Dean. The immediate supervisor, department head, or dean will meet or communicate with both parties, seek to understand their individual perspectives, and within a reasonable time, reach a conclusion and share it with both parties. Finally, a student may appeal to the vice president with administrative responsibility for the issue that is the subject of the concern. The vice

president will study the matter, work with the parties, and reach a final resolution. Students uncertain about the proper channels are encouraged to seek advice from faculty advisers, deans' offices, or the Office of the Dean of Students.

## Academic Calendar

The following calendar is effective as of August 1, 2023. Updates may have occurred since the publication of the Bulletin. Please refer to the Academic Services calendar on the Registrar's website (<https://registrar.wfu.edu/calendars/>) for the most up-to-date version.

### Fall Semester 2023

Date	Day	Event
August 23	Wednesday	Residence Halls open for new students*
August 25	Friday	Residence Halls open for returning students*
August 28	Monday	Classes begin
September 4	Monday	Labor Day - classes are in session, staff holiday
September 11	Monday	Last day to add full-term classes**
October 2	Monday	Last day to drop a full-term class**
October 12-15	Thursday-Sunday	Fall Break (No Thursday and Friday classes)
October 23	Monday	Mid-term grades due by noon
October 30	Monday	Last day to drop with a grade of "W"
November 22-26	Wednesday-Sunday	Thanksgiving Holiday
December 8	Friday	Classes end
December 9-10	Saturday-Sunday	Reading Days
December 11-16	Monday-Saturday	Fall final exams
December 17	Sunday	All Residence Hall close at 2pm*
December 20	Wednesday	Fall final grades due by noon
December 18-Jan 16		Winter Recess

### Spring Semester 2023

Date	Day	Event
January 13	Saturday	Residence Hall open*
January 17	Wednesday	Classes begin
January 31	Wednesday	Last day to add full-term classes**
February 15	Thursday	Founders' Day Convocation
February 21	Wednesday	Last day to drop a full-term class**
March 9-17	Saturday-2nd Sunday	Spring Break (no classes)
March 25	Monday	Last day to drop with a grade of "W"***
May 1	Wednesday	Classes end
May 2, 5, 8	Thursday, Sunday, Wednesday	Reading Days

May 3-4, 6-7, 9-10	Friday-Saturday, Monday-Tuesday, Thursday-Friday	Spring final exams
May 13	Monday	Final grades due for May Degree Candidates by noon
May 20	Monday	Commencement
May 21	Tuesday	Final grades due for non-degree candidates by noon

\*

Consult Residence Life and Housing (<https://rlh.wfu.edu/>) for a schedule of opening and closing times.

\*\*

*For courses taught in less than the full term's duration (e.g., 7.5 week classes) proportional drop and add deadlines are available on the Academic Services calendar on the Registrar's website (<https://registrar.wfu.edu/calendars/>).*

## Procedures

*Students are responsible for familiarizing themselves with the portions of this bulletin that pertain to their course of study. Statements concerning courses and expenses are not to be regarded as irrevocable contracts between the student and the institution. The University reserves the right to change the schedule and modality of classes and the cost of instruction at any time within the student's term of enrollment.*

- Admission
- Tuition and Fees
- Refunds
- Housing
- Advising and Registration
- Examinations and Grading
- Enrollment Policies and Procedures
- Transfer Credit

## Admission

Candidates for admission must furnish evidence of maturity and educational achievement. The Committee on Admissions carefully considers the applicant's academic records, scores on any submitted standardized tests, written portion of the application, and evidence of character, motivation, goals, and general fitness for study in the College. The applicant's secondary school program must establish a commitment to the kind of broad liberal education reflected in the academic requirements of the College.

Admission as a first-year student normally requires graduation from an accredited secondary school with a minimum of 16 units of high school credit. These should include 4 units in English, 3 in mathematics, 2 in history and social studies, 2 in a single foreign language, and 1 in the natural sciences. An applicant who presents at least 12 units of differently distributed college preparatory study can be considered. Homeschooled students submitting all required documentation of the application will be considered. Additional documentation outlining the homeschool curriculum, including transcripts from courses taken outside the home and Advanced Placement or other standardized test scores are welcomed. A limited

number of applicants may be admitted without the high school diploma, with particular attention given to ability, maturity, and motivation.

## Application

An application is secured from the Office of Undergraduate Admissions in person, online (<https://admissions.wfu.edu/>), or by mail:

P.O. Box 7305  
Winston-Salem, North Carolina 27109-7305

It should be completed and returned to that office no later than January 1 for the fall semester. Most admissions decisions for the fall semester are made by April 1, with prompt notification of applicants. For the spring semester, applications should be completed and returned no later than November 15.

The admission application requires records and recommendations directly from secondary school officials. Submission of standardized test scores is optional. If submitting scores, they should be sent directly to the University by the official testing service. A nonrefundable \$85 fee to cover the cost of processing must accompany an application. It cannot be applied to later charges for accepted students or refunded for others. The University reserves the right to reject any application without explanation.

A \$1500 nonrefundable admission deposit is required of all regularly admitted students and must be sent to the Office of Undergraduate Admissions no later than May 1 following notice of acceptance. It is credited toward first semester fees and is nonrefundable. Students notified of acceptance after May 1 for the fall semester or November 1 for the spring semester should make a nonrefundable admission deposit within two weeks of notification. Failure to make the admission deposit is taken as cancellation of application by the student. No deposit is required for summer session enrollment.

## Early Decision

Wake Forest has two binding early decision plans for students who have decided conclusively that Wake Forest is their first college choice. While early decision applicants may submit regular decision applications to other institutions, Wake Forest must be the applicant's first choice and only early decision application. Students, parents, and school counselors must sign the Early Decision Agreement stating that the applicant will enroll if admitted and will withdraw all applications to other colleges upon acceptance to Wake Forest.

Early Decision I (ED I) students may apply after completion of the junior year but no later than November 15. ED I applicants are notified on a rolling basis, typically six to eight weeks after the application is completed.

Early Decision II (ED II) applicants must follow the same exclusivity guidelines as required for ED I. The ED II application deadline is January 1. ED II is not rolling; decisions are released in mid-February.

A \$1500 enrollment deposit is due within two weeks of acceptance notification for both ED I and ED II.

## Admission of Students with Disabilities

Wake Forest College will consider the application of any qualified student, regardless of disability, on the basis of the selection criteria established by the University which include personal and academic merit. Upon

matriculation, all students will be required to meet the same standards for graduation.

The University endeavors to provide facilities which are in compliance with applicable laws and regulations regarding access for individuals with disabilities. Additionally, services are available to provide reasonable accommodations to students with disabilities. For more information on assistance for undergraduate students, please contact the director of the Learning Assistance Center, at 336-758-5929 or refer to Disability Services under Campus Life on the Wake Forest website.

Admission of Transfer Students

The number of transfer students who can be admitted each year depends upon the availability of space in the first-year (second semester), sophomore, and junior classes. Transfer students must be eligible for readmission to the last college attended and must supply a Dean's Statement(s) from all colleges attended. The Dean's Statement addresses any disciplinary action that may have been taken against the student for academic or non-academic reasons. The student must have an overall average of at least C on all college work attempted.

Courses satisfactorily completed in other accredited colleges are accepted subject to faculty approval. In general, no credit is allowed for courses not found in the Wake Forest curriculum. To earn a baccalaureate degree from Wake Forest University, a minimum of half of the degree requirements must be completed at Wake Forest, the senior year and one other.

Additionally, Wake Forest has a six-semester (typically three-year) residency requirement. Students are required to live in campus housing their first three years unless they live with a parent or guardian in the Winston-Salem area. In addition, the University is committed to housing students who request to live on-campus after fulfilling the residency requirement. Students who study abroad during the fall or spring semesters are given credit for that time toward their residency requirement; summer sessions do NOT count toward residency requirements. Transfer students are expected to fulfill the six-semester residency requirement. However, transfer students who have lived on campus at another institution are given credit for that time toward their residency requirement. See "Housing" for more information.

Tuition and Fees Expenses

Statements concerning expenses are not to be regarded as forming an irrevocable contract between the student and the University. The costs of instruction and other services outlined herein are those in effect on the date of publication of this bulletin, and the University reserves the right to change without notice the cost of instruction and other services at any time.

Charges are due in full on August 1 for the fall semester and December 1 for the spring semester. Faculty regulations require that student accounts be settled in full before the student may be entitled to receive an official transcript or diploma, or to register for classes.

Tuition

Fee	Per Semester	Per Year
Full-time	\$31,804	\$63,608
Part-time	\$2,650 (per hour) *	

Affiliate Programs	\$31,804
Audit Fee	\$75 (per hour)
Summer School	\$950 (per hour)

\* Students must receive approval prior to the start of classes for part-time study.

Students should expect an increase yearly in tuition. Students must obtain approval for part-time status prior to the beginning of the semester from the Office of Academic Advising to be eligible for part-time tuition.

Students enrolled in the College or in the School of Business for full-time residence credit are given full privileges regarding libraries, laboratories, athletic contests, concerts, publications, the Student Union, the University Theatre, and Student Health Services. Part-time students are granted the use of the libraries, laboratories, and Student Health Services but not to the other privileges mentioned above.

Students are required to arrive on campus by the last day to add a course for each semester.

Room Rates

Room Type	Per Semester	Per Year
Deacon Place rooms	\$6,595	\$13,190
Single rooms and all apartments	\$6,348	\$12,696
Double rooms	\$5,381	\$10,762
Triple rooms	\$4,780	\$9,560
Summer session: single	\$1,176	
Summer session: double	\$802	

Meal Plans

All resident students are required to sign-up for a meal plan. Choose the plan that best fits your lifestyle and the minimum plan for your housing type. To select your plan, first, log in to the Housing Portal (<https://wfu.starrezhousing.com/StarRezPortalX/>). Off-campus residents may purchase a meal plan, but are not required to do so. For specific details on all meal plans choices, including the specific meal plans and prices, please visit Deacon Dining's website (<https://dining.wfu.edu/home/meal-plans/>).

All students, regardless of class year, can change (increase or decrease) their meal plan for the fall semester through August 1, adhering to area and class year minimums. **Plan decreases for the fall semester are not allowed after August 1**; however, plan increases will be accepted through September 30 adhering to area and class year minimums. **Plan decreases for the spring semester are not allowed after January 3**; however, plan increases will be accepted through January 31 adhering to area and class year minimums.

Deacon Dollars

In addition to a meal plan, students may also purchase Deacon Dollars. The Deacon Dollar account is a debit account system on the student ID card that allows purchases throughout campus.

## Meal Plan Options

Meal Plan	Food Dollars	Cost/Semester
Freedom Plan	\$400	\$4,613
Black Plus Plan	\$325	\$3,853
Base Plan	\$275	\$3,317
Forestry Plan	\$100	\$3,317
Gold Plan	\$750	\$3,304
Screamin' Plan	\$375	\$2,185
Apartment Style Plan	\$300	\$1,288
Commuter Plan**	\$250	\$800

\*\* Commuter students only.

## Other Fees

An *admission application fee* of \$85 is required with each application for admission to cover the cost of processing and is nonrefundable.

An *admission deposit* of \$1,500 is required for students applying to Wake Forest University. All admissions deposits must be submitted to the director of admissions and are nonrefundable. The applicable deposit is credited to the student's charges for the semester for which he or she has been accepted for admission.

*Individual instruction music fees* are required in addition to tuition for students enrolling for individual study in applied music in the Department of Music and are billed to the student account by Student Financial Services. The fee is \$325 for ½-hour music classes and \$650 for 1-hour music classes.

A *one-time nonrefundable new-student orientation fee* of \$270 is charged to all new and transfer students in the fall semester.

A *mandatory nonrefundable student health fee* of \$550 per year is charged for all full-time Reynolda campus students.

A *mandatory nonrefundable student activity fee* of \$206 per year is charged to all full-time Reynolda campus students.

A *mandatory nonrefundable wellness fee* of \$394 per year is charged to all full-time Reynolda campus students.

A *continuous enrollment fee* of \$100 per semester is charged to a student who has been granted continuous enrollment.

*Library fees* are charged for lost or damaged books and are payable in the library.

*Returned check fee* of \$25 is charged for each returned check or returned DEAC payment by the Office of Student Financial Services

## Student Health Insurance

*Student Health Insurance Premium.* Wake Forest University requires health insurance for all full-time, degree-seeking students. Students who demonstrate coverage that meets our criteria may waive the insurance provided by WFU. Students may apply for a waiver or enroll online (<http://www.bcbssc.com/wfu/>) beginning June 1st. Premiums for student health insurance will be determined each year and published on the Wake Forest University website. Complete details and criteria can be found online (<https://shi.wfu.edu/>).

*Medical Leave Continuous Enrollment Status.* Students enrolled in the health insurance plan may continue coverage for a maximum of one year while on medical continuous enrollment status approved by the University. Students must intend to return and remain a degree-seeking candidate and remit appropriate premiums. To determine if you are eligible, please contact Student Blue for more information at 800-579-8022 or 336-758-4247.

## Refunds

A student who officially withdraws or is granted continuous enrollment status during a semester may be entitled to a refund of tuition, housing, and dining charges depending on the student's date of withdrawal, date of continuous enrollment status, and/or the last day residing in University housing. A withdrawal, official or otherwise, or grant of continuous enrollment status also affects financial aid eligibility, as outlined in the federal Return of Title IV Program Funds Policy and the Return of Non-Title IV Program Funds Policy. A student using scholarships, grants, or loans to pay educational expenses, whose account was paid-in-full prior to withdrawal or grant of continuous enrollment status, is likely to owe the University after withdrawal or grant of continuous enrollment status. Procedures for such changes of status are coordinated by the Office of Academic Advising.

## Refund of Charges Policy

### Tuition and Fees

Tuition refunds are based on the date of official withdrawal or the effective date of continuous enrollment status. Please refer to the official "Schedule of Refunds for Withdrawal or Continuous Enrollment" for the respective semester of enrollment. Refunds will be reduced by the amount of any outstanding charges on a student's account. If refunded charges leave a credit balance on the student account, the student is responsible for completing an online student refund request at (<http://finance.wfu.edu/sfs/student-refund/>) or the credit balance will remain on the student account and will be applied for future semesters. If the credit is a direct result of Title IV aid, the credit is automatically refunded to the student.

There are no refunds for mandatory fees after the first class day in a semester as reflected in the academic calendar.

Vehicle registration fees will not be refunded unless the issued permit is returned to Transportation and Parking Services before the first day of class. Students graduating or studying abroad for spring semester may receive a prorated refund of the vehicle registration fee by returning the issued permits to the Transportation and Parking Services office.

## Schedule of Refunds for Withdrawal or Continuous Enrollment

### Fall & Spring Semesters

Official Date	Tuition Refunded
Before semester begins	100% tuition, less deposit
First week of semester	85%
Second week of semester	75%
Third week of semester	50%
Fourth week of semester	30%
Fifth week of semester	20%
After fifth week of semester	0%



**Summer Sessions I & II (6 week sessions)**

Official Date	Tuition Refunded
First three days of session	100% tuition, less deposit
Fourth day of session	75%
Fifth day of session	50%
Sixth day of session	25%
After sixth day of session	0%

**Full Summer Session (12 week session)**

Official Date	Tuition Refunded
First five days of session	100% tuition, less deposit
Sixth - Ninth day of session	75%
Tenth - Twelfth day of session	50%
Thirteenth - Fifteenth day of session	25%
After fifteenth day of session	0%

Students are responsible for officially dropping courses to be eligible for a refund. Nonpayment for classes for which a student is registered or non-attendance in a registered class does not release the student from financial obligations and will not drop the student from the class. Student Financial Services calculates the refund of charges and will apply the amount of tuition refunded in the applicable refund schedule listed above. Student Financial Services has available an example of the application of the University Refund of Charges Policy. If charges originally paid by financial aid funds are no longer covered after financial aid funds are returned to the respective programs, the student is responsible for the remaining balance.

**Housing and Dining**

Housing and dining refunds for the fall and spring semesters are based on the student's official check-out date from University housing and are calculated based on the official Schedule of Refunds for Withdrawal or Continuous Enrollment (<https://finance.wfu.edu/students-parents/sfs/policies/#20230120231628>), or the University Disruption Refund Policy (<https://finance.wfu.edu/students-parents/sfs/policies/#disruption>), for the applicable semester.

Students with dining plans who do not reside in University housing will receive a refund of dining charges based on the date of official withdrawal or the effective date of the continuous enrollment status. Dining refunds are only applicable to dining charges billed to the student account. If a student's dining plan balance is less than the eligible calculated refund then the lesser of the two amounts will be refunded.

**Summer Sessions:**Housing

Any refund of charges under the Housing Agreement will only be available if a request for cancellation is received by Residence Life & Housing (RL&H) prior to the first day of classes. Once classes begin, no refunds will be made for housing charges.

Meal Plans

Summer meal plans may not be changed once selected. Any refund of charges under the Dining Agreement will only be available if a student withdraws from classes and a request for cancellation is received by RL&H prior to the first day of the first session of summer classes.

**Conduct or Honor Code Violations**

Tuition, fees, housing, dining and all other charges will not be refunded when a student is suspended or expelled from the University as a result

of a conduct or honor code violation. Similarly, housing charges will not be refunded when a student is suspended or expelled from University housing. Return of Title IV funds are handled in accordance with federal law.

\*Refunds will be reduced by the amount of any outstanding charges on a student's account.

**Pursuant to The Veterans Benefits and Transition Act of 2018**

GI Bill® and VR&E beneficiaries (Chapter 33 and Chapter 31 beneficiaries) may attend a course of education or training for up to 90 days from the date the beneficiary provides:

A certificate of eligibility, or a "statement of benefits" obtained from the VA's eBenefits web site, or a valid VAF 28-1905 form for Chapter 31 authorization purposes, provided that the student beneficiary provides such documentation to the appropriate VA Certifying Official no later than the first day of a course of education, and provided that the student provides any additional payment amount due that is the difference between the amount of the student's financial obligation and the anticipated amount of the VA education disbursement to Wake Forest University.

This policy allows a student to attend the course until the VA provides payment to Wake Forest University. Wake Forest University will not impose a penalty, or require the beneficiary to borrow additional funds to cover tuition and fees due to late payments from the VA.

**University Disruption Refund Policy**

Circumstances may arise during a semester that cause significant disruptions to University operations and result in the University closing the campus. These circumstances include, without limitation, extreme weather, fire, natural disaster, war, labor disturbances, loss of utilities, riots or civil commotions, epidemic, pandemic, public health crisis, power of government, or any other circumstance like or unlike any circumstance mentioned above, which is beyond the reasonable control or authority of the University.

In the event of a significant disruption to University operations either:

- During a semester that results in the University closing campus for the remainder of the semester;
- At the beginning of a semester that delays or prevents the University opening campus; or
- During a semester that results in the University closing campus temporarily during the semester

The University will issue refunds for housing and dining charges and wellness and parking fees to students where applicable and according to the refund schedule below. There will be no refunds for tuition or Student Health, Student Activity, or any other fees paid by or on behalf of students. Refunds (if applicable) will be calculated at the end of the semester.

This policy applies to significant disruptions where the University closes campus. It does not apply where students officially withdraw from the University or are officially granted continuous enrollment status during a semester. Refunds, if any, in those circumstances are governed by the University's Refund of Charges Policy.



## Fall & Spring Semesters - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	85%
2	78%
3	71%
4	64%
5	57%
6	50%
7	43%
8	36%
9	29%
10	22%
11	15%
12	10%
13	No Refund
14	No Refund
15	No Refund
16	No Refund

## Summer Sessions I & II (6 week sessions) - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	75%
2	50%
3	25%
4	No Refund
5	No Refund
6	No Refund

## Full Summer Session (12 week session) - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	85%
2	75%
3	65%
4	55%
5	45%
6	35%
7	25%
8	15%
9	No Refund
10	No Refund

11	No Refund
12	No Refund

## Return of Title IV Program Funds Policy

The 1998 amendments to the Higher Education Act (HEA) of 1965 (Section 484B), and subsequent regulations issued by the United States Department of Education (34 CFR 668.22), establish a policy for the return of Title IV, HEA Program grant and loan funds for a recipient who withdraws.

A student who is not officially withdrawn or granted continuous enrollment status, is nevertheless considered to be withdrawn for the purpose of Title IV, HEA Program funds, upon ceasing academic engagement during a semester.

Wake Forest University's continuous enrollment policy does not exempt any student from the requirements of the Return of Title IV Funds policy; nor does it extend federal student loan deferment benefits.

Title IV Funds subject to return include the following aid programs: Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Iraq & Afghanistan Service Grant, Teacher Education Assistance for College & Higher Education Grant, Federal Direct Loan (subsidized and unsubsidized), and Federal Direct PLUS Loan.

Title IV aid is awarded and paid on a payment period basis. For students enrolled in a single session or module of a payment period (such as a summer), the single session or module is the payment period. For students who are awarded Title IV aid based on a reported registration in multiple sessions or modules of a payment period, the payment period is the beginning (start date) of the first session or module through the end (last day of exams) of the last session or module. Students who do not complete a payment period upon which Title IV aid was awarded, are considered to be withdrawn from the payment period and are subject to the Return of Title IV Program Funds Policy.

The percentage of the payment period completed is determined by dividing the total number of calendar days comprising the payment period (excluding breaks of five or more consecutive days) into the number of calendar days completed. The percentage of Title IV grant and loan funds earned is:

1. up through the 60% point in time, the percentage of the payment period completed,
2. after the 60% point in time, 100%.

The amount of Title IV grant and loan funds unearned is the complement of the percentage of earned Title IV funds applied to the total amount of Title IV funds disbursed (including funds that were not disbursed but could have been disbursed, i.e., post-withdrawal or post-grant of continuous enrollment status disbursements).

If the amount earned is less than the amount disbursed, the difference is returned to the Title IV programs. If the amount earned is greater than the amount disbursed, the difference is treated as a late disbursement in accordance with the federal rules for late disbursements.

A student who completes all the requirements for graduation from his or her academic program before completing the payment period, is not considered to have withdrawn.

In a program offered in modules, a student is not considered to have withdrawn if the student successfully completes one module that

includes 49 percent or more of the number of days in the payment period, excluding scheduled breaks of five or more consecutive days and all days between modules.

In a program offered in modules, a student is not considered to have withdrawn if the student successfully completes a combination of modules that when combined contain 49 percent or more of the number of days in the payment period, excluding scheduled breaks of five or more consecutive days and all days between modules.

In a program offered in modules, a student is not considered to have withdrawn if the student successfully completes coursework equal to or greater than the coursework required for definition of a half-time student for the payment period.

Institutional charges (costs) include tuition and required fees, institutionally-controlled housing, and meal plan. Federal aid is considered as first applied toward institutional charges, regardless of other non-federal aid received.

Unearned funds, up to the amount of total institutional charges multiplied by the unearned percentage of funds, are returned by the University; the return of Title IV Program funds may be rounded to the nearest dollar for each aid source.

The student returns any portion of unearned funds not returned by the University. A student (or parent for PLUS loans) repays the calculated amount attributable to a Title IV loan program according to the loan's terms. If repayment of grant funds by the student is required, only 50% of the unearned amount must be repaid. A student repays a Title IV grant program subject to repayment arrangements satisfactory to the University or the Secretary of Education's overpayment collection procedures.

Funds are returned in the following order: Federal Direct Unsubsidized Loans, Federal Direct Subsidized Loans, Federal Direct PLUS Loans, Federal Pell Grants, Iraq & Afghanistan Service Grants, Federal Supplemental Educational Opportunity Grants, Teacher Education Assistance for College & Higher Education Grants, and other Title IV funds for which a return of funds is required.

The Office of Student Financial Aid calculates the amount of unearned Title IV grant and loan funds, and has available examples of the application of this federal policy and a copy of the relevant Code of Federal Regulations section (CFR 668.22).

## Return of Non-Title IV Program Funds Policy

The Office of Student Financial Aid calculates the amount of non-Title IV program funds to be returned to the various programs when a recipient withdraws or is granted continuous enrollment status. The return of non-Title IV Program funds may be rounded to the nearest dollar for each aid source.

Return on non-need-based (merit-based, etc.) funds are determined by specific program rules. Return of funds to various state and private aid programs is determined by specific program rules. If rules allow, state and private loan funds are returned before gift funds. State and private funds may be retained in amounts necessary to satisfy the student's remaining University charges or adjusted need, whichever is larger.

Aid from institutional funds for which all disbursement requirements have not been met by the student prior to withdrawal or change to continuous enrollment status are canceled and no disbursements are made.

Upon withdrawal or change to continuous enrollment status, a student's eligibility for need-based aid programs is recalculated based on the withdrawal date, using an adjusted estimated cost of attendance.

The adjusted estimated cost of attendance (COA) is established in two parts.

- For an on-campus student, the first part equals the adjusted tuition and housing charges (not to exceed the standard allowance, and not including charges that result from a student remaining in his/her housing after the date of withdrawal) and the standard allowance for books and supplies; the second part equals prorated estimates (by weeks) of food, transportation, and personal living expenses.
- For an off-campus student, the first part equals the adjusted tuition charge and the standard allowance for books and supplies; the second part equals prorated estimates (by weeks) of housing, food allowance, transportation, and personal living expenses.

Total grants and scholarships are reduced proportionally based on the adjusted estimated cost of attendance, using the percentage of initially-awarded grants and scholarships to the initial full-semester estimated cost of attendance.

The order in which each institutional fund is reduced is determined on a case-by-case basis by the aid office, with the guiding principle being the return of funds to University accounts most likely to be needed by other students.

A student who withdraws or changes to continuous enrollment status after receiving a cash disbursement must repay Wake Forest scholarship funds up to the amount of Title IV funds that the University must return. Fines and other incidental charges not included in the financial aid COA are solely the responsibility of the student. Required returns of funds to all financial aid programs are made prior to the refund to the student.

## Housing

Wake Forest has a six-semester residency requirement and is committed to providing eight semesters of on-campus housing for residential students in good standing.

- Students are expected to fulfill the residency requirement consecutively, barring time away from the University (e.g. CES, withdrawal).
- Students living in University housing or studying abroad during the fall or spring semester earn a housing credit as of the census date each semester.
- Students who are away from the University (e.g. CES, withdrawal) as of the census date do not earn a housing credit for that semester.
- Summer sessions do not count toward the residency requirement.
- Transfer students will receive a housing credit for each fall or spring semester completed at full-time status at another institution. Residence Life and Housing will work with the Office of the University Registrar on these evaluations.

Students may request an exception to the residency requirement by submitting a written request to Residence Life and Housing at [housing@wfu.edu](mailto:housing@wfu.edu) should they meet one of the following criteria:

- Living with a Parent/Guardian at their permanent residence in Forsyth County or a contiguous county
- Living with a parent or guardian will impact a student's cost of attendance and students receiving financial aid should follow up with Student Financial Aid to determine the impact on financial aid eligibility.
- Living with and having parental responsibilities for a minor child in Forsyth County or a contiguous county
- Married and living with their spouse in Forsyth County or a contiguous county
- 24 years of age or older
- Financially independent as determined by Student Financial Aid

The University's commitment to providing eight semesters of on-campus housing for residential students in good standing. Students who are released from or have fulfilled their residency requirement may request a return to housing on campus based on availability.

For more information about the Office of Residence Life and Housing as well as their processes and policies, please visit their website at [rlh.wfu.edu](https://rlh.wfu.edu) (<https://rlh.wfu.edu/>).

### Off-Campus Housing

Students who have earned four housing credits and wish to be released from the University's residency requirement early may enter the Off-Campus Lottery. This indicates a desire to live off-campus prior to fulfilling the residency requirement. As the Office of Residence Life and Housing finalizes the number of students able to live off-campus, they will use a random selection process to release the appropriate number of students.

Students who have earned six housing credits will have the opportunity to declare off-campus intent for future academic years as a part of the University's housing selection process.

For more information on the lottery process and other policies related to living off-campus, please visit the Office of Residence Life and Housing's Off-Campus Housing page (<https://rlh.wfu.edu/housing/off-campus-living/student-resources/policies/>).

### Off-Campus Address Registration and Orientation

Students approved to live off-campus must register their residential address and complete an online orientation course thereby declaring their compliance with the University's off-campus expectations. Additionally, if a student changes residences, they must re-register their address and check to make sure that the new residence is registered.

Students wishing to live in single-family dwellings must live in registered properties. City of Winston-Salem ordinances state that there shall be no more than four (4) individuals that are not related by blood, adoption, or marriage living together in a single-family dwelling. Residence Life and Housing will monitor the number of students registered in each single-family dwelling and will, at no time, grant permission to any individual(s) to exceed the city ordinance.

## Advising and Registration

### Orientation and Advising

For new students in the College, a required orientation program and a required meeting with the student's lower-division academic adviser precede the beginning of classes and the drop/add period. Some required orientation programs also occur during fall semester of the first year. The

lower-division academic adviser provides guidance during and between registration periods until the student declares a major.

During orientation, advisers meet with students both individually and in small groups. A meeting with the adviser is required before all subsequent registration periods. Students are encouraged to take the initiative in arranging additional meetings at any time to seek advice or other assistance. The lower-division adviser works with the student until the student declares a major, typically during the fourth semester. Then, an adviser in the student's major department is assigned.

## Registration

Registration for continuing students in the College and the School of Business undergraduate program typically begins in March for the fall and the summer terms, and in October for the spring term. Consultation with the academic adviser must be completed before registration. New students entering in the fall term register during the prior summer. Readmitted students and those approved for resumption of full- or part-time status, once officially advised, may work with the Office of the University Registrar staff to enroll in classes. Students currently enrolled at the University may register for the summer sessions classes. All tuition and fees must be paid in full to the Office of Financial and Accounting Services by the announced deadlines.

## Classification

Classification of students by class standing and as full-time or part-time is calculated in terms of semester hours earned.

The requirements for classification are as follows:

- *Sophomore—completion of no fewer than 25 hours toward a degree;*
- *Junior—completion of no fewer than 55 hours toward a degree;*
- *Senior—completion of no fewer than 87 hours toward a degree.*

## Course Load

Most courses in the College and the School of Business undergraduate program have a value of 3 credit hours, but they may vary from one-half hour to five hours. The normal load for a full-time undergraduate student is 15 credit hours per semester. The maximum credit hours allowed in the College without permission is 17, and the maximum allowed in the School of Business is 18. A student who feels that he or she has valid and compelling reasons to register for more than the maximum hours in a semester must seek permission starting each semester after self-service registration has opened for all students (see academic services calendar (<https://registrar.wfu.edu/calendars/>) for exact date). Only if the adviser, the appropriate staff of the Office of Academic Advising, and the Committee on Academic Affairs agree that the proposed course load is in the best interest of the student will permission be granted. Non-business or non-accounting majors wishing to take courses in the School of Business must have met the specific courses' prerequisites and have permission of the instructor. Enrollment in the course is subject to space availability.

Twelve hours per semester constitute minimum full-time enrollment for undergraduates at the University. Recipients of Wake Forest scholarships and loans, as well as some types of federal aid, must be enrolled for at least 12 hours. Recipients of veterans' benefits, grants from state government, and other governmental aid must meet the guidelines of the appropriate agencies.

## Part-time Students

A student may not register for part-time status (i.e., fewer than 12 hours in a single semester) without specific permission from the Office of Academic Advising by the last day to add a class. Students enrolled on a part-time basis are not eligible for the Dean's List Approval for part-time status requires that students pay for such work on a per hour basis. Petitions for part-time status after the last day to add a class will be denied, except in the case of special circumstances, and the student will be required to pay full tuition. Part-time students may be ineligible for campus housing unless an exception is made by the Office of Residence Life and Housing. For information regarding the consequences of part-time status on tuition, housing, or financial aid, students should visit the offices of Student Financial Services, Student Financial Aid, and Residence Life and Housing.

## Summer Full-time Status Policy

A Wake Forest University undergraduate student registered for one (1) or more credit hours at Wake Forest University during the summer is considered to be a full-time student during the summer part-of-term in which they are enrolled (Session I, Session II, or Full Summer).

**Important Note:** The above definition of full-time status during the summer session may not be coincident with requirements for Federal financial aid eligibility in the summer. For more information, contact Financial Aid (<https://financialaid.wfu.edu/>) (email ([financial-aid@wfu.edu](mailto:financial-aid@wfu.edu)); 336-758-5154)

## Class Attendance

The responsibility for class attendance lies with the student, who is expected to attend classes regularly and punctually. A vital aspect of the residential college experience is class attendance; its value cannot be measured by testing procedures alone. Students are considered sufficiently mature to appreciate the necessity of regular attendance, to accept this personal responsibility, to demonstrate the self-discipline essential for such performance, and to recognize and accept the consequences of failure to attend. Students who cause their work or that of the class to suffer because of absence or lateness may be referred by the instructor to the appropriate dean in the Office of Academic Advising for suitable action. Any student who does not attend classes regularly or who demonstrates other evidence of academic irresponsibility is subject to such disciplinary action as the Committee on Academic Affairs may prescribe, including immediate suspension from the College or from the School of Business.

Students who miss class while acting as duly authorized representatives of the University at events and times approved by the appropriate dean are considered excused. The undergraduate faculties are sensitive to the religious practices of members of the student body. At the beginning of the semester, students who will be absent from class for religious observances should confer with the instructor(s) about the date of the absence. The disposition of missed assignments will be arranged between instructor and student. Students anticipating many excused absences should consult the instructor before enrolling in classes in which attendance and class participation count heavily toward the final grade. For policies pertaining to absences resulting from illness or other extenuating circumstances please see the statement under Student Health Service.

## Auditing Courses

When space is available after the registration of degree-seeking students, others may request permission of the instructor to enter a class as auditors. No additional charge is made to full-time students in the College or the School of Business; for others the fee is \$75 per hour. Permission of the instructor is required. An auditor is subject to attendance regulations and to other conditions imposed by the instructor.

Although an auditor receives no credit, a notation of audit is made on the final grade report and entered on the academic record of students who have met the instructor's requirements. An audit may not be changed to a credit course or a credit course changed to an audit after the first official day of classes for each semester or term.

## Dropping a Course

Students may drop full term courses through the 26th class day. The last day in each term for dropping a class is listed on the Academic Calendar (<https://registrar.wfu.edu/calendars/>). A student who wishes to drop any course on or before this date must follow the procedure prescribed by the registrar.

## Drop/Add of Partial-Semester Courses

Students adding or dropping classes lasting for shorter durations than the full semester and/or that begin after the opening of the semester may add or drop those classes any time prior to the first class meeting, but instructor's permission may be required. The add and drop period for such classes is proportionate to the duration of the course. Consult with the Academic Services Calendar (<https://registrar.wfu.edu/calendars/>) or the Office of the University Registrar for the enforced add and drop dates.

## Course Withdrawal

Students may withdraw from one or more full term courses from the 27th class day until five days after midterm grades are due. Students may withdraw from one or more half term courses from the 14th instructional day until the 22nd instructional day of each respective half of term. Intentions of course withdrawal (see details below) are due by 5pm on the respective last day for withdrawal. The last day in each term for withdrawing from a course is listed on the Academic Services Calendar (<https://registrar.wfu.edu/calendars/>).

A "W" grade will be recorded on a student's transcript for any course withdrawal during this period. In order for a course withdrawal to be processed, a student must contact the Office of Academic Advising.

The student must consult with his or her course instructor and faculty adviser. The instructor and faculty advisor must indicate that consultation has occurred, not that they necessarily approve of the student's decision. Once the Office of Academic Advising has received the required information, the Office of the University Registrar will process the course withdrawal.

## Independent Study, Individual Study, Directed Reading and Internships

Such work is ordinarily reserved for junior and senior students in the undergraduate schools. Any student requesting approval for such a course must possess a cumulative grade point average of at least 2.0 in Wake Forest courses. All such course requests must be approved by the appropriate department. The academic requirements must be completed during the semester in which a student is enrolled.



The number of credit hours the student registers for in an independent study, individual study, directed reading, or internship course may not be changed during the add period unless approved by the sponsoring faculty member.

## Undergraduates in Graduate Courses

In exceptional circumstances, undergraduate students may enroll in Wake Forest graduate-level courses. Such students must have junior or senior status and must obtain written permission from the course instructor, the student's adviser, and the associate dean for academic advising. Typically, undergraduate students will not be allowed to take 600-level classes for credit if the related 300-level class is available; undergraduate students who wish to take a cross-listed course at the graduate level must follow the procedure described above. Graduate programs have no obligation to admit undergraduate students to their courses and do so at their own discretion.

## Examinations and Grading

### Examinations

Final examinations for each class are scheduled at specific periods during the six final examination days at the end of the term. All examinations are conducted in accordance with the Honor and Ethics System adopted by the student body and approved by the faculty. Students should have no more than two final exams in a 24-hour period. They should be allowed to reschedule exams in excess of two in a 24-hour period.

### Grading

For most courses carrying undergraduate credit, there are twelve final grades: A (exceptionally high achievement), A-, B+, B (superior), B-, C+, C (satisfactory), C-, D+, D, D- (passing but unsatisfactory), and F (failure).

**Incomplete Grade Designation.** "I" (incomplete) may be assigned only when a student fails to complete the work of a course because of illness or some other extenuating circumstance that is beyond the student's control. If the work recorded as "I" is not completed within thirty days after the student begins his or her next semester, the grade is automatically changed to the grade of F.

**Not Reported Grade Designation.** "NR" (Not Reported) is an administrative designation assigned by the University Registrar indicating that a faculty member has not reported a grade or grades by the reporting deadline. It is expected that the appropriate earned grade will quickly be reported. However, if the NR grade is not replaced within 45 days after the student enters his or her next semester, the NR is automatically changed to a grade of F.

**Grade Points.** Grades are assigned grade points per hour for the computation of academic averages, class standing, and eligibility for continuation, as follows:

Grade	Points
for each grade of A	4.00 points
for each grade of A-	3.67 points
for each grade of B+	3.33 points
for each grade of B	3.00 points
for each grade of B-	2.67 points
for each grade of C+	2.33 points
for each grade of C	2.00 points

for each grade of C-	1.67 points
for each grade of D+	1.33 points
for each grade of D	1.00 points
for each grade of D-	0.67 points
for each grade of F	no points
for each grade of I	no points
for each grade of NR	no points

**Pass/Fail.** To encourage students to venture into fields outside their major areas of competence and concentration, the College makes available the option, under certain conditions, of registering in courses on a pass/fail basis. The criteria for a passing grade can vary, and is established by the instructor. Courses taken under the pass/fail option yield full credit when passed but, whether passed or not, are not computed in the grade point average. The last day to change from grade mode to pass/fail is the drop date. The last day to change from pass/fail to grade mode is the Friday of the twelfth week of the semester.

A student may count no more than 18 hours taken on a pass/fail basis toward the degree. First-year students are not eligible to elect the pass/fail mode, but may enroll for courses offered only on a pass/fail basis. Second, third, and fourth-year students at Wake Forest may elect no more than 4 pass/fail hours in a given semester. Courses used to fulfill core, quantitative reasoning, cultural diversity, major, minor, or certificate program requirements may not be taken on a pass/fail basis unless they are offered only on that basis. Courses in the major(s) not used for satisfying major requirements may be taken on a pass/fail basis if the department of the major does not specify otherwise and if the student obtains the written or electronic permission of his or her academic adviser and the course instructor. Any student who is eligible to enroll for pass/fail credit must follow the prescribed enrollment process overseen by the Office of the University Registrar.

No courses in the School of Business may be taken pass/fail unless they are offered only on that basis.

## Grade Reports and Transcripts

The registrar will announce midterm and final grades in the students' WIN account, usually the day following the faculty grade reporting deadline.

Official transcripts of the permanent educational record will be issued by the registrar upon the student's request, unless there are unpaid financial obligations to the University or other unresolved issues.

Under the Family Educational Rights and Privacy Act (FERPA), the University has the right to inform parents/guardians of dependent students and certain other qualified individuals of the contents of the educational records.

## Dean's List

The Dean's List is issued after the end of the fall and spring semesters. It includes all full-time, degree-seeking students in the College and the School of Business who have a grade point average of 3.4 or better for a full-time course load in the semester and who have earned no grade below C during the semester. Students registered for part-time are not eligible for the Dean's List.

## Graduation Distinctions (Latin Honors)

**Effective for the Class of 2024 forward,** the candidate for a degree with distinction must earn a cumulative grade point average (GPA), based



on all grades earned in Wake Forest courses, sufficient to place the candidate in the top 30 percent of their graduating class, with the honors awarded at the following specific percentage cut offs:

- Top 5% are to be awarded the distinction of *summa cum laude*
- Next 10% are to be awarded the distinction of *magna cum laude*
- Next 15% are to be awarded the distinction of *cum laude*

Percentages will be calculated on the basis of those degree candidates for May (gpa cut-offs for May candidates will be in-effect for the following August and December degree candidates). Cumulative GPAs will be calculated to three decimal places and truncated without rounding.

**Policy ending with the 2023 graduating class:** Graduation distinctions are determined by the grade-point average system and are based entirely on grades earned in Wake Forest courses. A degree candidate with a cumulative average of not less than 3.8 for all courses attempted is graduated with the distinction *summa cum laude*. A candidate with a cumulative average of not less than 3.6 for all courses attempted is graduated with the distinction *magna cum laude*. A candidate with a cumulative average of not less than 3.4 for all courses attempted is graduated with the distinction *cum laude*. Details are available in the Office of the University Registrar.

## Repetition of Courses

A Wake Forest course can be repeated at Wake Forest if the grade earned is C- or lower. In this case, all grades received will appear on the transcript, but the course will be counted only one time for credit. If a student fails a course previously passed, the hours originally earned will not be forfeited. For purposes of determining the cumulative grade point average, a course will be considered as attempted only once, and the grade points assigned will reflect the highest grade received. A grade of irreplaceable F received in a class as a consequence of an honor violation does not prevent a student from repeating the class, but if the repeat successfully earns credit for the class, both the repeat grade and the irreplaceable F will be included in the cumulative grade point average.

## Enrollment Policies and Procedures

### Continuous Enrollment Status

An undergraduate student who needs to interrupt his/her full- or part-time status for personal or medical reasons may petition for continuous enrollment status with the Office of Academic Advising. This status can be approved for one or two semesters. When students approved for continuous enrollment status wish to resume full- or part-time status, they must submit a notification to this effect to the Office of Academic Advising and any other information required by the Committee on Academic Affairs. See Resumption of Full- or Part-time Status for more details.

In the case of change to continuous enrollment status granted during an academic term for medical reasons, the student may request that no grades be recorded for that semester. Such requests require the formal support of either the Student Health Service or the University Counseling Center, and the student's standing in courses at the time of departure may be taken into consideration. The Committee on Academic Affairs has final authority on such requests.

Residence hall keys (if applicable), mailbox keys, the Wake Forest University ID card, along with any other pertinent University property items, must be returned to the appropriate offices. The student retains active enrollment status with the University, and retains email and

registration privileges, and all applicable University policies will continue to apply. *Wake Forest University's policy on Continuous Enrollment Status does not exempt any student from the requirements of the Return of Title IV Funds policy; nor does it extend federal student loan deferment benefits.*

A continuous enrollment fee will be assessed.

Please note that at the discretion of Wake Forest, students on CES who have ongoing conduct matters may still be subject to university conduct or grievance processes and should consult conduct and grievance procedures for further information.

## Withdrawal

A student who intends to interrupt full- or part-time status for more than two semesters on a voluntary or medical basis and is not granted continuous enrollment status (see above), or any student who is suspended for academic or judicial reasons, is deemed to have withdrawn from the University.

A student who initially requests continuous enrollment status but who has been in that status for more than two semesters (or one year), is re-classified as withdrawn, will no longer have registration privileges and an email account, and must return all university property to the appropriate office(s). In addition, any student who discontinues class attendance or does not properly resume full- or part-time status, but who has not properly requested continuous enrollment status in advance, will also be deemed to have withdrawn.

A student who discontinues class attendance during an academic term from the College or the School of Business without officially applying for continuous enrollment status or withdrawal is assigned failing grades in all current courses, and is deemed to have withdrawn. All university property must be returned to the appropriate offices. Holds may be placed on the record of a student who does not return university property or those who have outstanding financial obligations to the university.

Withdrawn students do not retain email and registration privileges. Return of Title IV funds will be handled in accordance with federal law.

Withdrawing or graduating students with ongoing conduct or grievance processes may still be subject to university action and should consult conduct and grievance procedures for further information.

## Probation/Suspension

Any student who is placed on probation because of honor code or conduct code violations may be placed on such special academic probation as determined by the Committee on Academic Affairs. The Committee on Academic Affairs may at any time suspend or place on probation any student who has given evidence of academic irresponsibility, such as failing to attend class regularly, failing to complete papers, examinations, or other work on time, failure to earn more than six grade points in any semester, or failing to maintain a minimum GPA (see Requirements for Continuation).

If poor academic performance is attributable to circumstances over which the student clearly had no control (e.g., serious injury or illness), the student may, after consultation with an academic counselor or dean in the Office of Academic Advising, petition the Committee on Academic Affairs for further consideration of his or her status.

In deciding whether to permit exceptions to the foregoing eligibility requirements, the Committee on Academic Affairs will take into account such factors as convictions for violations of the College honor code

or social conduct code, violations of the law, and any other behavior demonstrating disrespect for the rights of others.

Any student convicted of violating the honor code and, as a result, suspended from the University or assigned the penalty of “activities suspension” is ineligible to represent the University in any way until the period of suspension is completed and the student is returned to good standing. Such students also may not be initiated into any fraternity or sorority during the time of the sanction.

No student suspended from Wake Forest may take coursework at another institution and have that work transferred to Wake Forest for credit.

## Requirements for Continuation

A student’s academic eligibility to continue is determined by the number of hours passed and the grade point average. The number of hours passed is the sum of the hours transferred from other institutions and the hours earned in the undergraduate schools of the University. The grade point average is computed only on work attempted in the undergraduate schools of the University and excludes both non-credit and pass/fail courses.

Students are expected to make reasonable and systematic progress toward the accomplishment of their degree programs. To be eligible to continue in the College, students must maintain:

For Hours Passed	A Minimum Cumulative GPA of
fewer than 30	1.60
at least 30, fewer than 60	1.70
at least 60, fewer than 90	1.80
90 and above	1.90

Students are responsible for knowing their academic standing at all times. Any student whose GPA falls below the required minimum will have a grace period of one semester to raise the average to the required level. Students also have the option of attending summer school at Wake Forest in an effort to raise the average.

The Committee on Academic Affairs will suspend students who earn six or fewer grade points in any given semester in courses other than CNS 353; military science courses; MSC 140-MS 147, MSC 150, MSC 175A-MS 175H, MSC 185 (ensemble courses); DCE 128; and elective 100-level courses in health and exercise science. In cases where failure was due to circumstances beyond the student’s control, he or she may appeal to the Committee for an exception.

Any student who is in academic difficulty is urged to seek advice and counsel from his or her academic adviser, from the Office of Academic Advising, from the Center for Learning, Access, and Student Success, and from the University Counseling Center.

A student who has or develops a health problem which, in the judgment of the director of the Student Health Service, creates a danger to the safety and well-being of the student or others may be required to withdraw or convert to continuous enrollment status until the problem is resolved.

## Resumption of Full- or Part-Time Status

The Committee on Academic Affairs oversees matters affecting students who have been granted continuous enrollment status. A student who has been granted continuous enrollment status for medical or psychological reasons must submit documentation from his or her physician or

therapist to either the director of the Student Health Service or the director of the University Counseling Center attesting to his or her readiness to resume a full academic program. The physician or therapist should also provide professional guidance to these directors as to the nature of the student’s ongoing care once a resumption of full- or part-time status has been approved.

For students whose change to continuous enrollment status is based upon mental health needs, it will be understood that a resumption of full- or part-time status generally can be accomplished only after an appropriate recovery period. In all such instances, the student’s resumption of full- or part-time status is contingent upon a statement from appropriate medical authorities that the medical condition has been sufficiently addressed so that normal study can be resumed.

Any student who has been granted continuous enrollment status and who hopes to receive transfer consideration for work done elsewhere must provide the University with a properly documented statement attesting to his or her good standing at the institution from which the transfer credit would come. (See Transfer Credit rules.) Additionally, an official copy of the student’s transcript must be made available to the Office of the University Registrar.

Should a student, upon interruption of full- or part-time status, fail to comply with procedures for a change to withdrawn or continuous enrollment status, “holds” may be placed upon his or her record that will prevent consideration of readmission or resumption of full- or part-time status. Although a resumption of full- or part-time status can normally be approved (subject to medical or psychological approvals as described here), any request for resumption of full- or part-time status to the University may be denied if a student has violated any laws or regulations or has engaged in conduct or exhibited behaviors that have demonstrated a disregard for the rights of others. Notification forms required for resumption of full- or part-time status and deadlines for submission are posted on the Office of Academic Advising website (<http://advising.wfu.edu>).

Deadlines for the receipt of all necessary information are as follows:

- *Fall Resumption - August 1*
- *Spring Resumption - December 1*
- *Summer Resumption - April 15.*

## Readmission

The Committee on Academic Affairs oversees the readmission of students who have withdrawn—voluntarily, for medical or psychological reasons, due to academic or judicial suspension, or otherwise. In making a decision on whether to readmit, the Committee considers both the academic and non-academic records of the student. A student who has withdrawn from the University for medical or psychological reasons must submit documentation from his or her physician or therapist to either the director of the Student Health Service or the director of the University Counseling Center attesting to his or her readiness to resume a full academic program. The physician or therapist should also provide professional guidance to these directors as to the nature of the student’s ongoing care once readmission has been approved.

Any student who has withdrawn and who hopes to receive transfer consideration for work done elsewhere must provide the University with a properly documented statement attesting to his or her good standing at the institution from which the transfer credit would come. (See Transfer

Credit rules.) Additionally, an official copy of the student's transcript must be made available to the Office of the University Registrar.

No student on judicial or academic probation or suspension from the University may take coursework at another institution and have that work transferred to the University for credit. Students whose withdrawals from the University were as the result of an honor or judicial conviction must satisfy fully any sanctions placed upon them prior to being considered for readmission.

Students who have been ineligible to continue for academic reasons must present to the Committee on Academic Affairs an intentional plan to raise their academic standing to acceptable standards. Any student who has been ineligible to continue for conduct reasons must present to the Committee of Academic Affairs a verification from the appropriate conduct office that the student is cleared to return.

Should a student, upon withdrawal or granting of continuous enrollment status, fail to comply with proper withdrawal or continuous enrollment procedures, "holds" may be placed upon his or her record that will prevent consideration of readmission or resumption of full- or part-time status until such matters are resolved.

Any request for readmission to the University may be denied if a student has violated any laws or regulations or has engaged in conduct or exhibited behaviors that have demonstrated a disregard for the rights of others. Readmission forms and deadlines are posted on the Office of Academic Advising website (<http://advising.wfu.edu>).

Deadlines for the receipt of all necessary information are as follows:

*Fall Readmission - August 1*

*Spring Readmission - December 1*

*Summer Readmission - April 15.*

## Summer Study

In addition to regular courses, a number of special summer programs for credit are described in the bulletin of the summer session.

Courses taken outside the U.S. require, in addition, prior approval from the Center for Global Programs and Studies. Students must obtain program approval and course approval through the Center for Global Programs and Studies.

## Transfer Credit

### Advanced Placement, International Baccalaureate, and CLEP

Advanced Placement and International Baccalaureate credit for college level work done in high school is available on the basis of the Advanced Placement Examination of The College Board and International Baccalaureate (IB) subject tests. Students are not allowed to exempt divisional core requirements through the Advanced Placement Examination, the College Level Examination, or the International Baccalaureate subject tests. Although students who successfully complete AP or IB exams earn credit towards the 120 hours needed for graduation, such credit courses do not satisfy the divisional requirements as the student must complete the required divisional courses while enrolled at Wake Forest. Students are permitted to take courses at Wake Forest for which they have received Advanced Placement or International

Baccalaureate credit. Students must contact the Registrar's Office in order to be allowed to do so. When this happens, students lose the AP or IB credit but the notation remains on the transcript. Once such credit has been forfeited it cannot be reinstated.

Under certain conditions, especially well-prepared applicants may be granted limited college credit through the subject tests of the College Level Examination Program (CLEP) of the Educational Testing Service. Such credit may be assigned with the approval of the department concerned or the dean of business.

## Transfer Credit

All work attempted in other colleges and universities must be reported to the Office of the University Registrar. Students wishing to receive transfer credit for work to be undertaken elsewhere must have a cumulative grade point average of no less than 2.0, must not be on academic probation or suspension of any kind from Wake Forest, and must obtain departmental approval following the prescribed process overseen by the Office of the University Registrar. For entering transfer students, credit may be accepted from accredited colleges and universities, including two-year colleges. For enrolled Wake Forest students and students readmitted to Wake Forest, transfer credit is accepted only from approved four-year institutions. For transfer hours to be accepted, the grade in any course must be C or better. Courses completed at other colleges or universities with the grade of C- or lower are not awarded transfer hours in Wake Forest. Of the 120 credit hours required for the baccalaureate, the minimum number of credit hours that must be earned in Wake Forest programs depends on whether the transferred courses were taken before or after enrolling at Wake Forest. (Refer to the Requirements for Degrees for more details.) Courses being considered for transfer that are not based on semester hour credits will not receive a higher conversion value than the value of the Wake Forest course.

After a student enrolls at Wake Forest, courses in anthropology, art, biology, chemistry, computer science, English, German, history, mathematics, philosophy, physics, Russian, or sociology cannot transfer in to satisfy divisional requirements.

Applications for transfer credit from online and distance learning courses are evaluated on an individual basis. No more than 15 credit hours earned through fully online courses may be applied toward graduation; of these, no more than eight credit hours may be transferred from another institution. It is the responsibility of the student to disclose to the Office of the University Registrar whether a class is an online or distance learning class. Undergraduate students in the College may not enroll in any online course for credit during their first two semesters at Wake Forest.

Dual enrollment courses, college level courses taken at institutions other than Wake Forest, are treated as transfer credit if the given course meets the University's standard criteria for transfer credit.

Courses with academic merit that meet the general criteria for transfer but are not approved by departments or programs may be eligible for General Elective Credit (GEC). Students should contact the Office of the University Registrar (OUR) for more information.

## Financial Aid

*By regulation of the Board of Trustees, all financial aid must be approved by the Committee on Scholarships and Student Aid.*

Financial aid programs include institutional, state, and federal scholarship, loan, and work funds. Financial need is a factor in the awarding of most aid. The annual calculation of need, and therefore award amounts, may vary from year to year. Additional information is provided online (<http://financialaid.wfu.edu/helpful-resources/info-undergrad-aid-recipients/>). IRS Publication 970 describes the possible taxability of scholarship assistance.

## Policy on Satisfactory Academic Progress for Financial Aid Eligibility

The Higher Education Act mandates that institutions of higher education establish minimum standards of satisfactory academic progress for students receiving federal (Title IV) aid. Wake Forest applies the same standards to all federal student aid programs, to institutionally-controlled need-based aid programs, and as required to state aid programs including the Need-Based Scholarship for North Carolina residents.

Certain federal aid programs have higher academic and/or other requirements, which are communicated to recipients. Other general student eligibility requirements to receive federal financial aid are listed at [www.ed.gov](http://www.ed.gov) (<http://www.ed.gov/>).

Evaluation of students' satisfactory academic progress for purposes of financial aid eligibility is made at the end of each term (fall, spring, summer), to determine eligibility for the following term. Students who have grade or other academic changes for a previous term, after an end-of-term evaluation has occurred, may request an additional evaluation by writing to the Committee on Scholarships and Student Aid at [financial-aid@wfu.edu](mailto:financial-aid@wfu.edu). Evaluation is also made upon students' readmittance and/or return to active status following a period of continuous enrollment status.

The minimum standards include all coursework that is applicable to a bachelor's degree (regardless of the timing of the student's declaration of a major or change in major), all coursework accepted or credited toward a bachelor's degree (transfer hours, Advanced Placement hours, International Baccalaureate hours, College Level Examination Program hours, etc.), and all other coursework (repeated courses, graduate-level coursework, etc.) taken at Wake Forest while enrolled as an undergraduate student.

During a semester in which a student drops courses or withdraws or begins continuous enrollment status, the number of hours attempted includes those hours attempted as of the earlier of

1. the withdrawal or continuous enrollment status effective date, or
2. the last day to drop a second part-of-term course without penalty (as published in the academic calendar).

To maintain academic eligibility for federal aid, a student must:

Complete the requirements for a bachelor's degree within a maximum number of hours attempted of 180. A student is ineligible when it becomes mathematically impossible to complete his/her degree within a maximum number of hours attempted of 180.

Pass at least two-thirds of those hours attempted in the undergraduate schools of the University. Incompletes count as hours attempted, unless from a non-credit course. Audited classes do not count as hours attempted.

Maintain the following minimum cumulative Wake Forest University grade point average on all hours attempted in the undergraduate schools of the University (including courses with a grade of incomplete):

For Hours Attempted of	A Minimum Cumulative GPA of
fewer than 30	1.60
at least 30, fewer than 60	1.70
at least 60, fewer than 90	1.80
90 and above	1.90

The Wake Forest University grade point average calculation excludes pass/fail courses. In cases where a student repeats a course for which he or she received a grade of C- or lower, the cumulative grade point average is calculated by considering the course as attempted only once, with the grade points assigned reflecting the highest grade received. However, this provision does not apply to any course for which the student has received the grade of an irreplaceable F.

To maintain academic eligibility for federal student aid, a student must also must avoid academic suspension by the Committee on Academic Affairs, by earning more than six grade points in any given semester as described in the "Requirements for Continuation (<https://bulletin.wfu.edu/undergraduate/procedures/enrollment/#requirementsforcontinuation>)" section of the Undergraduate Bulletin.

A student not meeting the minimum standards of satisfactory academic progress for purposes of financial aid eligibility when evaluation is done at the end of each term (fall, spring, summer), is placed in financial aid warning status for the following term of enrollment. The financial aid warning status lasts for one term of enrollment, during which the student may continue to receive financial aid funds. A student still not meeting the minimum standards after a term in financial aid warning status loses eligibility for the next term of enrollment, unless the student successfully appeals and is placed on financial aid probation, which may include the approval of an academic plan.

## Appeal Procedure

Denial of aid under the policy for Satisfactory Academic Progress for Financial Aid Eligibility may be appealed in writing to the Committee on Scholarships and Student Aid and mailed to P.O. Box 7246 Winston-Salem, NC 27109-7246; emailed to [finaid@wfu.edu](mailto:finaid@wfu.edu); or delivered to the Office of Student Financial Aid, Reynolda Hall Room 4.

A student's request must include information regarding why the student failed to maintain satisfactory academic progress, and what factors have changed that would allow him/her to demonstrate satisfactory academic progress at the next evaluation. Please note that the Committee cannot access students' health or academic records from other University offices. Students must provide directly to the Committee, any records or documentation necessary to support their request.

The Committee may grant a probationary reinstatement to any student, upon demonstration of extenuating circumstances documented in writing to the satisfaction of the Committee. Examples of extenuating circumstances and appropriate documentation include, but are not necessarily limited to the following: injury or illness of the student or immediate family members—statement from physician that injury or illness interfered with opportunity for satisfactory progress; death in family—statement of student or minister; temporary or permanent disability—statement from physician. During a probationary period, students may continue to receive aid. Reinstatement after probation can



be made only after the student has received credit for the appropriate percentage of work attempted with the required cumulative grade point average.

## Scholarships

Scholarships and loans are awarded from funds provided by generous gifts to the University from individuals and organizations. A listing and descriptions of permanent scholarship and loan programs is provided online (<https://financialaid.wfu.edu/types-of-aid/scholarships/>).

## Other Aid Programs

*Student employment* is possible for part-time, on-campus and off-campus work, for a recommended maximum of 20 hours per week for full-time students. Summer employment may also be available. Interested students should contact the student financial aid office.

Veterans' education benefits are administered by the Department of Veterans Affairs in the Federal Building at 251 North Main Street in Winston-Salem. Records of progress are kept by Wake Forest University on veteran and non-veteran students alike. Progress records are furnished to the students, veterans, and non-veterans alike, at the end of each scheduled school term. Additional information is provided online.

## Outside Assistance

Students must advise the Office of Student Financial Aid if they receive any assistance from outside organizations, including any local, state, and national scholarship and loan programs. Outside scholarships are added to an original financial aid package if possible. In some cases based on federal student aid program rules, outside scholarships reduce need-based student loan and work-study eligibility. In no case may aid exceed the estimated cost of attendance.

Outside scholarship donors should include on the check the recipient's name and the term(s) for which the scholarship is intended. Checks should be payable to Wake Forest University (or co-payable to Wake Forest University and the student) and sent to the Office of Student Financial Aid, P.O. Box 7246, Winston-Salem, NC, 27109-7246. Checks delivered by donors to the student should be forwarded to the aid office. If a student has instead previously deposited outside scholarship funds into her/his personal bank account, the student should notify the Office of Student Financial Aid to prevent the expected outside scholarship proceeds from showing as anticipated credit against semester charges on the student's DEAC account. It is not recommended that students deposit outside scholarship funds into personal bank accounts; doing so may result in the student losing certain tax benefits.

By submitting, or allowing donors to submit, checks to Wake Forest, a student gives permission for Wake Forest to write the Wake Forest University student identification number on the face of the check. If funds are not received by Wake Forest in a timely manner from an outside scholarship donor, the student becomes responsible for payment of charges previously deferred by the anticipated receipt of funds from the donor.

## Special Programs

*Students in the College are encouraged to apply to special programs, both on and off campus, which complement their abilities and interests. These include the programs described below and the special degrees, minors, and concentrations described in the courses of instruction.*

## Honors Study

For highly qualified students, a series of interdisciplinary honors courses is described under Departments/Programs.

For students especially talented in individual areas of study, most departments in the College offer special studies leading to graduation with honors in a particular discipline. The minimum requirement is a grade point average of 3.0 in all work and 3.3 (or higher in some areas) in the major. Other course, seminar, and research requirements are determined by each department.

## Open Curriculum

For students with high motivation and strong academic preparation, the Open Curriculum provides the opportunity to follow a course of study planned within the framework of a liberal arts education, but not necessarily fulfilling all core requirements for the degree. The Committee on Interdisciplinary Majors, as the administrative body for the Open Curriculum Program, selects a limited number of students based on their previous record of achievement, high aspirations, ability in one or more areas of study, strength of self-expression, and other special talents. The course of study for the core requirements is designed by the student and his or her Open Curriculum adviser.

## Study at Salem College

For full-time students in the fall and spring semesters, Wake Forest and Salem College share a program of exchange credits for courses taken at one institution because they are not offered in the curriculum of the other. An application for the Salem/Wake Forest Exchange Credit program must be approved by the academic adviser and the University Registrar or the dean of the School of Business. Please visit the University Registrar to begin the application process. Except in courses of private instruction, there is no additional cost to the student. Grades and grade points earned at Salem College under the Exchange Credit program are evaluated as if they were earned at Wake Forest.

Courses that are in the Wake Forest curriculum generally cannot be taken at Salem through this program. In very unusual circumstances, a student may wish to seek assistance in appealing to the Committee on Academic Affairs.

## Center for Global Programs and Studies

The Center for Global Programs & Studies (GPS) advances a global campus community and cultivates global mindsets through collaborative initiatives, programs, and services for the University. Program areas include: study abroad/away, community-based global learning, cross-cultural engagement course series, campus programs with a global learning focus, and Contemporary Global Studies and Global Trade & Commerce minors. A complete list of services offered by GPS can be found online (<http://global.wfu.edu>).

## Study Abroad/Away

Students interested in studying abroad or away (in the case of the Wake Washington program) should visit GPS for assistance and program information. All students planning to study abroad/away on a Wake Forest or an affiliate program (approved non-Wake Forest program) are required first to schedule an appointment with a study abroad advisor. All students must submit an online study abroad application. For more information visit this website (<http://studyabroad.wfu.edu>).



## Eligibility for Study Abroad/Away

In order to be eligible for study abroad/away on a Wake Forest or affiliate program (approved non-Wake Forest program) students must:

1. Have completed two semesters of coursework before beginning the program unless approved by the appropriate dean in the College and the Center for Global Programs and Studies
2. Have a cumulative grade point average of 2.0 or above
3. Be in good judicial standing and not be on suspension from Wake Forest
4. Be an active degree seeking student at Wake Forest during the term abroad/away
5. Obtain approval of the program from the Center for Global Programs and Studies before applying to any affiliate program (consult a study abroad advisor for the program approval process)
6. Fulfill all required steps of the study abroad/away process as outlined by the Center for Global Programs and Studies
7. Attend a mandatory pre-departure orientation

Students who do not meet the above criteria will not be eligible for study abroad/away and will not receive credit for any coursework taken outside the U.S. or from a domestic study away program. Students who study abroad/away on affiliate programs must follow all policies on transfer credit as stated in this *Undergraduate Bulletin*.

Note that any student possessing less than a 2.0 cumulative grade point average is not eligible to receive transfer credit from an affiliate study abroad/away program (See the transfer credit section of this *Undergraduate Bulletin*.)

## Center for Global Programs and Studies

The Center for Global Programs and Studies (GPS) advances a global campus community and cultivates global mindsets through collaborative initiatives, programs, and services for the entire University. A complete list of programs and services offered by GPS is available here (<http://global.wfu.edu>).

Contact Information:

The Center for Global Programs and Studies  
Reynolda Hall, Room 116  
Phone: 336-758-5938

## Global Abroad and Away

Global Abroad and Away (<http://studyabroad.wfu.edu/>) manages the extensive offerings of Wake Forest and Affiliate study abroad/away programs and provides advising to all students pursuing these academic opportunities. Other programs and services include:

- Study abroad/away scholarships (<http://studyabroad.wfu.edu/funding/>)
- Passport Assistance
- Community-Based Global Learning (CBGL) programs (<https://global.wfu.edu/staff/international-service/>)
- Cross-Cultural Engagement (CCE) program (<https://global.wfu.edu/global-abroad/cross-cultural-engagement/>)
- Contemporary Global Studies Minor coordination and support (<https://global.wfu.edu/global-campus/international-minors/>)

- Global Trade and Commerce Studies Minor coordination and support (<https://global.wfu.edu/global-campus/international-minors/global-trade-commerce-studies/>)

## Global Campus Programs

The Global Campus Programs (GCP) team is responsible for the planning, design, and implementation of programs focused on building a global campus community. The GCP team is both proactive and responsive to developing collaborative programming based on the needs of students, faculty, staff, and campus partners with the goal of enhancing global mindsets. Hallmark programs include: Global Village Living and Learning Community (<https://global.wfu.edu/global-campus/global-villages/>), Global Laureates Academy (<https://global.wfu.edu/global-laureates-academy/>), and the WISE Conference (<https://global.wfu.edu/global-campus/wise-conference/>) for International Educators.

## Study Abroad in Affiliate Programs

**Students wishing to study abroad on an affiliate program must visit the Center for Global Programs and Studies for assistance and procedures.** Affiliate programs are approved study abroad programs offered through program providers or other universities. GPS maintains an online database of approved Affiliate programs here (<http://studyabroad.wfu.edu>). In addition, GPS has a collection of printed materials of approved programs. All students planning to study abroad are required to meet with a study abroad advisor. GPS staff advises students regarding their program options. Students will not receive credit for participation on any unapproved study abroad program.

**Course Approval Process.** Once a student is accepted to a study abroad program, he or she must start the course approval process by scheduling an appointment with a study abroad advisor. In no case may a student undertake study abroad elsewhere without completing this process in advance to the satisfaction of GPS, the Registrar's Office, and the academic departments which oversee course credit approval. Students may not register for fewer than 12 hours or more than 17 hours on a semester study abroad program without the permission of a dean. Department chairs approve specific courses and the number of credit hours earned for those courses.

Grades for approved courses on affiliate study abroad programs will appear on the Wake Forest University transcript, but will NOT be calculated into the Wake Forest grade point average (see section on transfer credit). Students must follow the drop/add policies of the host institution. If the program does not have any relevant policies, then the Wake Forest policy is applied. If a student withdraws from a study abroad program, he or she must notify GPS, the Registrar's Office, and Student Financial Services; the rules for withdrawal, as stated in this *Undergraduate Bulletin*, also apply. For more information, consult GPS.

Students on **Affiliate** semester abroad/away programs pay Wake Forest tuition, with housing, meals, and other non-tuition fees (if applicable) billed directly to the student by the Affiliate program provider or host institution. Most, but not all, Affiliate programs also offer their own funding opportunities.

Students may request to have scholarship and financial aid applied toward Affiliate programs. Scholarships for study abroad are also available. Additional information is available in GPS and the Office of Student Financial Aid.

## Study Abroad/Away in Wake Forest Programs

### Austria (Vienna)

Students have the opportunity to study and live at the Flow House in the 19th District of Vienna (northwest section of the city). Each semester or summer session, a resident professor leads a group of up to 16 students and offers up to two courses in his or her respective disciplines. Resident professors are chosen from a wide variety of academic departments. In addition, Viennese professors offer courses in the study of German language or literature, Austrian art and architecture, business, music, or history of Austria and Central Europe. Group excursions to Central Europe enhance the learning experience as well as numerous integrative experiences within the city itself. Prior study of German language is recommended but not required. Further information may be obtained from the program director, professor Rebecca Thomas, in the Department of German & Russian.

### Chile (Santiago)

Students have the opportunity to study and live in South America on this "Across South America" program, which is offered during the spring semester. Students begin the semester in Santiago with a four week session on Chilean culture and language. Afterwards, they embark on academic excursions to Argentina, Ecuador, Peru, and Uruguay before returning to Santiago. Following the four weeks of academic travel, students continue with coursework in Santiago. A resident professor leads the group of students and offers two courses in his or her respective discipline. Resident professors are chosen from a variety of academic departments. While in Santiago, students experience the Chilean culture through homestays. This program offers courses in English and Spanish. Prior study of Spanish language is required for the Honors track. Further information may be obtained from the program director, professor Peter Siavelis, in the Department of Politics and International Affairs.

### England (Cambridge)

Wake Forest offers a semester program in Cambridge, England. The Cambridge INSTEP program, as it is called, emphasizes a close student-to-faculty teaching relationship with most classes taught in the seminar format with five to 12 students. In addition, intensive courses are offered for qualified students in the supervision format with one to four students (who meet course pre-requisites). Courses are taught by Cambridge University professors and provide a contemporary perspective on economics, business, politics, and international relations. Further information may be obtained from the Center for Global Programs and Studies.

### England (London)

Students have the opportunity to study and live at the Worrell House in the Hampstead District of London. Each semester or summer session, a resident professor leads a group of up to 14 students and offers up to two courses in his or her respective discipline. Resident professors are chosen from a wide variety of academic departments. In addition, British professors may offer courses in such areas as the study of art, English, history, politics, and theatre. Group excursions to museums and theatre performances enhance the learning experience as well as integrative experiences within the city itself and throughout the U.K. Further information may be obtained from the program director, professor Mary Dalton, in the Department of Communication.

### England (London)

The London INSTEP semester program offers a cross-disciplinary approach in which central themes are examined in the areas of business, political science, international relations, and communications/media. During the spring semester of each year, participants also have the option to complete an internship for academic credit. The program emphasizes a close student-to-faculty teaching relationship common to the English system of higher education. Courses are taught by select faculty members from local universities. Further information may be obtained from the Center for Global Programs and Studies.

### France (Dijon)

Students have the opportunity to study and live in France. Each fall semester a resident professor leads a group of students and offers a course in French. In addition, students take courses at the University of Burgundy. Students experience French culture through homestays and excursions to locations throughout France such as Paris, Provence, and Strasbourg. A major in French is not required, but FRH 212/FRH 213/FRH 214 or its equivalent or any French course above the intermediate level is required. Further information may be obtained from the program director, professor Stephen Murphy, in the Department of French Studies

### India (Delhi)

This summer abroad program focuses on the ways in which Indian cultural practices have developed into a hybridized format with elements that sustain some of the traditional components of Indian culture that have been synthesized with global cultural trends. This course examines the issues of sustainability of the cultural ecology of a specific ancient cultural system. The program is based in Delhi; however, there are excursions, including a trip to Ladakh in the Himalayan region of India, and to the "Golden Triangle" of India including the Taj Mahal. Further information may be obtained from professor Ananda Mitra in the Department of Communication.

### Italy (Venice)

Students have the opportunity to study and live at Casa Artom situated along the Grand Canal in Venice. Each semester or summer session, a resident professor leads a group of up to 20 students and offers up to two courses in his or her respective discipline. Resident professors are chosen from a wide variety of academic departments. In addition, Venetian professors offer courses in the study of Italian language or literature, Italian art and architecture, history, and economics to help students integrate into the local culture. Group excursions throughout Venice and in surrounding cities enhance the learning experience as well as numerous integrative experiences within the city itself. Prior study of Italian language is not required, but may be determined by the resident professor. Further information may be obtained from the program director, professor Alessandra Von Burg, in the Department of Communication.

### Peru (Cuzco)

This intensive, field-based program provides hands-on experiences in the wide range of environments Peru has to offer. Students take BIO 349 and/or JOU 370. Course work consists of daily lectures, readings, hands-on field activities, a full range of journalistic interviewing, reporting and writing skills and techniques, and a final project. At all sites, students collect, analyze, and identify a wide variety of plant species, and evaluate the possible stories and blog posts that emerge from interviews and observations. Journalistic reporting is the critical means by which decision makers and the public get information about environmental

issues. Further information may be obtained from professor Miles Silman in the Department of Biology and/or professor of journalism Justin Catanoso in the Department of English.

### **Spain (Barcelona)**

This semester program is specifically designed for business, economics, entrepreneurship, and global trade and commerce students, but it also appeals to those students interested in political science and international studies in general. Based at the Autonomous University of Barcelona's Sant Pau Campus (UAB), the program places students the heart of this city of 1.6 million inhabitants. A Wake Forest on-site administrator oversees program administration and Wake Forest's academic center. Courses are primarily taught in English, with no prior knowledge of Spanish required. Students are required to enroll in one course taught in Spanish or Catalan. Housing options include apartments, student residence halls, or homestays. Further information may be obtained from the Center for Global Programs and Studies.

### **Spain (Salamanca)**

Students have the opportunity to study and live in Spain. Each semester a resident professor leads a group of students and offers a course in Spanish. In addition, students take courses at the University of Salamanca. Students experience the Spanish culture through homestays, or dorms at the University of Salamanca and excursions to locations throughout Spain such as Granada, Madrid, and Seville. Internship opportunities are available. A major in Spanish is not required, but one course beyond SPA 212 is required. Further information may be obtained from the program director, professor Kathryn Mayers, in the Department of Spanish.

### **Spain (Salamanca)–Internships**

Students interested in experiencing the Spanish work environment are encouraged to apply for the Salamanca Summer Internship program. Internships are available during both summer sessions in a wide range of fields (medical, business, teaching, translation/interpretation) and may carry 1.5 or 3 hour credits. Students enroll in an internship course and have the option of taking a conversation course or literature course while in Salamanca. Students live with Spanish families or in dorms at the University of Salamanca. Further information may be obtained from professor Kathryn Mayers in the Department of Spanish.

### **Spain (Salamanca)–Neuroscience**

Each spring semester, the Wake forest Salamanca Neuroscience Program offers STEM students the opportunity to study science at one of the leading neuroscience institutes in Europe. Students on the program will be enrolled at the Neuroscience Institute at the University of Salamanca (INCyL), a site of cutting-edge research in areas ranging from Parkinson's Disease to regenerative medicine to cell therapy. The University itself has been designated an International University of Excellence in the Teaching of the Biological Sciences and of Spanish as a Second Language. Prerequisites to the program typically include two of the following BIO 150, PSY 151, or NEU 200, or permission of instructor, and one semester of college-level Spanish. All science courses are taught in English. Further information may be obtained from professor Kathryn Mayers in the Department of Spanish.

### **United States (Washington, D.C.)**

Each fall and spring, the Wake Washington program allows students to study and intern in the nation's capital. The WFU Resident Professor teaches two courses in his/her field, with a focus on taking advantage of Washington D.C.'s resources to enhance the coursework. In addition,

students engage in a four-day-per-week internship. Students are responsible for writing a research paper on a topic related to their internship and for participating in weekly meetings which include opportunities to hear prominent speakers. Alumni and parent mentors are available to students throughout the semester. Students earn 6 credits for the coursework taught by the resident professor and 6 credits for the internship experience and related obligations. Further information may be obtained from the program director, professor Katy Harriger in the Department of Politics and International Affairs.

### **Additional Summer Programs**

Each summer, the University offers a variety of summer study abroad courses led by Wake Forest faculty. There are many types of summer programs including language immersion, field research, specialized academic topics and internships. Wake Forest summer programs are offered throughout Europe, Africa, Asia, and Latin America. Detailed information on summer programs is available on the Center for Global Programs and Studies website (<http://studyabroad.wfu.edu>). Further information may be obtained from the Center for Global Programs and Studies.

## **Requirements for Degrees Degrees Offered**

The Wake Forest College of Arts and Sciences offers undergraduate programs leading to the bachelor of arts and bachelor of science degrees.

The bachelor of arts degree is conferred with a major in African American studies, anthropology, art history, biology, chemistry, Chinese language and culture, classical languages, classical studies, communication, computer science, critical and creative media, economics, elementary education, English, environment and sustainability studies, environmental science, French studies, German, German studies, Greek, history, Japanese language and culture, Latin, mathematics, music, philosophy, physics, politics and international affairs, psychology, religious studies, Russian, sociology, Spanish, studio art, theatre, or women's, gender, and sexuality studies.

The bachelor of science degree is conferred with a major in applied mathematics, applied statistics, biochemistry and molecular biology, biology, biophysics, chemistry, computer science, engineering, health and exercise science, mathematical business, mathematical economics, mathematics, physics, or statistics. The bachelor of science degree may be conferred in combined curricula in engineering and medical technology.

The School of Business offers undergraduate programs leading to the bachelor of science degree with a major in accountancy, business and enterprise management, finance, or mathematical business.

A student may receive only one bachelor's degree (either the bachelor of arts or the bachelor of science) from Wake Forest.

## **General Requirements**

The basic and divisional course requirements leave students in the College considerable flexibility in planning their courses of study. Students who entered under the bulletins of previous years may make use of new alternative basic and divisional courses announced in this bulletin while still following their original contract for the required totals thereof. Except for HES 100, only courses of 3 or more semester hours count towards satisfying basic and divisional requirements.

All students must complete:

1. the core requirements (unless accepted for the Open Curriculum),
2. a course of study approved by the department or departments of the major, and
3. elective courses, for a total of 120 hours.

In general, no more than 12 hours toward graduation may be earned from among all of the following courses: MSC 140-MSC 147, MSC 150-MSC 151, MSC 175A-MSC 175H, and MSC 183-MSC 185 (repeatable music courses); DCE 128; and elective 100-level courses in health and exercise science. However, music majors may count up to 16 hours in these courses toward graduation. A cross-listed course may be taken one time for hours toward graduation, unless otherwise specified by the course description, and no more than six hours in LIB courses may count toward graduation.

All students must earn a minimum cumulative 2.0 grade point average in Wake Forest College and the School of Business. Once enrolled at Wake Forest, a student may subsequently count, at most, 30 hours of credit from sources other than Wake Forest programs toward the graduation requirement of 120 hours. Students who transfer into Wake Forest must subsequently earn at least 60 hours in Wake Forest programs. Except for combined degree curricula, the work of the senior year must consist of courses in Wake Forest programs. Any exceptions must be approved by the Committee on Academic Affairs. No more than 15 credit hours earned through fully online courses may be applied towards graduation; of these no more than 8 credit hours may be transferred from another institution.

Transfer credits will not be used in calculating a student's GPA. This includes affiliate study abroad programs (approved non-Wake Forest programs). However, work from other institutions accepted in transfer, along with the grade(s) earned, will be recorded on the transcript. Graduation distinctions will be based solely on the Wake Forest GPA.

A student graduates under the requirements of the bulletin of the year in which he or she enters. However, when a student declares a major or a minor, the requirements for the major or minor that are in effect at the time of declaration will apply. Such requirements might not be congruent with those stated in a given bulletin. Newly admitted majors to the School of Business, will be assigned a catalog year that will reflect their first full academic year as a major in the School. If coursework is not completed within 6 years of entrance, the student must fulfill the requirements for the class in which he or she graduates.

The University issues degrees in August, December, and May. All requirements must be completed and certified before a student will be issued a degree and/or can participate in the commencement exercises. However, students may petition for permission to participate in the commencement exercises if all three of the following conditions are met:

1. The student will have completed at least 112 hours by the end of the spring semester preceding commencement.
2. The student will have a minimum 2.0 cumulative GPA and a minimum 2.0 GPA in the major(s).
3. The student has no outstanding judicial sanctions (unpaid fines, owed community service hours, etc.).

Commencement is a celebration of graduation, but not required for graduation. Participation in commencement is at the discretion of the appropriate Dean. The University reserves the right to refuse participation

in commencement in certain circumstances (e.g., unfulfilled sanctions for judicial or honor violations).

No further entries or alterations may be made toward the undergraduate degree once a student has been graduated.

To become a degree candidate, a student must submit an online application for graduation that will prompt a review of the student's academic record to assure that all degree requirements have been met. The application for graduation is available online in WIN. Students who are not enrolled in the term prior to their desired graduation date must contact the Office of the University Registrar before the application deadline. The application deadlines for each graduation date are as follows:

- December graduation: September 1
- May graduation: October 1
- August graduation: May 30

The University conducts one Commencement Ceremony each year in May. Students who have earned their degree the previous August or December are invited to participate in the May ceremony following their graduation.

## Core Requirements (Basic and Divisional combined)

The core requirements are intended to introduce the student to various fields of knowledge and to lay the foundation for concentration in a major subject and related fields during the junior and senior years. For these reasons, as many of the requirements as feasible should be taken in the first two years.

## Basic Requirements

All students must complete four requirements (unless exempted through procedures established by the departments concerned):

- FYS 100 (first-year seminar) - to be taken during first year
- 4 Writing credits to be fulfilled by either: WRI 109 (2 h) and WRI 110 (2 h), or WRI 111 (4 h). Should be taken during the first year
- **One 200-level foreign language course**
- **HES 100**

## Foreign Language Placements

All students new to Wake Forest who have studied a foreign language in high school must complete a foreign language placement test in the language(s) studied. Students will not receive credit for a class at a lower level than the level of their placement on the placement exam, unless they:

1. *register for the class in which they placed;*
2. *attend a few class meetings;*
3. *consult with their professor; and*
4. *successfully appeal their placement to the language placement appeals officers of the department and be reassigned to a lower level course.*

Students may satisfy the requirement with a foreign language they have not previously studied, and may start at the beginning level (111 or 101, depending on the language) offered at Wake Forest.



Students whose primary language (the language of instruction in the student's prior schooling) is other than English are exempt from the basic requirement in foreign language. Students must provide evidence that their language of high school instruction was *entirely* in the language for which exemption is sought. For Mandarin, evidence that the language of *middle school* instruction was entirely in Mandarin satisfies the requirement. English language schools or schools with mixed language instruction will not satisfy the requirement for exemption. In the absence of sufficient evidence for exemption, students may take the foreign language placement examination.

Students whose schooling has been in English but who are fluent in a language not taught at Wake Forest must present the equivalent of a 200-level college course or proficiency in reading and writing in the second language to be exempt from the requirement. Such students should contact the Office of Academic Advising. The Associate Dean for Academic Advising will refer each case to a person qualified to make the appropriate determination, *if possible*. Not all languages will be supported by qualified examiners, and in that event, students will need to choose alternative language pathways. If the second language is taught at Wake Forest, the relevant department decides whether the student may complete the requirement in that language or may be regarded as having fulfilled the requirement already. Elective courses in the language or literature of a student's heritage or country of origin are at the discretion of the department offering the course.

## Divisional Requirements

All students must complete courses in each of the five divisions of the undergraduate curriculum (unless exempted through procedures established by the departments concerned or by participation in the Open Curriculum). Together with the basic requirements these courses form the core of Wake Forest's undergraduate liberal arts education.

Division	Departments	Number of Courses Required
I: Humanities	History; Philosophy; Study of Religions; Women's, Gender, and Sexuality Studies	2
II: Literatures	<b>Literatures Written in English</b> (English Department) <b>In English Translation</b> (Classical Languages, East Asian Languages and Cultures, French Studies, German and Russian, Spanish and Italian, and the Program in Humanities)	1
III: Fine Arts	Art, Music, Theatre and Dance	1
IV: Social Sciences	Anthropology, Communication, Economics, Education, Politics and International Affairs, Psychology, Sociology	2

V: Math and Natural Sciences	Biology, Chemistry, Computer Science, Engineering, Mathematics, Physics, Statistical Sciences	2
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Students are not allowed to exempt divisional core requirements through the Advanced Placement Examination, the College Level Examination Program or the International Baccalaureate Program, although students who complete AP or IB courses and present qualifying exam scores earn credit towards the 120 hours needed for graduation. Departments choose which courses will satisfy divisional requirements. Courses satisfying a divisional requirement are designated (D) after their descriptions in this bulletin. Courses without the (D) designation do not satisfy a divisional requirement.

## Special Restrictions

- In divisions requiring more than one course, students may not choose two courses from within the same department.
- One course cannot satisfy the requirements of two divisions. A cross-listed course satisfies a requirement in one division only.
- Language courses at the 200-level do not fulfill the Division II literature requirement.

## Additional Requirements

To prepare students for the demands of technology and globalization, Wake Forest guides undergraduate course selections with two further requirements:

**Cultural Diversity Requirement.** All students must complete at least one course that educates them regarding cultural diversity. This course may be taken at the basic, divisional, or major/minor level, or as an elective. Courses qualified to meet this requirement are designated (CD) after their descriptions in this bulletin.

**Quantitative Reasoning Requirement.** All students must complete at least one course that requires quantitative reasoning, either as a qualifying course in Division V, as an elective, or as a major or minor course requirement. All courses meeting the requirement are designated (QR) after their descriptions in this bulletin.

## Requirement in Health and Exercise Science

Students must complete HES 100 before beginning additional health and exercise science elective courses, and in any case, before the end of the second year.

## Majors and Minors

### Declaring a Major

Students may declare a major after completing 40 hours. Most students declare a major in the spring of their sophomore year. Students declare a major through a procedure established between the academic departments and the Office of the University Registrar. Information about this process is distributed prior to the designated declaration period.

If the student is accepted into the major, the department provides an adviser who assists the student in planning a course of study for the junior and senior years. A department that rejects a student as a major must notify the Office of the University Registrar and file a written



statement indicating the reason(s) for the rejection with the Dean of the College.

Students who need to delay the declaration due to insufficient earned hours or other circumstances should consult the Office of the University Registrar.

A student wishing to major in accountancy, business and enterprise management, finance, mathematical business, or the master of science in accountancy should apply to the School of Business. (See the School of Business requirements in this Bulletin.)

The undergraduate schools try to provide ample space in the various major fields to accommodate the interests of students. It must be understood, however, that the undergraduate schools cannot guarantee the availability of space in a given major field or a given course, since the preferences of students change and there are limits to both faculty and facilities.

After the initial declaration, a student may not change from one major to another without the written approval of the departments concerned. The student's course of study for the junior and senior years includes the minimum requirements for the departmental major, with other courses selected by the student and approved by the adviser. At least half of the major must be completed at Wake Forest University.

**Please Note.** For credit in the major, courses taken in many programs of study abroad are not automatically equivalent to courses completed at Wake Forest. If a student wishes to take more than half of his or her courses for the major in study abroad programs, he or she must gain prior approval from the chair of the department. Students should check the Undergraduate Bulletin for additional departmental requirements for the major. Majors are listed alphabetically under Courses of Instruction in this bulletin.

**The following majors are recognized:**

*accountancy • African American studies • anthropology • applied mathematics • applied statistics • art history • biochemistry and molecular biology • biology • biophysics • business and enterprise management • chemistry • Chinese language and culture • classical languages • classical studies • communication • computer science • critical and creative media • economics • education • engineering • English • environment and sustainability studies • environmental science • finance • French studies • German • German studies • Greek • health and exercise science • history • the interdisciplinary major • Japanese language and culture • Latin • mathematical business • mathematical economics • mathematics • music • philosophy • physics • politics and international affairs • psychology • religious studies • Russian • sociology • Spanish • statistics • studio art • theatre • women's, gender, and sexuality studies*

## Maximum Number of Courses in a Department

Within the College, a maximum of 50 hours in a department or major is allowed to count towards the 120 hours required for graduation. Additional hours within a department or major may be taken, but will not count towards the total 120 hours required for graduation. All courses taken within a major or minor department count toward the major or minor GPA. For a student majoring in a department with two or more majors, 6 additional hours in the department but outside the student's major are also allowed.

These stipulations exclude required related courses from other departments. For students majoring in English, WRI 111 is excluded. For students majoring in a foreign language, elementary courses in that language are also excluded. These limits may be exceeded in unusual circumstances only by action of the Committee on Academic Affairs.

## Options for Meeting Major Requirements

To satisfy graduation requirements, a student must select one, and only one, of the following options, which will receive official recognition on the student's permanent record:

1. A single major
2. A single major and a minor
3. A single major and a double minor
4. A single major and a triple minor
5. A double major
6. A double major and a minor

In order to qualify for options four or six, students must offer a minimum of 135 hours for graduation.

*In addition to these options, a student may complete the requirements of one or more foreign area studies programs and/or any of the Romance languages certificates.*

## Double Majors

A student may major in two departments in the College with the written permission of the chair of each of the departments and on condition that the student meets all requirements for the major in both departments. A student may not use the same course to meet requirements in both of the majors. The student must designate one of the two fields as the primary major, which appears first on the student's record and determines the degree to be awarded. Only one undergraduate degree will be awarded, even if the student completes two majors.

## Minors

A minor is not required. Students may declare a minor only after declaring at least one major. According to the guidelines listed under Options for Meeting Major Requirements, students choosing either a single or a double major may also choose one or more minors from among the following or from the listing of interdisciplinary minors:

*anthropology • Arabic • art history • biology • chemistry • Chinese language and culture • classical studies • communication • computer science • creative writing • dance • economics • engineering • English • French studies • German • German studies • Greek • health and human services • history • Italian language and culture • Japanese language and culture • journalism • Latin • marketing communication • mathematics • music • philosophy • physics • politics and international affairs • psychology • religious studies • Russian • schools, education, and society • secondary education • sociology • Spanish • statistics • studio art • theatre*

For details of the various minors, see the appropriate departmental headings in the section of this bulletin that lists course offerings.

## Interdisciplinary Major

Highly qualified students may design an interdisciplinary major, focused on a topic not available as a regular major. The interdisciplinary major consists of courses offered by two or more departments, for a minimum of 42 hours. Students submit a proposal outlining the nature of the

major, a list of courses to be included, evidence of a comparable major at another university, if available, and letters from at least two relevant faculty members supporting the proposal, one of whom must agree to be the student's primary adviser. The interdisciplinary major may be declared after the student completes 40 hours, however planning for the major should begin as early as possible. A second major may not be declared. A minor may be declared; however, courses used in the interdisciplinary major may not also meet requirements in the minor. Students are required to complete an independent senior project, approved and reviewed by the adviser and readers from participating departments. Proposals are reviewed by the Open Curriculum Committee. Visit the interdisciplinary major website for more details.

## Interdisciplinary Minors

Interdisciplinary minors are listed alphabetically under Courses of Instruction in this bulletin. The following programs are offered:

*actuarial science • African American studies • African studies • American ethnic studies • bioethics, humanities and medicine • contemporary global studies • cultural heritage and preservation studies • East Asian studies • entrepreneurship • environmental science • environmental studies • film and media studies • global trade and commerce studies • health policy and administration • interdisciplinary humanities • Jewish studies • Latin-American and Latino studies • linguistics • medieval and early modern studies • Middle East and South Asia studies • neuroscience • Russian and East European studies • women's, gender, and sexuality studies • writing*

## Foreign Area Studies

The foreign area studies programs enable students to choose an interdisciplinary concentration in the language and culture of a foreign area. An area studies concentration may include courses in the major and also in the minor field, if a minor is chosen. Foreign area studies programs do not replace majors or minors; they may supplement either or both. A faculty adviser coordinates each foreign area studies program and advises students. Students who wish to participate in one of these programs must consult with the program coordinator, preferably in their sophomore year.

Italian Studies and Spanish Studies are offered as foreign area studies programs.

## Senior Testing

All seniors may be required to participate in a testing program designed to provide objective evidence of educational development. If the Committee on Academic Affairs decides to conduct such a program, its purpose would be to assist the University in assessing the effectiveness of its programs. The program does not supplant the regular administration of the Graduate Record Examination for students applying for admission to graduate school.

## Five-year Cooperative Degree Program in Latin-American Studies

Wake Forest and Georgetown universities have instituted a five-year cooperative degree program in Latin-American Studies. Under this program, undergraduate students who minor in Latin-American and Latino Studies at Wake Forest may apply to have a limited number of hours from their undergraduate work count toward a master's degree in Latin-American Studies at Georgetown University in Washington, DC. The BA is awarded by Wake Forest, while the master's degree is awarded by Georgetown. Those whose applications are accepted may

complete both their BS or BA and MA degrees in a five-year period. To apply for the combined BS/MA or BA/MA, students should declare an interest in the five-year cooperative degree program during their junior year. Students must then complete the regular Georgetown graduate application process and seek formal acceptance to the MA program during their senior year.

The five-year program is an opportunity for exceptional students to complete degree requirements at an accelerated pace. Interested students should contact the five-year degree program coordinator, Peter Siavelis, professor of politics and international affairs and director of the Latin-American and Latino Studies Program.

## Departments/Programs

*Plans of study, course descriptions, and the identification of instructors apply to the academic year 2023-2024, unless otherwise noted, and reflect official faculty action through June 2023.*

The University reserves the right to change programs of study, academic requirements, assignment of lecturers, or the announced calendar. The courses listed in this bulletin are not necessarily taught every year; their availability is a function of both staffing constraints and student demand. While no guarantees about future scheduling can be made, students are encouraged to alert their advisers and department heads to their needs and desires as soon as they can be foreseen. For an exact list of courses offered in each particular semester and summer, students should consult the course schedules issued by the Office of the University Registrar during the preceding term. Course descriptions in this bulletin are brief summaries. Students are encouraged to visit departmental and program websites for more detailed information.

## Abbreviations Found in Course Descriptions

Abbreviation	Description
(#h)	Indicates the number of hours earned for successful completion of the course. Follows the course title.
P-	A course requires one or more prerequisite courses.
C-	A course requires one or more corequisite courses.
P-POI	Permission of the instructor is required for registration.
P-POD	Permission of the department is required for registration.
(CD)	A course satisfies the cultural diversity requirement.
(D)	A course satisfies a divisional requirement.
(QR)	A course satisfies the quantitative reasoning requirement.

Courses 101-199 are primarily for first-year students and sophomores; courses 200-299 are primarily for juniors and seniors; courses 301-399 are for advanced undergraduate students. Graduate courses are described in the bulletin of the Graduate School.

# African American Studies (AAS)

## Interdisciplinary Program

African American Studies is a vibrant and dynamic discipline that creates new knowledge about the world and human existence through the critical and comprehensive study of the peoples, cultures, and ideas of Africa and the African diaspora. African American Studies at Wake Forest University distinguishes its approach to the discipline by its unique focus on the cultures, knowledges, and expressions of African descended people in the southern United States and their global reverberations.

The mission of African American Studies at Wake Forest University is to cultivate, nurture, and support signature intellectual contributions to the discipline of African American Studies, critical interdisciplinary scholarship, and human knowledge and understanding through the critical and comprehensive study of the cultures, experiences, expressions, and ideas of African descended people in the United States and in the African diaspora. African American Studies at Wake Forest University offers major and minor programs that leverage the unique intellectual and institutional strengths of the University.

## Contact Information

The Program in African American Studies (<https://afam.wfu.edu/>)

Tribble Hall A105

Phone: 336-758-3758

Email: [afam@wfu.edu](mailto:afam@wfu.edu)

## Programs

### Major

- African American Studies, B.A.

### Minor

- African American Studies, Minor

## Courses

### AAS 100. Introduction to African American Studies. (3 h)

Introduces the history and evolution of the discipline, key scholars, ideas, and themes, and central disciplinary questions in African American Studies.

### AAS 103. Introduction to Jazz. (3 h)

Survey of jazz music from its origins to the present in cultural and historical contexts. Also listed as MSC 103. (CD, D)

### AAS 105. Africa in World History. (3 h)

Examines the continent of Africa from prehistory to the present in global perspective, as experienced and understood by Africans themselves. Also listed as HST 105. (CD, D)

### AAS 106. Atlantic World since 1500. (3 h)

Examines the major developments that have linked the civilizations bordering the Atlantic Ocean from 1500 to the present. Themes include exploration; commerce; European colonization and indigenous responses; disease; religious conversion and revivalism; mestizo and creole culture; imperial warfare; enlightenment; revolution; slavery and abolition; extractive economies; nationalism; 'scientific racism'; invented traditions; the black diaspora and negritude; decolonization; the Cold War; segregation and apartheid; dictatorship; neoliberalism; and globalization. Also listed as HST 110. (CD, D)

### AAS 110. Introduction to Africana Philosophy. (3 h)

Introduces the history and development of Africana philosophy and explores significant issues, themes, and texts in the field.

### AAS 120. Introduction to Black Women's Studies. (3 h)

Introduces the history and development of Black Women's Studies and explores significant themes and topics in the field.

### AAS 130. Black Queer Studies. (3 h)

Examines critical topics, themes, and issues in Black Queer and Trans life, thought and culture.

### AAS 170. African Diaspora Studies. (3 h)

Survey of the key themes, topics, and linkages of the histories, cultures, politics, and ideas of continental and diasporic African communities across space and time.

### AAS 200. Theories and Methods in African American Studies. (3 h)

Examines the major analytical, conceptual, methodological, and theoretical frameworks in African American Studies and interdisciplinary approaches that inform the discipline.

### AAS 205. Black Cultural Studies. (3 h)

Interdisciplinary exploration of the conceptual, material, and theoretical dimensions of Black Cultural Studies and the key debates informing the politics and cultures of representation in African American and African diasporic cultural productions.

### AAS 207. Black Popular Culture. (3 h)

Explores the various forms of Black popular culture and the cultural and intellectual politics that inform its reception and representation by scholars and the general public.

### AAS 210. African American Intellectual Traditions. (3 h)

Explores significant figures and schools of thought in African American intellectual history.

### AAS 220. African American Cultural Criticism. (3 h)

Examines the cultural criticism of significant African American cultural critics and development and evolution of distinctive forms of African American cultural criticism.

### AAS 230. Black Expressive Cultures in the Americas. (3 h)

Explores the histories and cultures of Black musical, media, and visual practices and aesthetics across African diasporic communities in the Americas.

### AAS 266. The History of the Slave South. (3 h)

Examines slavery and southern distinctiveness, from the first interactions of Europeans, Native Americans and Africans through the Civil War and Emancipation. Also listed as HST 266. (CD)

### AAS 271. African American History to 1870. (3 h)

Examines the experiences of African-descended people from Africa to America and from slavery to freedom, with each experience - the slave trade, enslavement, and emancipation - marking a fundamental transformation in black lives. Also listed as HST 271. (CD)

**AAS 272. African American History since 1870. (3 h)**

Examines the experiences of African-descended people from the destruction of slavery to Reconstruction, from rural to urban, and from Jim Crow to Civil Rights, with each experience - emancipation, migration, and enfranchisement - marking a fundamental transformation in black lives. Also listed as HST 272. (CD)

**AAS 280. Race, Environment, and Justice. (3 h)**

Examines the confluence of issues at the intersection of race, environment, and justice in the United States and the African diaspora.

**AAS 290. Black Autobiography and Memoir. (3 h)**

Examines representative text tracing the histories, themes, and trends in Black self-writing.

**AAS 294. Black Art in the US and Great Britain since 1945. (3 h)**

Charts the development of Black Art in the United States and Great Britain from 1945 to the present through Paul Gilroy's notion of the "Black Atlantic" – the ways that a distinct aesthetic emerged from a fusion of West African, American, and British traditions. Also listed as ART 294.

**AAS 300. Black Feminist Theory. (3 h)**

Examines the history and evolution of Black Feminist theory with a focus on key questions, issues and thinkers that inform Black Feminist thought.

**AAS 305. Mothering While Black. (3 h)**

Examines the histories of Black mothers and Black motherhood in the United States from to the present.

**AAS 310. Organic Leadership: Lessons from the Black Freedom Struggle. (3 h)**

Examines the ideas, models, and philosophies of leadership of select artists, activists, and intellectuals from the modern black freedom movement.

**AAS 315. African American Social and Political Thought. (3 h)**

Examines significant figures, themes, and traditions in African American social and political thought.

**AAS 320. Philosophy and Race. (3 h)**

Examines how and in what ways race is interrogated by African American philosophers and philosophers of African descent with critical attention to issues of identity, ethics, and politics.

**AAS 322. Critical Theories of Race. (3 h)**

Explores conceptions of race informed by Critical Race Theory and other forms of critical thought.

**AAS 324. Race and the Modern World. (3 h)**

Interdisciplinary examination of the intersections of ideas, institutions, ideologies, and practices that have defined race and processes of racialization in the modern era.

**AAS 330. Politics of Black Religion. (3 h)**

Examines the complex intersection of politics and Black religion with particular consideration to how political ideas, theories, and movements are influenced by the knowledges, rituals, traditions, and practices of Black religion.

**AAS 340. Ethics of Black Power. (3 h)**

Examines the ethical dimension of Black Power and the cultural, ideological, and political movements influenced by theories and politics of Black Power.

**AAS 341. Africans in the Atlantic World, 1750-1815. (3 h)**

Explores Africans' experience in the Atlantic world (Africa, Europe and the Americas) during the era of the slave trade by examining their encounters with Indians and Europeans and their adjustment to slave traders in West Africa. Also listed as AES 341, HST 341. (CD)

**AAS 350. Politics of Black Liberation. (3 h)**

Explores the histories, concepts, and ideas of Black political movements that make explicit claim to enacting liberatory politics.

**AAS 355. African Political Philosophy. (3 h)**

Critical examination of the political philosophy of significant Africana thinkers and traditions.

**AAS 370. Special Topics in Arts, Aesthetics, and Expressive Cultures in African American Studies. (1-3 h)**

African American Studies topics of special interest. May be repeated for credit if topic varies.

**AAS 375. Black Lives. (3 h)**

Explores both the lived experience and the historical reality of African Americans. Black lives are profoundly shaped by their group experience, influenced in no small part by the role of racism. The biographical approach individuates historical figures struggling to fashion identity. Topics include character development, intimacy, gender roles, public and private personas, self-deceptions or defenses, and personal perceptions of biases. The craft of writing biography is taught throughout the semester. Also listed as HST 375. (CD)

**AAS 376. Civil Rights and Black Consciousness Movements. (3 h)**

A social and religious history of the African-American struggle for citizenship rights and freedom from World War II to the present. Also listed as HST 376. (CD)

**AAS 378. Race, Memory, and Identity. (3 h)**

Explores the collective memory and identity of American-Indian and African-American communities and their response to historical trauma in their cultural imagination, spirituality, and political and social activism. Also listed as HST 378, REL 348. (CD)

**AAS 380. Special Topics in Ethics, Politics, and Society in African American Studies. (1-3 h)**

African American Studies topics of special interest. May be repeated for credit if topic varies.

**AAS 387. Black Radical Tradition. (3 h)**

Examines the key concepts, texts, theories, and thinkers in the Black Radical Tradition.

**AAS 390. Special Topics in History, Culture, and Theory in African American Studies. (1-3 h)**

African American Studies topics of special interest. May be repeated for credit if topic varies.

**AAS 391. Themes in Africana Philosophy. (3 h)**

Select topics and themes in Africana philosophy.

**AAS 392. Seminar in African American Studies. (3 h)**

Offered by members of the African American Studies faculty on a topic of their choice. May be repeated for credit if topic varies.

**AAS 396. Independent Study in African American Studies. (1-3 h)**

Independent research projects in African American Studies which extend study in a particular course or explores new areas of interest. A maximum of 3 hours may apply to the African American Studies major or minor. By prearrangement.

**AAS 397. Directed Reading in African American Studies. (1-3 h)**

Reading in an area of African American Studies not otherwise available. A maximum of 3 hours may apply to the African American Studies major or minor. By prearrangement.



**AAS 399. African American Studies Atelier. (3 h)**  
 Capstone seminar for African American Studies majors to develop original research projects engaging key theoretical, methodological, and conceptual issues in the discipline.

Faculty

**Director:** Corey D.B. Walker, Wake Forest Professor of the Humanities, Department of English and Interdisciplinary Humanities Program  
**Professors:** Shanna Greene Benjamin, Melanie L. Harris  
**Affiliated Faculty:** Brittany Battle, Rian Bowie, Christopher Brown, Hana Brown, Sherri Lawson Clark, Regina Joyce Cordy, Phillip Cunningham, Dean Franco, Simeon Ilesanmi, Julia Jordan-Zachery, Nina Lucas, Judith Madera, Dani Parker Moore, Guy Emerson Mount, Ronald Neal, Anthony Parent, Nate Plageman, Erica Still, Ana-Maria Gonzalez Wahl, Eric King Watts, Betina Cutaia Wilkinson, Kyana R. L. Young

African American Studies, B.A.

Requirements

Requires a minimum of 30 hours in the major.

Code	Title	Hours
<b>Core Courses</b>		<b>12</b>
AAS 100	Introduction to African American Studies	
AAS 200	Theories and Methods in African American Studies	
One course which substantially engages slavery and race in the making of the modern world		
AAS 399	African American Studies Atelier	
<b>Select at least three courses from among the following areas (at the 200 or 300 level):</b>		<b>9</b>
I. Arts, Aesthetics, and Expressive Culture		
II. Ethics, Politics, and Society		
III. History, Culture, and Theory		
<b>Select nine hours of electives</b>		<b>9</b>

I. Arts, Aesthetics, and Expressive Culture

Code	Title	Hours
AAS 207	Black Popular Culture	3
AAS 220	African American Cultural Criticism	3
AAS 294	Black Art in the US and Great Britain since 1945	3
AAS 370	Special Topics in Arts, Aesthetics, and Expressive Cultures in African American Studies	3
HMN 223	African and Caribbean Literature	3
ENG 301	Individual Authors (when topic is Toni Morrison)	3
ENG 302	Ideas in Literature (when topic is Black is Beautiful: African American Poetics and Aesthetics 1919-2019)	3
ENG 356	Literature of the Caribbean	3
ENG 381	Studies in African-American Literature (when topic is appropriate)	3
ENG 387	African-American Fiction (when topic is appropriate)	3

ENG 389	African-American Poetry	3
REL 376	Race, Religion, and Film	3
THE 376	Multicultural American Drama	3

II. Ethics, Politics, and Society

Code	Title	Hours
AAS 310	Organic Leadership: Lessons from the Black Freedom Struggle	3
AAS 330	Politics of Black Religion	3
AAS 340	Ethics of Black Power	3
AAS 350	Politics of Black Liberation	3
AAS 380	Special Topics in Ethics, Politics, and Society in African American Studies	3
ANT 335	Anthropology of Space and Place in the U.S	3,4
SOC 364	Power, Politics, and Protest	3
SOC 384	Special Topics Seminar in Crime and Criminal Justice (when topic is appropriate)	3
POL 213	Economic Inequality and American Politics	3
POL 223	African American Politics	3
POL 226	American Constitutional Law: Civil Rights and Liberties	3
REL 246	Religion and Race	3
REL 338	Religion, Ethics, and Politics	3
REL 374	Black Messiahs and Uncle Toms	3
REL 375	Race, Myth, and the American Imagination	3
WGS 364	Women of Color, Feminisms, and the Politics of Resistance in the U.S	3
WGS 383	Race, Gender, and the Courts	3

III. History, Culture, and Theory

Code	Title	Hours
AAS 105	Africa in World History	3
AAS 106	Atlantic World since 1500	3
AAS 110	Introduction to Africana Philosophy	3
AAS 120	Introduction to Black Women's Studies	3
AAS 205	Black Cultural Studies	3
AAS 210	African American Intellectual Traditions	3
AAS 266	The History of the Slave South	3
AAS 271	African American History to 1870	3
AAS 272	African American History since 1870	3
AAS 300	Black Feminist Theory	3
AAS 315	African American Social and Political Thought	3
AAS 320	Philosophy and Race	3
AAS 322	Critical Theories of Race	3
AAS 324	Race and the Modern World	3
AAS 341	Africans in the Atlantic World, 1750-1815	3
AAS 355	African Political Philosophy	3
AAS 375	Black Lives	3
AAS 376	Civil Rights and Black Consciousness Movements	3
AAS 378	Race, Memory, and Identity	3
AAS 387	Black Radical Tradition	3



AAS 391	Themes in Africana Philosophy	3
AAS 392	Seminar in African American Studies	3
AAS 396	Independent Study in African American Studies	1-3
AAS 397	Directed Reading in African American Studies	1-3
ANT 111	Understanding Culture Through Ethnography	3
ANT 325	Roots of Racism: Race and Ethnic Diversity in the U.S	3
ENG 387	African-American Fiction (when topic is appropriate)	3
HMN 200	Introduction to Humanities: Themes in Literature, Culture, and Film	3
REL 107	Introduction to African Religions	3
REL 345	The African-American Religious Experience	3
REL 348	Race, Memory, and Identity	3
REL 373	Special Topics in African-American Religious Traditions	3
REL 393	Topics in Religions of Africa	3
SOC 359	Race and Racism	3
WGS 322	Feminist, Womanist, Murjerista Theologies: Constructive Perspectives on Christian Thought	3

## African American Studies, Minor Requirements

Requires 18 hours:

Code	Title	Hours
AAS 100	Introduction to African American Studies	3
AAS 200	Theories and Methods in African American Studies	3

Select twelve hours of electives (at least two at the 300 level) from among the following areas:

I. Arts, Aesthetics, and Expressive Culture

II. Ethics, Politics, and Society

III. History, Culture, and Theory

### I. Arts, Aesthetics, and Expressive Culture

Code	Title	Hours
AAS 207	Black Popular Culture	3
AAS 220	African American Cultural Criticism	3
AAS 294	Black Art in the US and Great Britain since 1945	3
AAS 370	Special Topics in Arts, Aesthetics, and Expressive Cultures in African American Studies	3
HMN 223	African and Caribbean Literature	3
ENG 301	Individual Authors (when topic is Toni Morrison)	3
ENG 302	Ideas in Literature (when topic is Black is Beautiful: African American Poetics and Aesthetics 1919-2019)	3

ENG 356	Literature of the Caribbean	3
ENG 381	Studies in African-American Literature (when topic is appropriate)	3
ENG 387	African-American Fiction (when topic is appropriate)	3
ENG 389	African-American Poetry	3
REL 376	Race, Religion, and Film	3
THE 376	Multicultural American Drama	3

### II. Ethics, Politics, and Society

Code	Title	Hours
AAS 310	Organic Leadership: Lessons from the Black Freedom Struggle	3
AAS 330	Politics of Black Religion	3
AAS 340	Ethics of Black Power	3
AAS 350	Politics of Black Liberation	3
AAS 380	Special Topics in Ethics, Politics, and Society in African American Studies	3
ANT 335	Anthropology of Space and Place in the U.S	3,4
SOC 364	Power, Politics, and Protest	3
SOC 384	Special Topics Seminar in Crime and Criminal Justice (when topic is appropriate)	3
POL 213	Economic Inequality and American Politics	3
POL 223	African American Politics	3
POL 226	American Constitutional Law: Civil Rights and Liberties	3
REL 246	Religion and Race	3
REL 338	Religion, Ethics, and Politics	3
REL 374	Black Messiahs and Uncle Toms	3
REL 375	Race, Myth, and the American Imagination	3
WGS 364	Women of Color, Feminisms, and the Politics of Resistance in the U.S	3
WGS 383	Race, Gender, and the Courts	3

### III. History, Culture, and Theory

Code	Title	Hours
AAS 105	Africa in World History	3
AAS 106	Atlantic World since 1500	3
AAS 110	Introduction to Africana Philosophy	3
AAS 120	Introduction to Black Women's Studies	3
AAS 205	Black Cultural Studies	3
AAS 210	African American Intellectual Traditions	3
AAS 266	The History of the Slave South	3
AAS 271	African American History to 1870	3
AAS 272	African American History since 1870	3
AAS 300	Black Feminist Theory	3
AAS 315	African American Social and Political Thought	3
AAS 320	Philosophy and Race	3
AAS 322	Critical Theories of Race	3
AAS 324	Race and the Modern World	3
AAS 341	Africans in the Atlantic World, 1750-1815	3
AAS 355	African Political Philosophy	3

AAS 375	Black Lives	3
AAS 376	Civil Rights and Black Consciousness Movements	3
AAS 378	Race, Memory, and Identity	3
AAS 387	Black Radical Tradition	3
AAS 391	Themes in Africana Philosophy	3
AAS 392	Seminar in African American Studies	3
AAS 396	Independent Study in African American Studies	1-3
AAS 397	Directed Reading in African American Studies	1-3
ANT 111	Understanding Culture Through Ethnography	3
ANT 325	Roots of Racism: Race and Ethnic Diversity in the U.S	3
ENG 387	African-American Fiction (when topic is appropriate)	3
HMN 200	Introduction to Humanities: Themes in Literature, Culture, and Film	3
REL 107	Introduction to African Religions	3
REL 345	The African-American Religious Experience	3
REL 348	Race, Memory, and Identity	3
REL 373	Special Topics in African-American Religious Traditions	3
REL 393	Topics in Religions of Africa	3
SOC 359	Race and Racism	3
WGS 322	Feminist, Womanist, Murjerista Theologies: Constructive Perspectives on Christian Thought	3

## Academic Community Engagement (ACE)

**Coordinator** Alessandra Von Burg, Associate Professor of Communication

**Academic Community Engagement (ACE) courses** connect academic content to community engagement through collaboration with community partners. ACE courses align with the Carnegie Foundation's classification of community engagement as "the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity."

ACE courses are approved by the ACE Advisory Council based on criteria that include, but are not limited to: reciprocity with community partners; demonstration of relevant and meaningful community engagement; clear articulation of intended student learning outcomes and community goals; methods of assessment of student outcomes and of community outcomes; and evidence of integration of academic and engagement goals. Faculty teaching ACE courses employ a variety of methods to engage the community. For more details and a complete list of all ACE-designated courses, refer to the Pro Humanitate Institute website (<http://phi.wfu.edu/>).

## African Studies (AFS)

Interdisciplinary Minor

The African Studies minor is designed to give students broad multidisciplinary perspectives on African history, politics, culture, and the economy. The program aims to teach students about the diversity of the African experience and to think critically about the generalized and often incomplete information that are encountered in the media, written texts, and pronouncements of experts, casual observers, residents, and visitors to the continent. The educational objectives of the program include helping the students to acquire critical information that would facilitate their understanding of the multiethnic and multicultural world they live in and become, in the process, global citizens.

## Contact Information

African Studies (<http://college.wfu.edu/politics/africanstudies/>)

## Programs Minor

- African Studies, Minor

## Courses

### African Studies (AFS)

**AFS 220. Special Topics in African Studies. (1-3 h)**

Subject varies with instructor. May be repeated for credit if topic varies.

**AFS 250. African Studies: Past and Present. (3 h)**

Interdisciplinary investigation of important issues related to Africa's past and present.

## Faculty

**Coordinator:**

**Nate Plageman**, Associate Professor, Department of History

**Core Faculty:**

**Lina Benabdallah**, Assistant Professor, Department of Politics and International Affairs

**Guillanume Coly**, Assistant Professor, Department of French Studies

**Regina Cordy**, Assistant Professor, Department of Biology

**Andrew Gurstelle**, Assistant Teaching Professor, Department of Anthropology and Director, Museum of Anthropology

**Simeon Ilesanmi**, Washington M. Wingate Professor, Department for the Study of Religions

**Veronique McNeely**, Associate Professor of the Practice, Department of French Studies

**Kimberly Wortmann**, Assistant Professor, Department for the Study of Religions

## African Studies, Minor

### Requirements

The interdisciplinary minor in African Studies offers students the opportunity to pursue a multidisciplinary study of Africa. The minor requires a minimum of 15 hours. Students who intend to minor in African Studies are encouraged to consult the coordinator of the program in their sophomore year.

Candidates for the minor are required to take the following:

Code	Title	Hours
HST 105	Africa in World History	3
or REL 107	Introduction to African Religions	
AFS 250	African Studies: Past and Present	3
Select 9 hours of Electives		9

## Electives for African Studies

The program coordinator maintains a complete list of all elective courses that fulfill the minor, as additional elective courses may have been approved since publication of this bulletin. Students may fulfill elective requirements by completing courses related to Africa on a Wake Forest approved study abroad course; they may also seek prior approval from the program coordinator for courses which are not listed here but which have a significant African component. No more than 9 hours within a single discipline may count towards the minor. For course descriptions, see the relevant department's listings in this bulletin.

Code	Title	Hours
AFS 220	Special Topics in African Studies	1-3
ANT 370	Origins to Empires: The Archaeology of Africa and Eurasia	3
ART 104	Topics in World Art (when topic is appropriate)	3
DCE 122	Special Topics in Dance (when topic is African dance)	1-3
ECN 358	Economic Growth and Development	3
ENG 337	Studies in 18th-Century British Literature (when topic is appropriate)	3
ENG 356	Literature of the Caribbean	3
ENG 358	Postcolonial Literature	3
FRH 216	Studies in French and Francophone Literature and Culture (when topic is appropriate)	3
FRH 361	Special Topics in French and Francophone Film Studies (when topic is appropriate)	3
HMN 223	African and Caribbean Literature	3
HST 268	African History to 1870	3
HST 269	African History since 1850	3
HST 271	African American History to 1870	3
HST 272	African American History since 1870	3
HST 336	Gender and Power in African History	3
HST 340	Urban Africa	3
HST 341	Africans in the Atlantic World, 1750-1815	3
HST 378	Race, Memory, and Identity	3
MSC 101	Introduction to the Music of World Cultures	3
POL 242	Topics in Comparative Politics (when topic is appropriate)	3
POL 252	Topics in International Politics (when topic is appropriate)	3
POL 257	Politics of International Development	3
POL 266	Modern Civil Wars	3
POL 274	Arab and Islamic Political Thought	3
REL 110	Introduction to Islamic Traditions (when topic is appropriate)	3
REL 336	Religious Traditions and Human Rights	3

REL 339	Religion, Power, and Society in Modern Africa	3
REL 345	The African-American Religious Experience	3
REL 348	Race, Memory, and Identity	3
REL 362	Topics in Islam (when topic is appropriate)	3
REL 393	Topics in Religions of Africa	3
SPA 368	Afro Cuban Cultural Expression	3

## American Ethnic Studies (AES)

### Interdisciplinary Minor

The American Ethnic Studies Program at Wake Forest University is a multicultural and multiracial research and teaching unit, dedicated to providing knowledge in the study of race, class, gender and ethnicity. Through the programs' curricula focus on several major ethnic groups including, African American, Asian/Pacific Islanders, Hispanics, and Chicanos, students learn interdisciplinary, ethnic-specific, and comparative concepts, theories, and methods of inquiry, which shape the cultural, literary, social, historical, economic, and political character of selected American ethnic communities.

## Contact Information

American Ethnic Studies (<http://college.wfu.edu/aes/>)  
109 Piccolo Hall  
Phone 336-758-3556

## Programs Minor

- American Ethnic Studies, Minor

## Courses

### American Ethnic Studies (AES)

#### AES 232. The American Jewish Experience. (3 h)

An interdisciplinary course exploring Jewish immigration to America with a primary focus on the nineteenth and twentieth centuries.

#### AES 234. Ethnicity and Immigration. (3 h)

An exploration of the socio-historical dynamics of the peopling of America in the nineteenth and twentieth centuries. (CD)

#### AES 236. Multi-Ethnic Dance. (3 h)

Exploration of the cultural importance of dance in major ethnic groups in American society. Also listed as DCE 236. (CD)

#### AES 251. Race and Ethnic Diversity in America. (3 h)

Different race and ethnic experiences are examined through an institutional approach that examines religion, work, schooling, marriage patterns, and culture from cross-cultural perspective. Grand theoretical schemes like the "melting pot" are critiqued for their relevance in an age of new cultural expectations among the many American ethnic groups. Also listed as WGS 251. (CD)

#### AES 265. Culture and Religion in Contemporary Native America. (3 h)

Interdisciplinary survey of American-Indian culture, including the arts and literature, religions, and historical changes. Special emphasis is placed on the impact of the Conquista, encounters with Northern Atlantic societies, and contemporary developments. Also listed as REL 265 and HMN 285. (CD)

**AES 300. American Ethnic Literature and Film. (3 h)**

Through a discussion of cinematic and literary works from the Caribbean, North Africa, and sub-Saharan Africa, this course explores how artists have created a space in which to find their voice and cultural identity within both a global and personal history.

**AES 310. Race, Class, and Gender in a Color-blind Society. (3 h)**

Examines issues surrounding race, class, and gender in the United States. Topics include income and wealth, theories of discrimination, public education, gender bias, and patterns of occupational and industrial segregation. Also listed as EDU 310.

**AES 341. Africans in the Atlantic World, 1750-1815. (3 h)**

Explores Africans' experience in the Atlantic world (Africa, Europe and the Americas) during the era of the slave trade by examining their encounters with Indians and Europeans and their adjustment to slave traders in West Africa. Also listed as AAS 341, HST 341. (CD)

**AES 357. Studies in Chicano/a Literature. (3 h)**

Writings by Americans of Mexican descent in relation to politics and history. Readings in literature, literary criticism, and socio-cultural analysis. Also listed as ENG 357. (CD)

**AES 358. The Italian Experience in America. (3 h)**

Explores issues of ethnicity and identity in the Italian-American experience. A central goal of this course is to understand the inter-relationship of social, economic and political factors that impinge on this large European ethnic group.

**AES 370. Immigration Practices in the U.S. and the European Union. (3 h)**

Explores the history and theory of immigration practices in the U.S. (after 1800) and the European Union (after its establishment in 1957) and compares the discourses and public policies in the two regions.

**AES 387. African-American Fiction. (3 h)**

Selected topics in the development of fiction by American writers of African descent. Also listed as ENG 387. (CD)

**AES 389. African-American Poetry. (3 h)**

Readings of works by American poets of African descent in theoretical, critical, and historical contexts. Also listed as ENG 389. (CD)

**AES 390. Special Topics. (1.5, 3 h)**

American ethnic studies topics of special interest. May be repeated for credit if topic varies.

**AES 396. Independent Study. (1-3 h)**

Independent projects in American Ethnic Studies which either continue study begun in regular courses or develop new areas of interest. A maximum of 3 hours may apply to the minor. By prearrangement.

## Faculty

**Director** Sherriann Lawson Clark

**Core Faculty:** Ana-María González Wahl

**Affiliated Faculty:** Hana E. Brown, Betina Cutaia Wilkinson, Annalise Glauz-Todrank, Derek Hicks, Julia Jordan-Zachery, Jieun Lee, Nina Lucas, Judith Madera, Ronald Neal, Anthony Parent, Erica Still, Alessandra Beasley Von Burg

## American Ethnic Studies, Minor

### Requirements

Requires 15 hours.

Code	Title	Hours
AES 251	Race and Ethnic Diversity in America (during the second or third year at Wake Forest)	3
or ANT 325	Roots of Racism: Race and Ethnic Diversity in the U.S	
AES 234	Ethnicity and Immigration	3
or SOC 356	Sociology of Immigration	
or COM 339	Practices of Citizenship	
Select a 3-hour course from the behavioral and social sciences		3
Select a 3-hour course from the humanities		3
Electives		3

This structure gives students an understanding of the interdisciplinary nature of American ethnic studies within the context of the traditional liberal arts curriculum.

## Electives for American Ethnic Studies

Additional elective courses may have been approved since publication of this bulletin. The program director maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this bulletin.

Code	Title	Hours
ANT 325	Roots of Racism: Race and Ethnic Diversity in the U.S	3
ANT 374	North American Archaeology	3
COM 330	Communication and Conflict	3
COM 338	African-American Rhetoric	3
COM 339	Practices of Citizenship	3
COM 340	Democracy, Slavery and Sex: Emancipation Discourse from the Founding to the Civil War	3
COM 341	Class, Race, Sex and War: Emancipation Discourse from the Civil War to the Second Wave of Feminism	3
COM 350	Intercultural Communication	3
EDU 305	The Sociology of Education	3
ENG 371	American Ethnic Literature	3
ENG 377	American Jewish Literature	3
ENG 379	Literary Forms of the American Personal Narrative	3
ENG 381	Studies in African-American Literature	3
ENG 393	Multicultural American Drama	3
HST 271	African American History to 1870	3
HST 272	African American History since 1870	3
HST 338	Sexuality, Race and Class in the United States since 1850	3
HST 341	Africans in the Atlantic World, 1750-1815	3
HST 358	Race, Gender and the Courts	3
HST 365	Modern Native American History	3
HST 376	Civil Rights and Black Consciousness Movements	3
HST 378	Race, Memory, and Identity	3
HST 390	Research Seminar (Race, Class, Gender and Resistance in the American South)	4

HST 390	Research Seminar (Slave, Narrative and Memory)	4
MSC 103	Introduction to Jazz	3
MSC 108	American Music	3
POL 214	Latina/o/x Politics	3
POL 223	African American Politics	3
PSY 357	Cross-Cultural Psychology	3
PSY 364	Stereotyping and Prejudice	3
REL 103A	Introduction to Christian Traditions	3
REL 113	Introduction to Jewish Traditions	3
REL 342	Religious Intolerance in the U.S	3
REL 345	The African-American Religious Experience	3
REL 357	Jews in the United States	3
REL 359	Hinduism in America	3
REL 373	Special Topics in African-American Religious Traditions	3
REL 374	Black Messiahs and Uncle Toms	3
REL 375	Race, Myth, and the American Imagination	3
SOC 348	Sociology of the Family	3
SOC 356	Sociology of Immigration	3
SOC 359	Race and Racism	3
SOC 360	Social Inequality	3
SOC 364	Power, Politics, and Protest	3
SPA 363	Cultural and Social Entrepreneurship: Promotion of Latin American and Latino Societies	3
WGS 364	Women of Color, Feminisms, and the Politics of Resistance in the U.S	3
WGS 377	Special Topics (Ethnohistory of Native-American Women, in any semester in which this topic is taught)	3
WGS 383	Race, Gender, and the Courts	3

## Anthropology (ANT)

The WFU Department of Anthropology promotes understanding and appreciation of human cultural and biological diversity. Through academic courses, scholarly and applied research, and public service, the Department provides the Wake Forest community with the tools and knowledge necessary for global citizenship. Composed of scholars representing all sub-fields of anthropology, the Department serves as the premier academic and practical resource for multicultural awareness and education in the University and Winston-Salem communities, enhancing the University's commitment to Pro Humanitate.

## Contact Information

Department of Anthropology (<http://college.wfu.edu/anthropology/>)  
 Anthropology Building, Box 7807  
 Phone 336-758-5945

## Programs

### Major

- Anthropology, B.A.

## Minor

- Anthropology, Minor

## Courses

### Anthropology (ANT)

#### ANT 111. Understanding Culture Through Ethnography. (3 h)

A representative ethnographic survey of worldwide cultures and major concepts in cultural anthropology taught through case studies. Credit toward the major or minor not given for both ANT 111 and ANT 114. (CD, D)

#### ANT 111G. People and Cultures of World. (3 h)

A representative ethnographic survey of worldwide cultures and major concepts in cultural anthropology taught through case studies. Same as ANT 111, and also meets the geography requirement for teaching licensure candidates. (CD, D)

#### ANT 112. Introduction to Archaeology. (3 h)

Overview of the field of archaeology and its place within anthropology. Includes coverage of methods, theory, history of the field, and discussions of major developments in world prehistory (CD, D)

#### ANT 113. Introduction to Biological Anthropology. (3 h)

Introduction to biological anthropology, including human biology, human variation, human genetics, human evolution, and primatology. (D)

#### ANT 114. Introduction to Cultural Anthropology. (3 h)

Investigates and interprets the cultural diversity of the world's people, through an understanding of economic, social, and political systems, law, and religion; language and culture; gender, race, ethnicity, kinship and the family; and globalization and culture change. Credit toward the major or minor not given for both ANT 111 and ANT 114. (CD, D)

#### ANT 150. Introduction to Linguistics. (3 h)

The social phenomenon of language: how it originated and developed, how it is learned and used, its relationship to other kinds of behavior; types of language (oral, written, signed) and language families; analysis of linguistic data; social issues of language use. Also listed as LIN 150. (CD, D)

#### ANT 190. Introduction to Museum Studies. (3 h)

Survey of museum history and theory. Covers object collections, curation, exhibit design, and cultural issues in museums. Does not count toward the major or minor in anthropology. (D)

#### ANT 305. Museum Anthropology. (3 h)

Examines the historical, social, and ideological forces shaping the development of museums including the formation of anthropological collections and representation, and the intellectual and social challenges facing museums today. P - ANT 111 or 112 or 114, or POL.

#### ANT 307. Collections Management Practicum. (1.5 h)

The principles of collections management including artifact registration, cataloging, storage, and handling; conservation issues and practices; disaster planning and preparedness; and ethical issues will be covered through lectures, readings, workshops, and hands-on use of the Museum's collections.

#### ANT 308. Archaeological Theory and Practice. (3 h)

Examination of contemporary archaeological topics through participation in the formulation and implementation of an archaeological research design. Building knowledge relevant to contemporary society through understanding the interdependent nature of archaeological theory and method.



**ANT 315. Artifact Analysis and Laboratory Methods in Archaeology. (4 h)**

An introduction to methods for determining the composition, age, manufacture, and use of different prehistoric and historic artifact types. Techniques for reconstruction of past natural environments from geological or ecofact samples. Exploration of date display tools including computer-based illustration, and archeological photography. P-ANT 111 or 112 or 114, or POI.

**ANT 318. Prehistory and Archaeology of Europe. (3 h)**

Problem-based survey of the archaeological record of Europe. Complex interrelationships of material culture, economy, ideology, and social life from earliest peopling to the late Iron Age. Offered only in WFU Study Abroad programs.

**ANT 325. Roots of Racism: Race and Ethnic Diversity in the U.S. (3 h)**

Examines biological myths of race and race as a social construction; historical, economic, and political roots of inequalities; institutions and ideologies that buttress and challenge power relations; and implications of anthropological teaching and research for understanding social class and race discrimination in the U.S. (CD)

**ANT 327. Global Justice and Human Rights in Latin America. (3 h)**

Examines anthropological understandings of human rights, with emphasis on activism and rights-in-practice in Latin America. Explores how human rights are understood, mobilized, and reinterpreted in specific contexts. Investigates how anthropologists negotiate tensions between culture and rights, universalism and relativism, and advocacy and neutrality. (CD)

**ANT 329. Anthropology of Gender and Sexuality. (3 h)**

Examines cultural constructions of gender from a cross-cultural perspective and the relationship between feminism and anthropology through time. Emphasizes how varied forms of feminisms are constituted within diverse social, cultural, and economic systems. Students consider how feminist anthropologists have negotiated positions at the intersection of cultural and human rights. Also listed as WGS 329.

**ANT 332. Anthropology of Gender. (3 h)**

Focuses on the difference between sex, a biological category, and gender, its cultural counterpart. An anthropological perspective is used to understand both the human life cycle and the status of contemporary women and men worldwide. In section one, topics include evolution and biological development, sexuality and reproduction, parenting, and life cycle changes. The second section takes students to diverse locations, including Africa, South Dakota, China, India, and the Amazon for a cross-cultural comparison examining roles, responsibilities, and expectations, and how these interact with related issues of class and race. (CD)

**ANT 333. Language and Gender. (3 h)**

Uses an anthropological perspective to examine relationships among language structure, language use, persons, and social categories. Also listed as LIN 333.

**ANT 334. People and Cultures of South Asia. (3 h)**

Survey of the people and cultures of the Indian subcontinent in the countries of Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka. The course reviews major topics of interest to anthropologists, including prehistory, history and politics, religion, social organization, caste, gender, development, and population. (CD)

**ANT 335. Anthropology of Space and Place in the U.S. (3, 4 h)**

Course examines the spatial dimensions of culture by focusing on housing disparities in the U.S. Particular attention is paid to the cultural, gendered, economic, political, and regional contexts of housing policies and the impact policies have on children, families and communities. Course includes an optional Service-Learning community asset mapping assignment of a local Winston-Salem neighborhood.

**ANT 336. Myth, Ritual and Symbolism. (3 h)**

Explores how people envision and manipulate the supernatural in cross-cultural perspective. Emphasizes dynamic aspects of religious beliefs and practices. Also listed as REL 304. P-ANT 111 or 114 or POI. (CD)

**ANT 337. Economic Anthropology. (3 h)**

Examines the relationship between culture and the economy and its implications for applied anthropology. The variable nature and meaning of economic behavior will be examined in societies ranging from non-industrial to post-industrial. Discusses the impact of economic development programs, foreign aid and investment, technology transfer, and a variety of other economic aid programs. P-ANT 111 or 112 or 113 or 114, or POI.

**ANT 339. Culture and Nature: Introduction to Environmental Anthropology. (3 h)**

Exploration of humanity's "place" in the cosmos, focusing on different worldviews of nature and culture. Case studies from anthropology, archeology, and environmental science examine conceptions of technology, resources, environment, and ownership in the context of environmental change, "natural" disasters, and resource scarcity. (CD)

**ANT 340. Anthropological Theory. (4 h)**

Critical review of the major anthropological theories of humans and society. The relevance and significance of these theories to contemporary anthropology are discussed. P-ANT 112 and 113 and 114, or POI.

**ANT 342. Applied Anthropology. (3 h)**

Explores the application of anthropological concepts and methods in the understanding of contemporary problems stemming from cultural diversity, including competing social and economic development models and ideologies of terror. Emphasis is on conflict and change in developing areas but also considers the urban experiences. (CD)

**ANT 347. Warfare and Violent Conflict. (3 h)**

Seminar focusing on the causes and nature of warfare and violent group interaction across cultures and through time. Compares case studies from around the globe and of varying sociopolitical organization, past and present. Includes explorations of primate behavior, forms of warfare, and competing theoretical explanations for its existence and for particular occurrences.

**ANT 350. Language, Indigeneity and Globalization. (3 h)**

Taking a global case-study approach, this seminar explores the role language plays in contemporary identity formation and expression, from indigenous to transnational contexts. Addresses relationships among language and colonialism, postcolonialism, nationalism, cultural revitalization, standardization, social and economic inequality, boundary-formation, and processes of cultural inclusion and exclusion. Also listed as LIN 350. (CD)

**ANT 353. Language in Education. (3 h)**

This seminar explores the role of language in educational contexts; includes the study of bilingual and bicultural education, second language education, cross-cultural education, and communication in the classroom. Service-learning component. Also listed as EDU 353. (CD)

**ANT 354. Field Methods in Linguistic Anthropology. (4 h)**

Trains students in basic skills of collecting and analyzing linguistic data at the levels of phonetics-phonology, grammar, lexico-semantics, discourse, and sociocultural context. Students will learn about the research questions that drive linguistic fieldwork as well as the relevant methods, tools, and practical and ethical concerns. Also listed as LIN 354. P-ANT/LIN 150 or POI.

**ANT 355. Language and Culture. (3 h)**

Covers theoretical and methodological approaches to the study of language and culture, including: semiotics, structuralism, ethnohistory, the ethnography of communication, and sociolinguistics. The topics include: linguistic relativity; grammar and worldview; lexicon and thought; language use and social inequality; language and gender; and other areas. Also listed as LIN 355. (CD)

**ANT 356. Language and Social Justice: Signs, Stigma and Social Capital. (3 h)**

Explores contemporary topics on how language use serves to create, sustain, justify, resist, and alter social and economic inequality; constitutes social action; embeds social orders in linguistic structures. Course is collaborative, hands-on, seminar-style. Also listed as LIN 356. (CD)

**ANT 358. Native Cultures of North America. (3 h)**

Ethnology and ethnohistory of the indigenous peoples and cultures of North America since European contact. Explores historic and modern cultures, social and political relationships with Euroamericans, and social justice. (CD)

**ANT 360. Anthropology of Global Health. (3 h)**

A critical introduction to the interdisciplinary field of global health, focusing on contributions from medical anthropology. Compares a diversity of health experiences and evaluates interventions across the globe. Explores how biocultural, political, and economic forces shape patterns of illness and disease with special attention to improving the health of the world's most vulnerable citizens.

**ANT 361. Evolution of Human Behavior. (3 h)**

The application of Darwinian principles to the study of human nature and culture. Considers the existence, origin, and manifestation of human behavioral universals and the theoretical and practical implications of individual variability.

**ANT 362. Medical Anthropology. (3 h)**

Examines Western and non-Western conceptions of health, illness, the roles of patient and healer, and the organization of health in Western and non-Western cultures. Service learning optional. P-ANT 111 or 114, or POI. (CD)

**ANT 363. Primate Behavior and Biology. (3 h)**

Examines the evolution and adaptations of the order Primates. Considers the different ways that ecology and evolution shape social behavior. A special emphasis on the lifeways of monkeys and apes.

**ANT 364. Primate Evolutionary Biology. (3 h)**

Examines the anatomy, evolution, and paleobiology of members of the order Primates. Emphasis is placed on the fossil evidence for primate evolution. Major topics covered include: primate origins, prosimian and anthropoid adaptations, patterns in primate evolution, and the place of humans within the order Primates.

**ANT 366. Human Evolution. (3 h)**

The paleontological evidence for early human evolution, with an emphasis on the first five million years of biocultural evolution.

**ANT 367. Human Biological Diversity. (3 h)**

Seminar focusing on current issues in human biological diversity. Special emphasis on the nature of human variation, and the relationship between human biological diversity and human behavioral diversity. Students learn what is known about how modern human biological variation is patterned and investigate how this variation is interpreted culturally.

**ANT 368. Human Osteology. (4 h)**

Survey and analysis of human skeletal anatomy, emphasizing archeological, anthropological, and forensic applications and practice. Lab-4 hours.

**ANT 370. Origins to Empires: The Archaeology of Africa and Eurasia. (3 h)**

Survey of human prehistory from the earliest hominin social behaviors to the rise of cultural complexity and stratified societies in Africa, Asia, and Europe. Detailed examination of the cultural evolution of state societies within important contexts of past environmental, social, and political change. (CD)

**ANT 372. Environmental Archaeology. (3 h)**

Survey of scientific approaches for reconstructing and interpreting the interactions between past human populations and their environments. Integrates geoarchaeological, archaeobotanical, zooarchaeological, and geochronological methods with anthropological understandings of human construction and experience of environment. Problem-based field activities provide experience applying research techniques and anthropological theory.

**ANT 374. North American Archaeology. (3 h)**

The development of indigenous cultures in North America, from the earliest arrival of people to European contact as outlined by archeological research, with an emphasis on ecology and sociocultural processes. (CD)

**ANT 378. Conservation Archeology. (1.5 h)**

A study of the laws, regulations, policies, programs, and political processes used to conserve prehistoric and historic cultural resources.

**ANT 380. Anthropological Statistics. (3 h)**

Basic statistics, emphasizing application in anthropological research. (QR)

**ANT 381. Field Program in Anthropological Archaeology. (3 h)**

Integrated training in archeological field methods and analytical techniques for researching human prehistory. Students learn archeological survey, mapping, excavation, recording techniques, and artifact and ecofact recovery and analysis. P-ANT 111 or 112 or 113 or 114 or POI. (D)

**ANT 382. Field Program in Anthropological Archaeology. (3 h)**

Integrated training in archeological field methods and analytical techniques for researching human prehistory. Students learn archeological survey, mapping, excavation, recording techniques, and artifact and ecofact recovery and analysis. P-ANT 111 or 112 or 113 or 114 or POI. (D)

**ANT 383. Field program in Cultural Anthropology. (3 h)**

The comparative study of culture and training in ethnographic and cultural analysis carried out in the field. P-ANT 111 or 112 or 113 or 114 or POI. (CD, D)

**ANT 384. Field Program in Cultural Anthropology. (3 h)**

The comparative study of culture and training in ethnographic and cultural analysis carried out in the field. P-ANT 111 or 112 or 113 or 114 or POI. (CD, D)

**ANT 385. Special Problems Seminar. (3 h)**

Intensive investigation of current scientific research within the discipline. The course concentrates on problems of contemporary interest.

**ANT 386. Special Problems Seminar. (3 h)**

Intensive investigation of current scientific research within the discipline. The course concentrates on problems of contemporary interest.

**ANT 387. Ethnographic Research Methods. (4 h)**

Designed to familiarize students with ethnographic research methods and their application. Considers the epistemological, ethical, political, and psychological aspects of research. Field experience and data analysis. P-ANT 111 or 114 or POI.

**ANT 390. Student-Faculty Seminar. (4 h)**

A review of contemporary problems in the fields of archeology, linguistics, and biological and cultural anthropology. Senior standing recommended. P-ANT 112, 113 and 114, or POI.

**ANT 391. Internship in Anthropology. (1-3 h)**

An internship course designed to meet the needs and interests of selected students, to be carried out under the supervision of a departmental faculty member. P-POI.

**ANT 392. Internship in Anthropology. (1-3 h)**

An internship course designed to meet the needs and interests of selected students, to be carried out under the supervision of a departmental faculty member. P-POI.

**ANT 393. Community-Based Research or Service-Learning in Anthropology. (1-3 h)**

Semester experience to be taken in conjunction with another anthropology course. Involves the application of anthropological methods and theory within a community-based research project or service-learning framework.

**ANT 394. Mentored Research in Anthropology. (1-3 h)**

Undergraduate research mentored by faculty and involving intensive investigation of an anthropological problem. P-POI.

**ANT 395. Honors Thesis in Anthropology. (1-3 h)**

Research, analysis, and writing of an Honors Thesis required for graduation with departmental honors to be carried out under the supervision of a departmental faculty member. Senior standing required. P-POI.

**ANT 398. Individual Study. (1-3 h)**

A reading or research course designed to meet the needs and interests of selected students, to be carried out under the supervision of a departmental faculty member. P-POI.

**ANT 399. Individual Study. (1-3 h)**

A reading or research course designed to meet the needs and interests of selected students, to be carried out under the supervision of a departmental faculty member. P-POI.

## Faculty

**Chair** Margaret Bender

**Professor** Margaret Bender, Ellen Miller

**Associate Professors** Sherri Lawson Clark, Steven Folmar, Karin Friederic, Paul Thacker

**Assistant Professors** Timothy Gitzen, Jessica MacLellan

**Academic Director of Museum of Anthropology and Associate Teaching Professor** Andrew Gurstelle

## Anthropology, B.A.

### Requirements

Requires a minimum of 33 hours and must include:

Code	Title	Hours
<b>Required Major Courses</b>		
ANT 111	Understanding Culture Through Ethnography	3
or ANT 114	Introduction to Cultural Anthropology	
ANT 112	Introduction to Archaeology	3
ANT 113	Introduction to Biological Anthropology	3
ANT 340	Anthropological Theory	4
ANT 390	Student-Faculty Seminar	4
Select one course from Linguistic Anthropology		3-4
Select one course from Methods Courses		3-4

Students are encouraged, but not required, to enroll in a course offering intensive field research training.

A minimum GPA of 2.0 in anthropology courses is required at the time the major is declared. A minimum GPA of 2.0 in anthropology courses counted toward the major is required for graduation. Credit toward the major or minor not given for both ANT 111 and ANT 114. Only one course (excluding ANT 111, ANT 112, ANT 113, ANT 114, ANT 150, ANT 340, ANT 390) can be taken under the pass/fail option and used to meet major requirements. A maximum of four hours of course credit from the following can be used to meet major requirements.

Code	Title	Hours
ANT 391	Internship in Anthropology	1-3
ANT 392	Internship in Anthropology	1-3
ANT 393	Community-Based Research or Service-Learning in Anthropology	1-3
ANT 394	Mentored Research in Anthropology	1-3
ANT 395	Honors Thesis in Anthropology	1-3
ANT 398	Individual Study	1-3
ANT 399	Individual Study	1-3

A maximum of six hours of anthropology transfer credit can be used to meet major requirements.

## Linguistic Anthropology

Code	Title	Hours
ANT 150	Introduction to Linguistics	3
ANT 333	Language and Gender	3
ANT 350	Language, Indigeneity and Globalization	3
ANT 353	Language in Education	3
ANT 354	Field Methods in Linguistic Anthropology	4
ANT 355	Language and Culture	3
ANT 356	Language and Social Justice: Signs, Stigma and Social Capital	3

## Methods Courses

Code	Title	Hours
ANT 315	Artifact Analysis and Laboratory Methods in Archaeology	4
ANT 354	Field Methods in Linguistic Anthropology	4
ANT 368	Human Osteology	4
ANT 380	Anthropological Statistics	3

ANT 381	Field Program in Anthropological Archaeology	3
ANT 382	Field Program in Anthropological Archaeology	3
ANT 383	Field program in Cultural Anthropology	3
ANT 384	Field Program in Cultural Anthropology	3
ANT 387	Ethnographic Research Methods	4

## Honors

To be graduated with the designation "Honors in Anthropology," highly qualified majors (3.5 GPA in anthropology) should apply to the department for admission to the honors program. Honors students must complete a senior research project, document their research, and satisfactorily defend their work in an oral examination. For additional information, members of the departmental faculty should be consulted.

## Anthropology, Minor Requirements

Requires 18 hours and must include:

Code	Title	Hours
Select two of the following:		6
ANT 112	Introduction to Archaeology	
ANT 113	Introduction to Biological Anthropology	
ANT 114	Introduction to Cultural Anthropology	
or ANT 111	Understanding Culture Through Ethnography	
Select a minimum of six hours at the 200-level or above.		6

Only one course (excluding ANT 111, ANT 112, ANT 113, ANT 114, ANT 150) can be taken under the pass/fail option and used to meet minor requirements. Credit toward the major or minor not given for both ANT 111 and ANT 114. Only three hours from the following may be used toward the minor.

Code	Title	Hours
ANT 391	Internship in Anthropology	1-3
ANT 392	Internship in Anthropology	1-3
ANT 393	Community-Based Research or Service-Learning in Anthropology	1-3
ANT 394	Mentored Research in Anthropology	1-3
ANT 395	Honors Thesis in Anthropology	1-3
ANT 398	Individual Study	1-3
ANT 399	Individual Study	1-3

Only three hours from the following may be used to meet minor requirements.

Code	Title	Hours
ANT 381	Field Program in Anthropological Archaeology	3
ANT 382	Field Program in Anthropological Archaeology	3
ANT 383	Field program in Cultural Anthropology	3
ANT 384	Field Program in Cultural Anthropology	3

A minimum GPA of 2.0 in anthropology courses counted toward the minor is required for graduation.

## Art (ART)

The department offers courses in the history of art, architecture, printmaking, photography, and film from the ancient through modern periods, and the practice of studio art in six areas: drawing, painting, printmaking, sculpture, photography, and video art. Opportunities to supplement the regular academic program of the department include study abroad in Wake Forest residential study centers, changing art exhibitions in the gallery of the Scales Fine Arts Center, exhibition of student work in the START gallery, and internships in local museums and arts organizations. The art department requires a minimum GPA of 2.0 in the major for graduation.

The department offers two majors, art history and studio art, each requiring ten courses of three or more semester hours each. Any student interested in majoring or minoring in art should contact the art department. Students may major in one field and minor in the other by successfully completing a minimum of 13 courses in art, of which at least eight courses must be in the major field and at least four courses in the minor field.

The department accepts only three courses from a non-Wake Forest program for credit toward the major or minor. Of these three courses, only two may be in the same area of concentration as the major or minor. That is, an art history major or minor may take up to two art history courses and one studio course; a studio major or minor may take up to two studio art courses and one art history course at a non-Wake Forest program. All studio courses taken abroad are assigned ART 210.

Students enrolled at Wake Forest may not take courses in studio art or art history at other institutions to satisfy divisional requirements.

## Contact Information

Department of Art (<http://college.wfu.edu/art/>)  
Scales Fine Arts Center 110A, Box 7232  
Phone 336-758-5310

## Programs Majors

- Art History, B.A.
- Studio Art, B.A.

## Minors

- Art History, Minor
- Studio Art, Minor

## Courses Art (ART)

*All studio art courses 200 and above and 110A-H may be repeated. Prerequisites may be waived with permission of instructor. All studio art courses may be taken with permission of instructor.*



**ART 101. Engaging with Art. (1.5 h)**

An opportunity to experience and reflect analytically on the arts in the cultural and intellectual life at Wake Forest, with an emphasis on art exhibitions, lectures, and visiting artist talks. Pass/fail only. May not be repeated.

**ART 103. History of Global Art. (3 h)**

Examines art in selected world cultures with discussions of media, materials, patronage, historical impact, and broader cultural context. (CD, D)

**ART 104. Topics in World Art. (3 h)**

An examination of the visual arts in selected world cultures, with discussions of techniques, styles, broader cultural contexts, and confrontations with varying traditions. Course may be repeated if topic differs. (CD, D)

**ART 105. History of Global Architecture. (3 h)**

Examines architectural monuments in selected world cultures with discussions of the planning, siting, design, construction, patronage, historical impact, and broader cultural context. (CD, D)

**ART 106. Global Contemporary Art. (3 h)**

A global perspective on contemporary artistic trends since 1990, including discussions about art criticism, exhibitions and the changing art world. (D)

**ART 110. Topics in Studio Art. (1-3 h)**

Studio art courses as determined by individual instructors. (D only if taken for 3h).

**ART 111. Introduction to Studio Art Fundamentals. (3 h)**

Introduces elements and principles of visual language through hands-on experimentation and critical thinking. (D)

**ART 112. Introduction to Painting. (3 h)**

Introduces the fundamentals of the contemporary practice of oil painting. No prior painting experience required, although prior studio art experience is recommended. (D)

**ART 113. Drawing with Digital Integration. (3 h)**

Introduces principles of art and drawing with integration of digital media. Broadens the scope of studio exploration and critical thinking. Introduces raster and vector graphics software. (D)

**ART 114. Introduction to Film and Video Art. (3 h)**

Introduces historical, aesthetic, and technical principles of contemporary video art and film production. Students will work in groups to produce and experimental film and work individually to create a video that focuses on a personal story. (D)

**ART 115. Introduction to Sculpture. (3 h)**

Introduces basic sculptural styles and multimedia, with emphasis on contemporary concepts. Prior studio experience is recommended. (D)

**ART 117. Introduction to Printmaking. (3 h)**

Introduces one or more of the following major divisions of fine art printmaking: relief (woodcuts and linoleum cuts), intaglio (hand engraving and acid etching methods on copper), lithography from limestone slabs, monotype. (D)

**ART 118. Introduction to Drawing. (3 h)**

Drawing fundamentals emphasizing composition, value, line, and form. (D)

**ART 119. Introduction to Darkroom Photography. (3 h)**

An introduction to designing, processing and critiquing black and white photographs, including 35mm camera techniques and lighting. (D)

**ART 120. Introduction to Digital Photography. (3 h)**

An introduction to designing, processing, and critiquing digital photographs printed on digital media. Includes camera techniques and lighting. (Digital camera required)(D)

**ART 121. Design Studio: Ethics and Aesthetics. (3 h)**

Addresses diverse social, environmental, and economic problems through the design of specific objects and environments in a collaborative studio. A variety of approaches to design development are covered, along with prototyping, testing, and presentation. (D)

**ART 122. Design Studio: Visualization of Ideas. (3 h)**

Employing a variety of different image generating techniques, students produce visual representations which communicate content based upon specific assigned subjects. Imaging methods may include illustration, typography, photography, video etc. as determined by the instructor. (D)

**ART 198. Study Abroad - Art History. (3 h)**

Courses in the history of art associated with Wake Forest study abroad programs. Elective credit only.

**ART 199. International Studies in Art. (1-4 h)**

Offered by art department faculty in locations outside of the United States, on specific topics in art history or studio art. (D only if taken for 3h or 4h). May be repeated when content differs.

**ART 203. Islamic Art and Architecture. (3 h)**

Subjects of study will be drawn from Spain, North Africa, the eastern Mediterranean, Iran, Central Asia, and India, and will focus on selected periods from 650 to the present. (CD, D)

**ART 204. South Asian Art and Architecture. (3 h)**

Topics range from the material culture of the Indus Valley civilization to the art of contemporary South Asia. (CD, D)

**ART 205. The Architecture of Devotion in South Asia. (3 h)**

Explores architecture associated with the major religions of South Asia, including Buddhism, Hinduism, Islam, Sikhism, and Christianity. Building types include stupas, temples, mosques, shrines, and churches. (CD, D)

**ART 206. Art and Empire: India and Europe, 1500-1900. (3 h)**

Examines artistic exchanges between India and various European powers from c. 1500-1900, beginning with the arrival of the Portuguese in Goa and ending with the British imperial era. Readings include primary sources by European and Indian travelers. (CD, D)

**ART 207. Building Empire: Early Modern Islamic Architecture. (3 h)**

Examines Ottoman, Mughal, and Safavid architecture. Topics include imperial palaces, mosques, and mausoleums; the capital cities of Istanbul, Isfahan, and Delhi; royal court culture; and cultural exchanges with European powers. (CD, D)

**ART 208. Ottoman Art and Architecture. (3 h)**

Examines the visual culture of the Ottoman empire in Turkey, the Balkans, the Eastern Mediterranean, and North Africa. Explores imperial architecture; the history of Istanbul; arts of the royal court; cultural exchanges with other world powers; and Ottoman-inspired visual culture in the modern and contemporary periods. (CD, D)

**ART 209. Special Topics in Art. (1-3 h)**

Variable topics in art. Course can be repeated if topic differs.

**ART 210. Topics in Studio Art. (1-4 h)**

Used to designate studio art courses taken at other institutions. May be repeated.

**ART 211. Intermediate Drawing. (4 h)**

Practice and refinement of drawing skills. Emphasis on concept development. P-ART 118 or POI.



**ART 212. Painting II. (4 h)**

Continuation of ART 112 with concentrated emphasis on conceptual development and technical exploration. P-ART 112 or POI.

**ART 213. Painting III. (4 h)**

An individualized course of study with emphasis on refining the skills and concepts developed in Painting II. P-ART 212 or POI.

**ART 214. Film and Video Art: Site Specific. (4 h)**

Continues the historical, aesthetic, and technical exploration of contemporary film and video art production. Students will produce multi-channel video projects that interact with a physical space. P-ART 114 or POI.

**ART 215. Public Art. (4 h)**

Covers art that is sited in the public realm. Exercises with various sites, materials, and audiences, will culminate in a public project. P-ART 115 or POI.

**ART 216. Sculpture Fabrication. (4 h)**

Fabrication of small-scale sculpture using wood, fabric, and metal. Projects stress craftsmanship and imagination. P-ART 115 or POI.

**ART 217. Intermediate Printmaking. (4 h)**

Explorations of multiple-surface and mixed media printmaking methods involving relief, intaglio, and lithography. Color printing methods are explored in the atelier tradition. Strong emphasis on idea development and image generation. P - ART 117 or POI.

**ART 218. Life Drawing. (4 h)**

Introduction to drawing the human figure. May be repeated once. P-ART 118 or POI.

**ART 219. Darkroom Photography. (4 h)**

Further exploration of traditional black and white photography, with an emphasis on alternative processes, camera techniques, aesthetic and critical issues to increase the understanding of the contemporary photographic image. P-ART 119 or 120 or POI.

**ART 221. Advanced Drawing. (4 h)**

Development of a project or series of art works with attention to methodology and material selection. P-ART 211 or POI.

**ART 222. Advanced Painting. (4 h)**

A course of individual study with faculty guidance focused on developing a body of work for exhibition. Will cover various aspects of professional practice including artist statements and proposals, and portfolio development. P-ART 212 or POI.

**ART 224. Film and Video Art: Cyberspace. (4 h)**

Continues the historical, aesthetic, and technical exploration of contemporary film and video art production. Students will produce multi-channel video projects that interact with cyberspace. P-ART 114 or POI.

**ART 225. Bodies and Objects. (4 h)**

This course will explore the social and psychological ramifications of making objects based on the body through casting and other techniques. P-ART 115 or POI.

**ART 226. Installation Art. (4 h)**

Exercises to develop an understanding of material, process, and audience as they relate to contemporary art. The major projects for the course are an installation and a design project. P-ART 115 or POI.

**ART 227. Advanced Printmaking. (4 h)**

Advanced development of printmaking techniques with deeper focus on the unique quality of specific processes. Selected technical concentrations are invited. P - ART 217 or POI.

**ART 228. Film and Video Art: Theatre Works. (4 h)**

Continues the historical, aesthetic, and technical exploration of contemporary film and video art production. Students will produce single-channel film and video projects for theatre viewing. P-ART 114 or POI.

**ART 229. Digital Photography. (4 h)**

Further exploration designing, printing, and critiquing digital photographs, includes lighting and digital camera techniques. P-ART 119 or 120 or POI (Digital Camera Required)

**ART 230. Spanish Art and Architecture. (3 h)**

Study of the development and uniqueness of Spanish art and architecture within the framework of Mediterranean and Western art in general. Special focus on works viewed during group tours around Spain. Counts as an elective for the Spanish major. Offered in Salamanca.

**ART 231. American Visual Arts. (3 h)**

American art and culture from the Colonial period to 1900 in terms of changing aesthetic standards, social, and historical developments. Includes fine arts, folk arts, material culture, and mass media. (D)

**ART 233. American Architecture. (3 h)**

Discussion-based course examining American architecture from 1650 to the present. (D)

**ART 234. British Art: Nation, Empire, and Identity. (3 h)**

Examines the central role of art and design in forming national identity in Britain, from Henry VIII to present. Topics include the monarchy and art patronage; the country house; exploration and empire building; political and industrial revolutions; debates about modernity. (D)

**ART 235. Arts of London. (3 h)**

A course focused on the collections, exhibits, and architecture of London. The focus of the course will vary depending upon the specialty of the instructor and specific exhibits on view. Offered in London. (D)

**ART 237. Street Photography. (4 h)**

Using digital cameras, the computer and ink jet printers, students examine the creative, social, and critical aspects of contemporary fine art photographic image making. Emphasis will be placed on the genre of Street Photography. P-ART 119 or 120 or POI. (Digital camera required)

**ART 239. Photography and the Artist's Book. (4 h)**

Explores the making, editing, and, sequencing of photographic images to direct the audience through the intimate experience of viewing the artist's book in conjunction with the research and discussion of historical and contemporary bookmaking techniques. P-ART 119 or 120 or POI.

**ART 240. Ancient American Art and Architecture. (3 h)**

Topics dealing with the material remains of the civilizations of North, Central, and South America prior to European contact. (CD, D)

**ART 241. Ancient Art and Architecture. (3 h)**

Surveys the major monuments of the ancient world, from prehistory through Late Antiquity, including Mesopotamian, Egyptian, Greek, and Roman works of art and architecture. (D)

**ART 242. Masters and Masterpieces of Spanish Art. (3 h)**

The history of Spanish art and architecture from the 16th century to the present. Special attention to masterpieces made for the Church and court. Counts as an elective for the Spanish major. Offered in Salamanca. (D)

**ART 244. Greek Art and Architecture. (3 h)**

Explores the art and architecture of ancient Greece, from the prehistoric Aegean through the Hellenistic period. (D)

**ART 245. Art and Architecture of the Roman World. (3 h)**

Examines the art and architecture of the ancient Roman world, including Europe, North Africa, and the Near East, from pre-Roman Italy through the period of Late Antiquity and the rise of Christianity. (D)

**ART 246. Byzantine Art and Architecture. (3 h)**

Explores the art and architecture of the Mediterranean world from the foundation of Constantinople as the New Rome in the 4th century until the fall of the Byzantine Empire to the Ottoman Turks in 1453. (D)

**ART 248. Film and Video Art: Ecological Works. (4 h)**

Continues the historical, aesthetic, and technical exploration of contemporary video art and filmmaking in a fine art context. Students will create projects that engage with a local ecological issue. P- Art 114 or POI.

**ART 249. The Arts of Medieval Spain. (3 h)**

Examines the visual culture of medieval Spain from the "barbarian" invasions of Late Antiquity through the Islamic period and the Christian Reconquista. Addresses works from architecture to the minor arts, with particular attention to the interactions among their Christian, Muslim, and Jewish makers. (CD, D)

**ART 250. Artistic Exchanges in the Mediterranean, 500-1400. (3 h)**

Survey of the art and architecture of the medieval Mediterranean (c. 500-1400 CE) in Iberia, Italy, Byzantium, and Islamic dynasties based in the Near East and North Africa. Focuses on the visual interactions and exchanges among different religious and political communities. (CD, D)

**ART 252. Romanesque Art and Architecture. (3 h)**

Explores art and architecture from the Carolingian Renaissance through the 12th century. (D)

**ART 253. The Gothic Cathedral. (3 h)**

The character and evolution of Gothic cathedrals and the sculpture, stained glass, metalworks, and paintings designed for them. (D)

**ART 254. Luxury Arts in the Middle Ages. (3 h)**

Medieval illuminated manuscripts and precious objects made of gold, silver, ivory, enamel, and other luxury materials are the subjects of this course. (D)

**ART 258. The Printed Image in Early Modern Europe. (3 h)**

Technical and artistic development of prints, and the information revolution they brought about. Prints by Durer, Rembrandt, and others. Students will curate an exhibit from the WFU Print Collection. (D)

**ART 259. The History of Photography. (3 h)**

A historical survey of photography from its moment of invention in the 1830s to the present. Students will consider technological shifts—including digital and social media—and the ways photography crosses cultural borders, whether scientific, legal, documentary, or artistic. (D)

**ART 260. Classics of World Cinema. (3 h)**

Selected masterpieces of world film 1930-1970. Emphasizes developing skills for viewing, discussing, and writing about motion pictures as visual and dramatic art. Students must register for both 260 and 260L. (D)

**ART 260L. Classics of World Cinema Lab. (0 h)**

Group film screening.

**ART 261. Topics in Film History. (3 h)**

Variable topics in film history, including genres, major directors, regional or national cinemas, and historical periods. Course may be repeated if topic is different. (D)

**ART 264. Film Stills: Photographs Inspired by Films. (4 h)**

After viewing and discussing a film, students will 'respond' visually by creating digital photographs inspired by the film. We will critique, view another film, and create another group of photographs. P- Art 119 or 120 or POI (Digital camera required)

**ART 265. Art and Life in Renaissance Europe. (3 h)**

Cross-cultural developments in the visual arts in Italy, Flanders, and other European centers in the 15th and 16th century. Topics include the status of artists; the use of art in the home, the church, and political arena; the economics of art; and art used to disseminate discoveries about science and world explorations. (D)

**ART 266. Art in the Age of Giotto, Dante, and the Plague. (3 h)**

Developments in Italian painting, sculpture, and architecture in the 14th century with special attention to the new naturalism of Giotto and the effects of the Great Plague of 1348 on the arts. (D)

**ART 267. Early Italian Renaissance Art. (3 h)**

The development of art and architecture in Italy in the 15th century. Special attention is given to the works of Donatello, Botticelli, and Leonardo da Vinci. (D)

**ART 268. 16th Century Art in Italy: Magnificence and Reform. (3 h)**

The development of art and architecture in Rome, Florence, Venice and other cities. Artists studied include Michelangelo, Raphael, and Titian. (D)

**ART 269. Venetian Renaissance Art. (3 h)**

A survey of the art of the Venetian Renaissance, with slide lectures and museum visits. Offered in Venice. (D)

**ART 270. Northern Renaissance Art. (3 h)**

A survey of painting, sculpture, and printmaking in Northern Europe from the mid-14th century through the 16th century. (D)

**ART 272. 17th-Century European Art: Politics, Power and Patronage. (3 h)**

Examines art and architecture in Baroque Europe in its religious and social context. Artists studied include Caravaggio, Rubens, and Rembrandt. (D)

**ART 273. 18th-Century European Art: the Birth of the Modern World. (3 h)**

Examines cultural production in Europe, c.1680-1800 with particular attention to fine art, and situates the art of the period within a cultural and historical framework. (D)

**ART 274. 17th-Century Dutch Painting. (3 h)**

Survey of art, artists and cultural issues of the Dutch Golden Age. Artists include Rembrandt, Hals, Steen and Vermeer. (D)

**ART 276. Austrian Art and Architecture. (3 h)**

Study of the development of Austrian art and architecture and its relationship to European periods and styles. Includes visits to sites and museums. Offered in Vienna.

**ART 281. 19th-Century European Art: From Enlightenment to Abstraction. (3 h)**

Considers artistic production of Europe from the French Revolution to the discussion of abstraction in the early 20th century. Examines the notion of modernity as a cultural ideal and the development of avant-gardes in the interplay between art, society, politics and economics. (D)

**ART 282. Modern Art in Europe and the Americas. (3 h)**

A survey of European, American, and Latin American art from the years 1890 to 1945 that focuses on how art intertwines with the expansion of capitalism, two world wars, and colonialism. (D)

**ART 284. Post War/Cold War: Global Art 1945-1990. (3 h)**

A global history of art during the Cold War and its immediate aftermath, 1945-1990. Discussion will focus on the ways that art both underpinned and resisted the Cold War's rigid political positions. (CD, D)

**ART 286. Topics in Art and Architectural History. (3 h)**

Variable topics in art and architectural history, such as historical periods, geographic regions, or specific media. Course can be repeated if topic differs. (D)

**ART 287H. Honors in Art History. (3 h)****ART 287S. Honors in Studio Art. (4 h)****ART 288. Modern Architecture. (3 h)**

A survey of European and American architecture from 1900 to the present. (D)

**ART 290. Printmaking Workshop. (4 h)**

A workshop course exploring relief, intaglio, lithography, and monotype techniques. Open to students at any skill level. Offered in the summer.

**ART 291H. Individual Study. (1.5, 3 h)**

Independent Study in Art History with faculty guidance. P - POI.

**ART 291S. Individual Study. (1-4 h)**

Independent Study in Studio Art with faculty guidance. P - POI.

**ART 293. Practicum. (3, 4 h)**

Internships in local cultural organizations, to be arranged and approved in advance by the art department. Pass/Fail. P-POI.

**ART 294. Black Art in the US and Great Britain since 1945. (3 h)**

Charts the development of Black Art in the United States and Great Britain from 1945 to the present through Paul Gilroy's notion of the "Black Atlantic" – the ways that a distinct aesthetic emerged from a fusion of West African, American, and British traditions. Also listed as AAS 294. (D)

**ART 295. Studio Seminar. (1-4 h)**

Offered by members of the faculty or visiting faculty on topics of their choice and related studio activities. P-POI.

**ART 297. Management in the Visual Arts. (3 h)**

Provides art students with the skills, experiences, and frameworks for understanding the role that the visual arts play within the national and international economy. Also listed as ENT 312. P-Junior or senior standing and POI.

**ART 298. Contemporary Art and Criticism. (1.5-3 h)**

This discussion-based class examines key works of recent art in a sustained and critical manner. The course is associated with the Student Union Buying trip.

**ART 331. American Foundations. (3 h)**

An interdisciplinary study of American art offered through the Honors program. Also listed as HON 393, 394.

**ART 351. Topics in Gender and Art. (3 h)**

Seminar that addresses a range of topics which intersect gender and artistic practice in various cultures and historical periods. Attention will be paid to the role of art in formulating, subverting, or resiting gender norms.

**ART 386. Advanced Topics in Art and Architectural History. (3 h)**

Variable topics in art and architectural history focusing on specialized themes, periods, regions, or media. Course may be repeated if topic differs.

**ART 394. Issues in Art History. (4 h)**

A discussion-based course focusing on critical theory and methods employed by art historians working today as well as by some of the founding figures of the discipline. Intended for art history majors. P-Non-majors, POI.

**ART 396. Art History Seminar. (4 h)**

Focused readings, discussion, and research on a topic selected by members of the faculty. May be repeated. P-One course in art history or POI.

**ART 397. Advanced Topics In Studio Art. (1-4 h)**

Focus on selected studio projects, critical readings, and discussions on topics selected by members of department faculty. P-POI.

## Faculty

Chair Morna O'Neill

Charlotte C. Weber Professor of Art David M. Lubin

Professors John J. Curley, David L. Faber, Morna O'Neill

Hoak Family Fellow and Associate Professor Joel Tauber

Associate Professors Chanchal Dadlani, John R. Pickel

Assistant Professor Merih Danali, Guiying Gao

Teaching Professors Jennifer Gentry, Leigh Ann Hallberg

Visiting Assistant Professor Nikki Moore

Adjunct Assistant Professor Bryan Ellis

Teacher-Scholar Postdoctoral Fellow Brianna Guthrie, Sule James

Lecturers Rachel Barnes, (London), Maria A. Chiari (Venice)

Adjunct Lecturer Ashley Givens

Research Professors David Finn, Page H. Laughlin

## Art History, B.A.

### Requirements

At least eight courses in art history and two courses in studio art are required.

Code	Title	Hours
<b>Required Major Courses</b>		
ART 103 or ART 105	History of Global Art History of Global Architecture	3
ART 394	Issues in Art History	4
Select one Art History Seminar		
Select two Studio Art courses		6
Or one Studio Art course and one course that combines art history and studio art or offers direct experience with works of art (for example ART 199, 293, 297)		
Select one Art History course in each of the following: *		
A course with a primary focus before 1400		
A course with a primary focus between 1400 and 1800		
A course with a primary focus after 1800		
Select one course from a non-western artistic tradition *		
Submit a portfolio of written work **		

\*

The same course can be used to fulfill both of these requirements.

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For precise instructions, contact the art department.

## Art History Courses

Code	Title	Hours
ART 103	History of Global Art	3
ART 104	Topics in World Art	3
ART 105	History of Global Architecture	3
ART 106	Global Contemporary Art	3
ART 198	Study Abroad - Art History	3
ART 199	International Studies in Art	1-4
ART 203	Islamic Art and Architecture	3
ART 204	South Asian Art and Architecture	3
ART 205	The Architecture of Devotion in South Asia	3
ART 206	Art and Empire: India and Europe, 1500-1900	3
ART 207	Building Empire: Early Modern Islamic Architecture	3
ART 208	Ottoman Art and Architecture	3
ART 231	American Visual Arts	3
ART 233	American Architecture	3
ART 234	British Art: Nation, Empire, and Identity	3
ART 235	Arts of London	3
ART 240	Ancient American Art and Architecture	3
ART 241	Ancient Art and Architecture	3
ART 244	Greek Art and Architecture	3
ART 245	Art and Architecture of the Roman World	3
ART 246	Byzantine Art and Architecture	3
ART 249	The Arts of Medieval Spain	3
ART 250	Artistic Exchanges in the Mediterranean, 500-1400	3
ART 252	Romanesque Art and Architecture	3
ART 253	The Gothic Cathedral	3
ART 254	Luxury Arts in the Middle Ages	3
ART 258	The Printed Image in Early Modern Europe	3
ART 259	The History of Photography	3
ART 260	Classics of World Cinema	3
ART 260L	Classics of World Cinema Lab	0
ART 261	Topics in Film History	3
ART 265	Art and Life in Renaissance Europe	3
ART 266	Art in the Age of Giotto, Dante, and the Plague	3
ART 267	Early Italian Renaissance Art	3
ART 268	16th Century Art in Italy: Magnificence and Reform	3
ART 269	Venetian Renaissance Art	3
ART 270	Northern Renaissance Art	3
ART 272	17th-Century European Art: Politics, Power and Patronage	3
ART 273	18th-Century European Art: the Birth of the Modern World	3
ART 274	17th-Century Dutch Painting	3
ART 276	Austrian Art and Architecture	3
ART 281	19th-Century European Art: From Enlightenment to Abstraction	3
ART 282	Modern Art in Europe and the Americas	3

ART 284	Post War/Cold War: Global Art 1945-1990	3
ART 286	Topics in Art and Architectural History	3
ART 288	Modern Architecture	3
ART 294	Black Art in the US and Great Britain since 1945	3
ART 298	Contemporary Art and Criticism	3
ART 331	American Foundations	3
ART 351	Topics in Gender and Art	3
ART 386	Advanced Topics in Art and Architectural History	3
ART 394	Issues in Art History	4
ART 396	Art History Seminar	4

## Studio Art Courses

*All studio art courses 200 and above and 110 may be repeated. Prerequisites may be waived with permission of instructor. All studio art courses may be taken with permission of instructor.*

Code	Title	Hours
ART 110	Topics in Studio Art	1-3
ART 111	Introduction to Studio Art Fundamentals	3
ART 112	Introduction to Painting	3
ART 113	Drawing with Digital Integration	3
ART 114	Introduction to Film and Video Art	3
ART 115	Introduction to Sculpture	3
ART 117	Introduction to Printmaking	3
ART 118	Introduction to Drawing	3
ART 119	Introduction to Darkroom Photography	3
ART 120	Introduction to Digital Photography	3
ART 121	Design Studio: Ethics and Aesthetics	3
ART 122	Design Studio: Visualization of Ideas	3
ART 210	Topics in Studio Art	1-4
ART 211	Intermediate Drawing	4
ART 212	Painting II	4
ART 213	Painting III	4
ART 214	Film and Video Art: Site Specific	4
ART 215	Public Art	4
ART 216	Sculpture Fabrication	4
ART 217	Intermediate Printmaking	4
ART 218	Life Drawing	4
ART 219	Darkroom Photography	4
ART 221	Advanced Drawing	4
ART 222	Advanced Painting	4
ART 224	Film and Video Art: Cyberspace	4
ART 225	Bodies and Objects	4
ART 226	Installation Art	4
ART 227	Advanced Printmaking	4
ART 228	Film and Video Art: Theatre Works	4
ART 229	Digital Photography	4
ART 239	Photography and the Artist's Book	4
ART 248	Film and Video Art: Ecological Works	4
ART 264	Film Stills: Photographs Inspired by Films	4
ART 290	Printmaking Workshop	4



ART 295	Studio Seminar	1-4
ART 397	Advanced Topics In Studio Art	1-4

## Honors

Qualified students in both the studio and art history areas may ask to participate in the department's honors program. To be graduated with the designation "Honors in Art," students must execute a written project or create a body of work; the results of their efforts must be presented and defended before a committee of department faculty. Interested students should consult any member of the department for additional information concerning the requirements for this program.

## Studio Art, B.A.

### Requirements

Eight courses in studio art and two courses in art history are required.

Code	Title	Hours
<b>Required Major Courses</b>		
Select three of the four following:		9-12
	Printmaking, Drawing, or 2D Design	
	Painting or ART 111	
	Photography or Film/Video	
	Sculpture or 3D Design *	
Select two Art History courses		
	Or one Art History course and one course that combines art history and studio art or offers direct experience with works of art (for example ART 199, 293, 297)	
Submit a portfolio of visual work **		

\*

Sculpture or 3D Design is required as one of the three areas

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For precise instructions, contact the art department.

For concentration the studio major requires a three-course sequence in one core area of study. The remainder of the courses for the major may be fulfilled by courses in any studio area. Studio courses at the 200 level may be repeated once. Studio art majors who are serious about pursuing a career in art are encouraged to take as many art courses as possible in consultation with their advisor.

Students interested in enrolling in ART 291S must have taken at least one regular course in studio art in the Art Department. An application must be presented to the studio faculty well before advising and registration, the semester before taking the class. Please see the Individual Study Guidelines in the Art Office or speak to a studio faculty member for more details.

## Studio Art Courses

All studio art courses 200 and above and 110 may be repeated. Prerequisites may be waived with permission of instructor. All studio art courses may be taken with permission of instructor.

Code	Title	Hours
ART 110	Topics in Studio Art	1-3
ART 111	Introduction to Studio Art Fundamentals	3
ART 112	Introduction to Painting	3

ART 113	Drawing with Digital Integration	3
ART 114	Introduction to Film and Video Art	3
ART 115	Introduction to Sculpture	3
ART 117	Introduction to Printmaking	3
ART 118	Introduction to Drawing	3
ART 119	Introduction to Darkroom Photography	3
ART 120	Introduction to Digital Photography	3
ART 121	Design Studio: Ethics and Aesthetics	3
ART 122	Design Studio: Visualization of Ideas	3
ART 210	Topics in Studio Art	1-4
ART 211	Intermediate Drawing	4
ART 212	Painting II	4
ART 213	Painting III	4
ART 214	Film and Video Art: Site Specific	4
ART 215	Public Art	4
ART 216	Sculpture Fabrication	4
ART 217	Intermediate Printmaking	4
ART 218	Life Drawing	4
ART 219	Darkroom Photography	4
ART 221	Advanced Drawing	4
ART 222	Advanced Painting	4
ART 224	Film and Video Art: Cyberspace	4
ART 225	Bodies and Objects	4
ART 226	Installation Art	4
ART 227	Advanced Printmaking	4
ART 228	Film and Video Art: Theatre Works	4
ART 229	Digital Photography	4
ART 239	Photography and the Artist's Book	4
ART 248	Film and Video Art: Ecological Works	4
ART 264	Film Stills: Photographs Inspired by Films	4
ART 290	Printmaking Workshop	4
ART 295	Studio Seminar	1-4
ART 397	Advanced Topics In Studio Art	1-4

## Art History Courses

Code	Title	Hours
ART 103	History of Global Art	3
ART 104	Topics in World Art	3
ART 105	History of Global Architecture	3
ART 106	Global Contemporary Art	3
ART 198	Study Abroad - Art History	3
ART 199	International Studies in Art	1-4
ART 203	Islamic Art and Architecture	3
ART 204	South Asian Art and Architecture	3
ART 205	The Architecture of Devotion in South Asia	3
ART 206	Art and Empire: India and Europe, 1500-1900	3
ART 207	Building Empire: Early Modern Islamic Architecture	3
ART 208	Ottoman Art and Architecture	3
ART 231	American Visual Arts	3
ART 233	American Architecture	3



ART 234	British Art: Nation, Empire, and Identity	3
ART 235	Arts of London	3
ART 240	Ancient American Art and Architecture	3
ART 241	Ancient Art and Architecture	3
ART 244	Greek Art and Architecture	3
ART 245	Art and Architecture of the Roman World	3
ART 246	Byzantine Art and Architecture	3
ART 249	The Arts of Medieval Spain	3
ART 250	Artistic Exchanges in the Mediterranean, 500-1400	3
ART 252	Romanesque Art and Architecture	3
ART 253	The Gothic Cathedral	3
ART 254	Luxury Arts in the Middle Ages	3
ART 258	The Printed Image in Early Modern Europe	3
ART 259	The History of Photography	3
ART 260	Classics of World Cinema	3
ART 260L	Classics of World Cinema Lab	0
ART 261	Topics in Film History	3
ART 265	Art and Life in Renaissance Europe	3
ART 266	Art in the Age of Giotto, Dante, and the Plague	3
ART 267	Early Italian Renaissance Art	3
ART 268	16th Century Art in Italy: Magnificence and Reform	3
ART 269	Venetian Renaissance Art	3
ART 270	Northern Renaissance Art	3
ART 272	17th-Century European Art: Politics, Power and Patronage	3
ART 273	18th-Century European Art: the Birth of the Modern World	3
ART 274	17th-Century Dutch Painting	3
ART 276	Austrian Art and Architecture	3
ART 281	19th-Century European Art: From Enlightenment to Abstraction	3
ART 282	Modern Art in Europe and the Americas	3
ART 284	Post War/Cold War: Global Art 1945-1990	3
ART 286	Topics in Art and Architectural History	3
ART 288	Modern Architecture	3
ART 294	Black Art in the US and Great Britain since 1945	3
ART 298	Contemporary Art and Criticism	3
ART 331	American Foundations	3
ART 351	Topics in Gender and Art	3
ART 386	Advanced Topics in Art and Architectural History	3
ART 394	Issues in Art History	4
ART 396	Art History Seminar	4

## Honors

Qualified students in both the studio and art history areas may ask to participate in the department's honors program. To be graduated with the designation "Honors in Art," students must execute a written project or create a body of work; the results of their efforts must be presented and defended before a committee of department faculty. Interested students

should consult any member of the department for additional information concerning the requirements for this program.

## Art History, Minor

### Requirements

Code	Title	Hours
Select four courses in Art History		
Or three Art History courses and one course that combines art history and studio art or offers direct experience with works of art (for example ART 199, 293, 297)		
Select one course in Studio Art		

Students may double minor in art history and studio art, but must complete all minor requirements of each.

All courses in the minor must be three or more semester hours.

### Art History Courses

Code	Title	Hours
ART 103	History of Global Art	3
ART 104	Topics in World Art	3
ART 105	History of Global Architecture	3
ART 106	Global Contemporary Art	3
ART 198	Study Abroad - Art History	3
ART 199	International Studies in Art	1-4
ART 203	Islamic Art and Architecture	3
ART 204	South Asian Art and Architecture	3
ART 205	The Architecture of Devotion in South Asia	3
ART 206	Art and Empire: India and Europe, 1500-1900	3
ART 207	Building Empire: Early Modern Islamic Architecture	3
ART 208	Ottoman Art and Architecture	3
ART 231	American Visual Arts	3
ART 233	American Architecture	3
ART 234	British Art: Nation, Empire, and Identity	3
ART 235	Arts of London	3
ART 240	Ancient American Art and Architecture	3
ART 241	Ancient Art and Architecture	3
ART 244	Greek Art and Architecture	3
ART 245	Art and Architecture of the Roman World	3
ART 246	Byzantine Art and Architecture	3
ART 249	The Arts of Medieval Spain	3
ART 250	Artistic Exchanges in the Mediterranean, 500-1400	3
ART 252	Romanesque Art and Architecture	3
ART 253	The Gothic Cathedral	3
ART 254	Luxury Arts in the Middle Ages	3
ART 258	The Printed Image in Early Modern Europe	3
ART 259	The History of Photography	3
ART 260	Classics of World Cinema	3
ART 260L	Classics of World Cinema Lab	0
ART 261	Topics in Film History	3

ART 265	Art and Life in Renaissance Europe	3
ART 266	Art in the Age of Giotto, Dante, and the Plague	3
ART 267	Early Italian Renaissance Art	3
ART 268	16th Century Art in Italy: Magnificence and Reform	3
ART 269	Venetian Renaissance Art	3
ART 270	Northern Renaissance Art	3
ART 272	17th-Century European Art: Politics, Power and Patronage	3
ART 273	18th-Century European Art: the Birth of the Modern World	3
ART 274	17th-Century Dutch Painting	3
ART 276	Austrian Art and Architecture	3
ART 281	19th-Century European Art: From Enlightenment to Abstraction	3
ART 282	Modern Art in Europe and the Americas	3
ART 284	Post War/Cold War: Global Art 1945-1990	3
ART 286	Topics in Art and Architectural History	3
ART 288	Modern Architecture	3
ART 294	Black Art in the US and Great Britain since 1945	3
ART 298	Contemporary Art and Criticism	3
ART 331	American Foundations	3
ART 351	Topics in Gender and Art	3
ART 386	Advanced Topics in Art and Architectural History	3
ART 394	Issues in Art History	4
ART 396	Art History Seminar	4

## Studio Art Courses

*All studio art courses 200 and above and 110 may be repeated. Prerequisites may be waived with permission of instructor. All studio art courses may be taken with permission of instructor.*

Code	Title	Hours
ART 110	Topics in Studio Art	1-3
ART 111	Introduction to Studio Art Fundamentals	3
ART 112	Introduction to Painting	3
ART 113	Drawing with Digital Integration	3
ART 114	Introduction to Film and Video Art	3
ART 115	Introduction to Sculpture	3
ART 117	Introduction to Printmaking	3
ART 118	Introduction to Drawing	3
ART 119	Introduction to Darkroom Photography	3
ART 120	Introduction to Digital Photography	3
ART 121	Design Studio: Ethics and Aesthetics	3
ART 122	Design Studio: Visualization of Ideas	3
ART 210	Topics in Studio Art	1-4
ART 211	Intermediate Drawing	4
ART 212	Painting II	4
ART 213	Painting III	4
ART 214	Film and Video Art: Site Specific	4
ART 215	Public Art	4

ART 216	Sculpture Fabrication	4
ART 217	Intermediate Printmaking	4
ART 218	Life Drawing	4
ART 219	Darkroom Photography	4
ART 221	Advanced Drawing	4
ART 222	Advanced Painting	4
ART 224	Film and Video Art: Cyberspace	4
ART 225	Bodies and Objects	4
ART 226	Installation Art	4
ART 227	Advanced Printmaking	4
ART 228	Film and Video Art: Theatre Works	4
ART 229	Digital Photography	4
ART 239	Photography and the Artist's Book	4
ART 248	Film and Video Art: Ecological Works	4
ART 264	Film Stills: Photographs Inspired by Films	4
ART 290	Printmaking Workshop	4
ART 295	Studio Seminar	1-4
ART 397	Advanced Topics In Studio Art	1-4

## Studio Art, Minor

### Requirements

Code	Title	Hours
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Select four courses in Studio Art

Or three Studio Art courses and one course that combines art history and studio art or offers direct experience with works of art (for example ART 199, 293, 297)

Select one course in Art History

Students may double minor in art history and studio art, but must complete all minor requirements of each.

All courses in the minor must be three or more semester hours.

### Studio Art Courses

*All studio art courses 200 and above and 110 may be repeated. Prerequisites may be waived with permission of instructor. All studio art courses may be taken with permission of instructor.*

Code	Title	Hours
ART 110	Topics in Studio Art	1-3
ART 111	Introduction to Studio Art Fundamentals	3
ART 112	Introduction to Painting	3
ART 113	Drawing with Digital Integration	3
ART 114	Introduction to Film and Video Art	3
ART 115	Introduction to Sculpture	3
ART 117	Introduction to Printmaking	3
ART 118	Introduction to Drawing	3
ART 119	Introduction to Darkroom Photography	3
ART 120	Introduction to Digital Photography	3
ART 121	Design Studio: Ethics and Aesthetics	3
ART 122	Design Studio: Visualization of Ideas	3
ART 210	Topics in Studio Art	1-4
ART 211	Intermediate Drawing	4

ART 212	Painting II	4	ART 253	The Gothic Cathedral	3
ART 213	Painting III	4	ART 254	Luxury Arts in the Middle Ages	3
ART 214	Film and Video Art: Site Specific	4	ART 258	The Printed Image in Early Modern Europe	3
ART 215	Public Art	4	ART 259	The History of Photography	3
ART 216	Sculpture Fabrication	4	ART 260	Classics of World Cinema	3
ART 217	Intermediate Printmaking	4	ART 260L	Classics of World Cinema Lab	0
ART 218	Life Drawing	4	ART 261	Topics in Film History	3
ART 219	Darkroom Photography	4	ART 265	Art and Life in Renaissance Europe	3
ART 221	Advanced Drawing	4	ART 266	Art in the Age of Giotto, Dante, and the Plague	3
ART 222	Advanced Painting	4	ART 267	Early Italian Renaissance Art	3
ART 224	Film and Video Art: Cyberspace	4	ART 268	16th Century Art in Italy: Magnificence and Reform	3
ART 225	Bodies and Objects	4	ART 269	Venetian Renaissance Art	3
ART 226	Installation Art	4	ART 270	Northern Renaissance Art	3
ART 227	Advanced Printmaking	4	ART 272	17th-Century European Art: Politics, Power and Patronage	3
ART 228	Film and Video Art: Theatre Works	4	ART 273	18th-Century European Art: the Birth of the Modern World	3
ART 229	Digital Photography	4	ART 274	17th-Century Dutch Painting	3
ART 239	Photography and the Artist's Book	4	ART 276	Austrian Art and Architecture	3
ART 248	Film and Video Art: Ecological Works	4	ART 281	19th-Century European Art: From Enlightenment to Abstraction	3
ART 264	Film Stills: Photographs Inspired by Films	4	ART 282	Modern Art in Europe and the Americas	3
ART 290	Printmaking Workshop	4	ART 284	Post War/Cold War: Global Art 1945-1990	3
ART 295	Studio Seminar	1-4	ART 286	Topics in Art and Architectural History	3
ART 397	Advanced Topics In Studio Art	1-4	ART 288	Modern Architecture	3
			ART 294	Black Art in the US and Great Britain since 1945	3
			ART 298	Contemporary Art and Criticism	3
			ART 331	American Foundations	3
			ART 351	Topics in Gender and Art	3
			ART 386	Advanced Topics in Art and Architectural History	3
			ART 394	Issues in Art History	4
			ART 396	Art History Seminar	4

## Art History Courses

Code	Title	Hours
ART 103	History of Global Art	3
ART 104	Topics in World Art	3
ART 105	History of Global Architecture	3
ART 106	Global Contemporary Art	3
ART 198	Study Abroad - Art History	3
ART 199	International Studies in Art	1-4
ART 203	Islamic Art and Architecture	3
ART 204	South Asian Art and Architecture	3
ART 205	The Architecture of Devotion in South Asia	3
ART 206	Art and Empire: India and Europe, 1500-1900	3
ART 207	Building Empire: Early Modern Islamic Architecture	3
ART 208	Ottoman Art and Architecture	3
ART 231	American Visual Arts	3
ART 233	American Architecture	3
ART 234	British Art: Nation, Empire, and Identity	3
ART 235	Arts of London	3
ART 240	Ancient American Art and Architecture	3
ART 241	Ancient Art and Architecture	3
ART 244	Greek Art and Architecture	3
ART 245	Art and Architecture of the Roman World	3
ART 246	Byzantine Art and Architecture	3
ART 249	The Arts of Medieval Spain	3
ART 250	Artistic Exchanges in the Mediterranean, 500-1400	3
ART 252	Romanesque Art and Architecture	3

## Biochemistry and Molecular Biology (BMB)

### Interdisciplinary Major

This interdisciplinary Bachelor of Science major, jointly offered by the Departments of Biology and Chemistry, provides a strong foundation in biological chemistry and molecular biology, and related topics at the interface of these two disciplines. The major is designed to build conceptual understanding and practical and critical thinking skills to address current biological, biochemical, and biomedical challenges. A required research experience spanning multiple semesters, culminating in a senior project, will give students strong experimental skills and provide insight into biochemical and molecular biological experimental approaches and results that demonstrate the function of biological molecules. To graduate with a biochemistry and molecular biology major, students must have a minimum GPA of 2.0 in required and elective BIO, BMB, and CHM courses taken at Wake Forest. At the time of major declaration, students will select a major concentration either in

biochemistry or in molecular biology. Policies for transfer credits are set by the biology and chemistry departments, as outlined in their bulletin sections.

## Policies for the Majors and Minors and other Programs of Study

1. The Bachelor of Science in Biochemistry and Molecular Biology, regardless of concentration, cannot be used as a double major with Biology or Chemistry.
2. Due to the number of shared courses, a Biochemistry and Molecular Biology major, regardless of concentration, cannot declare a minor in Biology or Chemistry.

## Contact Information

Biochemistry and Molecular Biology (<https://bmb.wfu.edu/>)  
Wake Downtown Main Office  
Phone 336-702-1926  
e-mail: [bmb@wfu.edu](mailto:bmb@wfu.edu)

## Programs

### Major

- Biochemistry and Molecular Biology, B.S.

## Courses

### Biochemistry and Molecular Biology (BMB)

**BMB 301. Special Topics in Biochemistry and Molecular Biology. (3 h)**  
Courses in selected special topics in biochemistry and molecular biology. May be repeated for credit if course content differs. P - POI.

**BMB 370. Biochemistry I: Macromolecules and Metabolism. (3 h)**  
Introduces principles of biochemistry including structure, function, and biosynthesis of biological molecules, analysis of enzyme function and activity, bioenergetics, and regulation of metabolic pathways. Also listed as BIO 370 and CHM 370. P-any two of the following with associated labs: CHM 122 (or CHM 123), CHM 280 or BIO 265.

**BMB 371L. Advanced Biochemistry Lab. (1.5 h)**  
Emphasizes approaches for isolation and analysis of enzymes. Required for BMB major and the chemistry major with concentration in biochemistry. Recommended for research focused students. Also listed as BIO 371L and CHM 371L. Credit allowed for BIO 370L/CHM 370L, or BMB 371L/BIO 371L/CHM 371L, but not both. P or C-BMB 370/BIO 370/CHM 370.

**BMB 372. Advanced Molecular Biology. (3 h)**  
Presents molecular mechanisms by which stored genetic information is expressed including the mechanisms for and regulation of gene expression, protein synthesis, and genome editing. Emphasizes analysis and interpretation of experimental data from the primary literature. Also listed as BIO 372. P-BIO 265 and BIO 370/BMB 370/CHM 370.

**BMB 372L. Advanced Molecular Biology Laboratory. (1.5 h)**  
Introduces modern methods of molecular biology to analyze and manipulate expression of genes and function of gene products. Also listed as BIO 372L. P or C-BIO 372/BMB 372 or BMB 373/CHM 373.

### BMB 373. Biochemistry II. (3 h)

Examines the structure, function, and synthesis of proteins and nucleic acids and includes advanced topics in biochemistry including catalytic mechanisms of enzymes and ribozymes, use of sequence and structure databases, and molecular basis of disease and drug action. Also listed as CHM 373. P-CHM 223 and BIO 370/BMB 370/CHM 370.

### BMB 376. Biophysical Chemistry. (3 h)

Fundamentals of physical chemistry applied to biological molecules, including thermodynamics, kinetics, quantum mechanics, and spectroscopy. Emphasizes modern experimental approaches used to analyze biological systems. Also listed as CHM 376. P-CHM 280, BIO/BMB/CHM 370, PHY 114. P or C-MTH 112.

### BMB 381. Epigenetics. (3 h)

Studies the molecular mechanisms for inheritance of genome modifications. Uses primary literature to explore the environmental and developmental signals that influence epigenetic controls of gene expression and disease. Also listed as BIO 381. P-BIO 265 and BIO/BMB/CHM 370.

### BMB 381L. Epigenetics Laboratory. (1 h)

Lab provides hands-on experiences with genome editing and molecular genetics to address the function and expression of genes. Also listed as BIO 381L. P or C-BMB 381 or POI.

### BMB 382. Molecular Signaling. (3 h)

Examines the molecular and biochemical mechanisms by which hormones, neurotransmitters, and other signaling molecules act to change growth, development, and physiological and behavioral responses of organisms with a focus on discussion of primary literature. Also listed as BIO 382. P-BIO 265 and BIO 370/BMB 370/CHM 370.

### BMB 383. Genomics. (3 h)

Examines the architecture, expression, and evolution of genomes. Uses current primary literature to examine the functional and evolutionary dynamics of genomes and the modern analytic techniques used to investigate genome-wide phenomena. Also listed as BIO 383. P-BIO 235.

### BMB 383L. Genomics Lab. (1 h)

Introduces analytic methods and interpretation of genome-wide data through practical tutorials. Also listed as BIO 383L. P or C-BMB 383.

### BMB 388. Senior Seminar in Biochemistry and Molecular Biology. (1 h)

Discussion of contemporary research and introduction to the biochemical and molecular biology literature and research skills and approaches. Pass/Fail only. P or C-BMB 370/BIO 370/CHM 370.

### BMB 390. Biochemistry and Molecular Biology Research Experience. (0-2 h)

Research experience and written report for off campus or summer research by prearrangement. Pass/Fail only. May be repeated for credit.

### BMB 391. Independent Research. (0.5-2 h)

Working under the guidance of a faculty member or research staff member, students will conduct an independent research project that involves the collection and analysis of data, and that culminates in a written paper or poster to be submitted to the sponsoring faculty or staff member. P-POI.

### BMB 392. Independent Research. (0.5-2 h)

Working under the guidance of a faculty member or research staff member, students will conduct an independent research project that involves the collection and analysis of data, and that culminates in a written paper or poster to be submitted to the sponsoring faculty or staff member. P-POI.

**BMB 393. Independent Research. (0.5-2 h)**

Working under the guidance of a faculty member or research staff member, students will conduct an independent research project that involves the collection and analysis of data, and that culminates in a written paper or poster to be submitted to the sponsoring faculty or staff member. P-POI.

**BMB 394. Independent Research. (0.5-2 h)**

Working under the guidance of a faculty member or research staff member, students will conduct an independent research project that involves the collection and analysis of data, and that culminates in a written paper or poster to be submitted to the sponsoring faculty or staff member. P-POI.

**BMB 395. Senior Research Project. (2 h)**

Writing of senior research project or honors thesis. P or C-two of the following: BMB 390/BMB 391/BIO 391/CHM 391, BMB 392/BIO 392/CHM 392.

**Faculty**

**Program Coordinator:** Lindsay Comstock-Ferguson  
**Charles M. Allen Professor of Biology** Gloria K. Muday  
**Professors** Rebecca Alexander, Patricia Dos Santos, Erik C. Johnson  
**Associate Professors** Lindsay Comstock-Ferguson, Sarah McDonald Esstman, James B. Pease, Ke Zhang  
**Assistant Professors** Josh Currie, Troy Stich  
**Associate Teaching Professor** Diana R. Arnett  
**Assistant Teaching Professor** Jesalyn Bolduc

**Biochemistry and Molecular Biology, B.S.**

**Requirements**

The biochemistry and molecular biology major requires 48 credits of BIO, BMB, or CHM courses, and students will need to take at least two courses from these requirements each semester for adequate progress in the major.

Code	Title	Hours
<b>Required Major Courses</b>		
Broad Foundation in Chemistry: *		
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
CHM 280 & 280L	College Chemistry II and Theory and Methods of Quantitative Analysis Lab	4
CHM 122 & 122L	Organic Chemistry I and Organic Chemistry I Lab	4
or CHM 123 & 123L	Organic Chemistry I Honors and Organic Chemistry I Honors Lab	
CHM 223 & 223L	Organic Chemistry II and Organic Chemistry II Lab	4
Broad Foundation in Biology: *		
BIO 150 & 150L	Biology I and Biology I Lab	4
BIO 160 & 160L	Biology II and Biology II Lab	4
BIO 265	Cellular and Molecular Biology	3
BMB Core Sequence:		

BMB 370	Biochemistry I: Macromolecules and Metabolism (Third Year)	3
BMB 372	Advanced Molecular Biology (Third or fourth year)	3
BMB 373	Biochemistry II	3
BMB 371L	Advanced Biochemistry Lab (Third Year)	1.5
BMB 372L	Advanced Molecular Biology Laboratory (Third or fourth year)	1.5
BMB 388	Senior Seminar in Biochemistry and Molecular Biology (Senior year only)	1
The BMB research requirement of two semesters or summers of research fulfilled by enrolling in two of the following courses: BMB 390, BMB 391, BIO 391, CHM 391, BMB 392, BIO 392, or CHM 392. **		0-6
BMB 395	Senior Research Project (Senior year only; guided by a faculty member)	2
Electives		
Co-Requirements ***		
MTH 112	Calculus with Analytic Geometry II	4
PHY 113	General Physics I	4
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	

\*  
*These biology and chemistry core courses should be completed in the first two years of study.*

\*\*  
*At least two semesters or summers of research are required for research performed in a laboratory at Wake Forest University or the Wake Forest School of Medicine.*

\*\*\*  
*Should also be completed by the end of the third year.*

Candidates for the BS degree in BMB must have a minimum GPA of 2.0 in their biology, chemistry, and BMB courses numbered 200 or above. Required physics and mathematics courses must be taken for a letter grade and may not be taken pass/fail.

Elective courses must be selected from the following list. For course descriptions, see the relevant department's listing in this publication. Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. Students choosing the concentration in molecular biology can take any two from the list, while students choosing the biochemistry concentration must take either BMB 376 or CHM 341 and one other elective.

**Elective Courses**

Code	Title	Hours
BMB 301	Special Topics in Biochemistry and Molecular Biology	3
BMB 376	Biophysical Chemistry	3
BMB/BIO 381	Epigenetics	3
BMB/BIO 382	Molecular Signaling	3
BMB/BIO 383	Genomics	3



BIO 317 & 317L	Plant Physiology and Development and Plant Physiology and Development Lab (lab is optional)	3-4
BIO 336 & 336L	Development and Development Lab (lab is optional)	3-4
BIO 343	Molecular Neuroscience	3
BIO 360	Metabolic Diseases	3
BIO 362	Immunology	3
BIO 365	Biology of the Cell	3
BIO 367	Virology	3
BIO 369	Cancer Biology	3
BIO 386	Genetics & African Diaspora	3
BIO 388	Methods in Molecular Genetics	4
CHM 324	Medicinal Chemistry I	3
CHM 334	Chemical Analysis	4
CHM 341	Physical Chemistry I	3
CSC/BIO 385	Bioinformatics	3
CSC/BIO 387	Computational Systems Biology	3
PHY/BIO 307	Biophysics	3
PHY 320	Physics of Biological Macromolecules	3

## Honors

Highly qualified majors may be eligible to graduate with honors in biochemistry and molecular biology if their research project is of sufficient quality. To be awarded the distinction "Honors in Biochemistry and Molecular Biology," a graduating student must have a minimum GPA of 3.0 in all courses and a 3.3 in required and elective BIO, BMB, and CHM courses. Honors students will have begun research before their senior year. Students interested in pursuing an honors degree must obtain preapproval from the program coordinator during the fall of the senior year and enroll in BMB 395 during their senior year. The student must prepare an honors paper describing his or her independent research project, written in the form of a scientific paper, which must be submitted to, and approved by, an advisory committee. Honors students are also required to make a short oral presentation at the end of their senior year. For additional information, please consult the program coordinator or BMB faculty advisors.

## Bioethics, Humanities and Medicine (BHM)

### Interdisciplinary Minor

The interdisciplinary minor in Bioethics, Humanities and Medicine is designed to foster students' understanding of the ethical dimensions of science, health research and health care delivery; to provide students with the knowledge and skills necessary to engage and analyze these dimensions; to facilitate students' integration of their education in the humanities and their understanding of, and approach to, medicine and health care; and to allow students to bring this interdisciplinary knowledge to bear in medical education and practice.

### Contact Information

Center for Bioethics, Health & Society (<http://college.wfu.edu/bhmminor/>)

Tribble Hall B313, Box 7332

Phone 336-758-4256

## Programs Minor

- Bioethics, Humanities and Medicine, Minor

## Courses

### BHM 310. The Art and Science of Health and Healing. (3 h)

Brings together perspectives from the humanities and the clinic to explore health and disease, suffering and dying, as well as the art and science of healing.

### BHM 385. Special Topics in Bioethics, Humanities, and Medicine. (1-3 h)

Offered by members of the faculty on specialized topics of their choice. With permission, may be repeated for credit. P-POI.

### BHM 395. Independent Study in Bioethics, Humanities, and Medicine. (1-3 h)

Reading, research, or internship courses designed to meet the needs and interests of students, to be carried out under the supervision of a faculty member. P-POI.

## Faculty

Director, Professor of Philosophy Ana S. Iltis

### Steering Committee

Simone Caron - Professor of History

Amanda Gengler - Assistant Professor of Sociology

Pat Lord - Teaching Professor of Biology

## Bioethics, Humanities and Medicine, Minor

## Requirements

The minor requires 18 hours. No more than three credits counting towards a major and no more than six credits counting towards another minor can also count towards the Bioethics, Humanities and Medicine minor.

Code	Title	Hours
<b>Required Courses</b>		
BHM 310	The Art and Science of Health and Healing *	3
or HMN 370	Medicine and the Humanities	
or HST 339	Sickness and Health in American History	
Select one of the following:		3
PHI 161	Introduction to Bioethics	
PHI 367	Philosophical Theories in Bioethics	
BIO 210	Ethical Decision-Making in Biology and Medicine	
Select 6 credit hours of Electives from Group A **		6
Select 6 credit hours of Electives from Group B ***		6

\*

For HST 339 to fulfill the core requirement, students must obtain the permission of the instructor and complete assignments designed to fulfill the goals of the core requirement.

\*\*

Courses in Group A must be taken in two different departments.

\*\*\*

*Courses in Group B must be taken in two different departments.*

## Group A

Code	Title	Hours
BHM 385	Special Topics in Bioethics, Humanities, and Medicine (with approval of steering committee)	1-3
BHM 395	Independent Study in Bioethics, Humanities, and Medicine (with approval of steering committee)	1-3
ANT 360	Anthropology of Global Health	3
ANT 362	Medical Anthropology	3
BIO 386	Genetics & African Diaspora	3
COM 345	Rhetoric of Science and Technology	3
COM 355	Survey of Health Communication	3
COM 356	Health Communication: Patient-Provider	3
COM 357	Health Communication Campaigns	3
COM 358	Health Communication and Bioethics	3
COM 361	Family Communication and Health across the Lifespan	3
COM 370	Special Topics (with permission of the BHM Interdisciplinary Minor Faculty Steering Committee)	1-3
CNS 334	Ethics in Health and Human Services	3
CNS 335	Health and Human Services in a Diverse Society	3
ECN 240	Economics of Health and Medicine	3
HES 360	Epidemiology	3
HPA 150	Introduction to Public Health	3
SOC 329	Health Inequalities	3
SOC 331	The Social and Legal Contexts of Medicine	3
SOC 335	Sociology of Health and Illness	3
SOC 336	Money, Markets and Medicine	3
SOC 368	Death and Dying	1.5
SOC 369	Social Movements	3
SOC 383	Special Topics Seminar in Medicine and Health Care	3
WGS 330	Gender and the Politics of Health	3

## Group B

Code	Title	Hours
BHM 385	Special Topics in Bioethics, Humanities, and Medicine (with approval of steering committee)	1-3
BHM 395	Independent Study in Bioethics, Humanities, and Medicine (with approval of steering committee)	1-3
BIO 210	Ethical Decision-Making in Biology and Medicine *	3
ENG 175	Studies in American Literature (when taught as: Race, Heredity, and Genetics)	3
HMN 365	Humanity and Nature	3

HST 113	Health, Disease and Healing in World History	3
HST 339	Sickness and Health in American History (if HST 339 is not used to fulfill core requirement)	3
PHI 161	Introduction to Bioethics **	3
PHI 360	Ethics	3
PHI 367	Philosophical Theories in Bioethics ***	3
PHI 368	Concepts of Health & Disease	3
PHI 382	Seminar in Public Philosophy (When taught as Bioethics)	3
REL 307	Magic, Science and Religion	3
REL 329	Chinese Medicine	3
REL 330	Pope, Jefferson and Imam: A Study in Comparative Ethics	3
REL 362	Topics in Islam	3
REL 390	Special Topics in Religion (Environmental Ethics)	1.5-3

\*

*If PHI 367 is used to fulfill core requirement and if PHI 161 is not used as a Group B elective.*

\*\*

*If PHI 367 is used to fulfill core requirement and if BIO 210 is not used as a Group B elective.*

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*If PHI 161 or BIO 210 is used to fulfill core requirement.*

Other courses, including Special Topics courses in a number of departments, may be suitable as electives in the minor. These courses can be counted toward the minor with the approval of the interdisciplinary minor in Bioethics, Humanities and Medicine committee.

## Biology (BIO)

The department offers programs leading to Bachelor of Arts and Bachelor of Science degrees in biology. Students electing to major in biology should consult with their major adviser to determine which degree program is most appropriate for their current career objectives. The requirements for completion of Biology degree programs are those in effect at the time of the declaration of the major, as the curriculum and the departmental requirements may change slightly during the student's period of residence.

**Special Note.** Students enrolled at Wake Forest may not take courses in biology at other institutions to satisfy the divisional requirement.

## Contact Information

Department of Biology (<http://college.wfu.edu/biology/>)  
Winston Hall 226, Box 7325  
Phone 336-758-5322

## Programs Majors

- Biology, B.A.
- Biology, B.S.

## Minor

- Biology, Minor

## Courses Biology (BIO)

All BIO courses numbered 211 through 399 require BIO 150, BIO 150L, BIO 160, and BIO 160L as prerequisites. Additional prerequisites may be required and are noted in individual course descriptions.

Under special circumstances, an exceptional student lacking a prerequisite for a particular course may be allowed to enroll in that course by receiving a POI (permission of instructor) from the instructor.

The same numbered course cannot be repeated unless it is a topics course (BIO 301-BIO 306) with a different title.

A maximum of four hours of research in biology (BIO 390, BIO 391, and/or BIO 392) may be applied toward the major, but an additional four hours in research (BIO 392, BIO 393, and/or BIO 394) may be taken and applied as elective hours towards graduation. Research courses should be taken in consecutive order. Only BIO major and minors are eligible to receive BIO credit for research. Only BA majors are eligible to take BIO 399.

### **BIO 101. Biology and the Human Condition. (4 h)**

Introduction to basic principles in biology, emphasizing recent advances in biology in the context of their ethical, social, political, and economic considerations. Intended for students with little or no previous experience in biology. BIO 101 is not recommended for those pursuing a career in the health professions or who are planning to continue in biology. Does NOT count toward the biology major or minor. Credit not given for both BIO 101 and BIO 111. C-BIO 101L. (D)

### **BIO 101L. Biology and the Human Condition-Lab. (0 h)**

Lab only. No credit.

### **BIO 105. Plants and People. (4 h)**

Explores the numerous associations between plants and people, the fundamental importance of plant diversity to humans and their role in the sustainability of the biosphere. This course is intended for students with little or no previous experience in biology and does NOT count toward the major or minor in Biology. (D)

### **BIO 111. Biological Principles. (4 h)**

Study of the general principles of living things with focus on the cellular, organismal, and population levels of biological organization, emphasizing the role of heredity and evolution in these systems. Used as equivalent credit for prior college level or transfer course work only. Does NOT count toward the major or minor in biology. Credit not given for both BIO 101 and BIO 111. (D)

### **BIO 111L. Biological Principles Lab. (0 h)**

Lab only. No credit.

### **BIO 150. Biology I. (3 h)**

Introduction to macromolecules, cells, tissues, and resource acquisition. Both BIO 150 and BIO 150L must be taken to meet the divisional requirement. May not be taken Pass/Fail. (D)

### **BIO 150L. Biology I Lab. (1 h)**

May not be taken Pass/Fail. P or C-BIO 150.

### **BIO 160. Biology II. (3 h)**

Introduction to molecular genetics, evolution, ecology, and the environment. May not be taken Pass/Fail. P-BIO 150.

### **BIO 160L. Biology II Lab. (1 h)**

May not be taken Pass/Fail. P-BIO 150 and 150L. P or C-BIO 160.

### **BIO 202. Bird Taxonomy (Florida). (2 h)**

Immersion in bird taxonomy and ecology, conducted in southern Florida during six days of Spring Break. Two on-campus meetings are followed by a trip to top birding sites in North America, viewing over 100 species and covering most of the world's orders of birds. Out-of-pocket costs for food, transportation, and lodging expected to be \$200 or less. P-POI required.

### **BIO 208. Understanding Climate Change. (1.5 h)**

Introduction to the scientific evidence for climate change.

### **BIO 210. Ethical Decision-Making in Biology and Medicine. (3 h)**

Examines contemporary issues in bioethics, including responsible conduct in research, implications of technological advances in biology, environmental issues, and controversies in health care and medical practice.

### **BIO 212. Biodiversity. (4 h)**

Investigates the history of life on earth and examines its diversification in an evolutionary and ecological context. Lectures cover the mechanisms of biological diversification and survey life on earth. Labs introduce students to the broad diversity of life through exercises with living organisms. P-BIO 150, 150L, 160, and BIO 160L. (D)

### **BIO 220. Introduction to Earth Science. (3 h)**

Oceans, weather, climate, earthquakes, volcanoes, soil, and space all play important roles in our dynamic planet. Students will explore the lithosphere, hydrosphere, atmosphere, and biosphere, and gain a deeper understanding of how the Earth operates as a whole. Also listed as ENV 220. P-requires BIO 150, 150L, 160, and BIO 160L if taken as BIO 220.

### **BIO 225. Field Biology and Natural History. (3 h)**

Provides a hands-on study of organisms in their natural habitats with an emphasis on local North Carolina biodiversity. Well-established sampling methods in field biology are blended with emerging technologies. P-BIO 150, 150L, 160, and BIO 160L.

### **BIO 235. Genetics. (3 h)**

Exploration of genetic inheritance, molecular genetics, population genetics, and genomics. Intended as an intermediate course for developing skills towards advanced studies in genetics, evolution, ecology, and molecular biology. P-BIO 150, 150L, 160, and 160L.

### **BIO 245. Comparative Animal Physiology. (3 h)**

Introduction to animal physiology in the context of animal diversity and evolution. P-BIO 150, BIO 150L, and BIO 160. P or C- BIO 160L.

### **BIO 265. Cellular and Molecular Biology. (3 h)**

Exploration of the molecular mechanisms of cellular functions. P-BIO 150, BIO 150L, and BIO 160. P or C- BIO 160L.

### **BIO 301. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

### **BIO 302. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

### **BIO 303. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

### **BIO 304. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

**BIO 305. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

**BIO 306. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

**BIO 307. Biophysics. (3 h)**

Introduction to macromolecules with studies of important biophysical tools, such as sedimentation, centrifugation, electrophoresis, X-ray crystallography, absorption and emission light spectroscopy, fluorescence, single molecule techniques and a survey of membrane biophysics. Also listed as PHY 307. P-BIO 150, PHY 113 or 123, PHY 114 or 124, or POL.

**BIO 308. Biomechanics. (3 h)**

Analyzes the relationship between organismal form and function using principles from physics and engineering. Solid and fluid mechanics are employed to study design in living systems. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 308L. Biomechanics Lab. (1 h)**

Laboratory study of biomechanics. P or C-BIO 308.

**BIO 309. Comparative Anatomy. (4 h)**

Study of the vertebrate body from an evolutionary, functional, and developmental perspective. Labs emphasize structure and function, primarily through the dissection of representative vertebrates. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 311. Ecology and Conservation Biology of Coral Reefs. (4 h)**

In-depth study of the various biotic and abiotic components that come together to structure ecosystem function and biodiversity at all spatial scales in one of Earth's most productive and diverse environments, yet one most threatened by human use and climate change. Lab component is a one-week field trip over Spring Break. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 313. Herpetology. (4 h)**

Explores the biology of reptiles and amphibians, emphasizing their unique morphological, physiological, behavioral and life-history adaptations, and their evolutionary relationships. The lab consists mostly of field trips. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 314. Evolution. (3 h)**

Study of the evolutionary analysis of biological change in populations, lineages, and the history of Earth. Explores reconstruction of evolutionary histories, adaptation, complexity, and biodiversity through primary literature. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 314L. Evolution Lab. (1 h)**

Introduces evolutionary analytic methods and interpretation of trait and molecular data through practical tutorials. P or C-BIO 314.

**BIO 315. Population Genetics. (3 h)**

Study of the amount and distribution of genetic variation in populations of organisms and of how processes such as mutation, recombination, and selection affect genetic variation. Lectures introduce theoretical studies and include discussion of molecular and phenotypic variation in natural populations. P-BIO 235. (QR)

**BIO 315L. Population Genetics Lab. (1 h)**

Introduces quantitative modeling of population genetic dynamics, and experiments using populations of organisms. P or C-BIO 315.

**BIO 316. Biology of Birds. (4 h)**

Lecture plus lab course emphasizing ecological and evolutionary influences on the physiology, behavior, diversity, and population biology of birds, and case studies in conservation biology. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 317. Plant Physiology and Development. (3 h)**

Examines the growth, development, and physiological processes of plants. Control of these processes is examined on genetic, biochemical, and whole plant levels. P-BIO 265.

**BIO 317L. Plant Physiology and Development Lab. (1 h)**

Consists of structured experiments and an independently designed research project. P or C-BIO 317.

**BIO 319. Biology of Soils. (3 h)**

A survey of soil structure and biodiversity, with a detailed study of ecological interactions within soil communities and the impact of the soil biota on soil formation, nutrient cycling, and bioremediation within pristine, managed, and damaged soils. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 319L. Biology of Soils Lab. (1 h)**

Laboratory study of physical, chemical, and biological methods for analyzing the soil habitat. P or C-BIO 319.

**BIO 323. Animal Behavior. (3 h)**

A survey of laboratory and field research on animal behavior. P-BIO 150, 150L, 160, or BIO 160L.

**BIO 323L. Animal Behavior Lab. (1 h)**

Laboratory study of animal behavior. P or C-BIO 323.

**BIO 324. Hormones and Behavior. (3 h)**

Exploration of the mechanisms of hormonal influences on behavior. P-BIO 245.

**BIO 327. Mycology: Biology of Fungi. (4 h)**

Introduces fungi, their evolution and natural taxonomy; cell and molecular biology; genetics, mating, and development; primary and secondary biochemistry; and their interactions with other organisms and the environment. Lab introduces culturing, microscopic and molecular techniques. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 330. Land and Natural Resource Management. (3 h)**

Provides a fundamental understanding of land and resource management. The major focus is on federal oversight and policies but state, local, non-profit, and international aspects are included. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 332. Microbiology. (4 h)**

Overview of the biology of microorganisms with emphasis on prokaryotes. Topics include cell structure and function, genetics and evolution, metabolic and ecological diversity, and medical microbiology. Lab emphasizes inquiry-based study of environmental microorganisms through a blend of classical and modern techniques. P-CHM 122 (or CHM 123) and BIO 150, BIO 150L, BIO 160, and BIO 160L.

**BIO 334. Parasitology. (4 h)**

Survey of protozoan, helminth, and arthropod parasites with a focus on cellular biology, life cycles, host-parasite relationships, and public health implications. Laboratory emphasizes microscopy-based techniques for examining parasite morphology and intracellular structures. P-BIO 265.

**BIO 336. Development. (3 h)**

Study of the molecular, cellular, and anatomical aspects of embryonic development of invertebrate and vertebrate animals. P-BIO 265.

**BIO 336L. Development Lab. (1 h)**

Laboratory study of the molecular, cellular, and anatomical aspects of embryonic development of invertebrate and vertebrate animals. P or C-BIO 336.

**BIO 339. Animal Cognition. (3 h)**

A survey of learning, reasoning and social cognition in animals, with an emphasis on species other than widely-used models such as rodents or primates. Classes are initially mostly lecture, and then mostly discussion of empirical studies from the primary literature. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 340. Ecology. (4 h)**

Introduction to the interrelationships among living systems and their environments; structure and dynamics of major ecosystem types; contemporary problems in ecology. P-BIO 150, 150L, 160, and BIO 160L. (QR)

**BIO 341. Marine Biology. (3 h)**

Introduction to marine organismal and habitat diversity and marine ecological processes. P-BIO 150, 150L, 160, and BIO 160L and C-BIO 341L.

**BIO 341L. Marine Biology. (1 h)**

Develops practical knowledge of marine environments through extensive field work. C-BIO 341.

**BIO 342. Oceanography. (4 h)**

Introduces the geological, physical, chemical, and biological processes that govern the global oceans and their role in climate change. Lab focus is on tools and research questions pertinent to the field of biological oceanography and includes a five-day field trip over Fall Break. P-CHM 111 and BIO 150, 150L, 160, and BIO 160L.

**BIO 343. Molecular Neuroscience. (3 h)**

Investigates the cellular and molecular basis of neural function, including the molecular basis of neurological disorders. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 346. Neurobiology. (3 h)**

Introduces the structure and function of the nervous system including the neural basis of behavior. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 346L. Neurobiology Lab. (1 h)**

Laboratory emphasizing electrophysiological techniques with experiments from the cellular to the behavioral level. Students will design and complete their own projects. C-BIO 346.

**BIO 348. Physiological Plant Ecology. (3 h)**

Provides a fundamental understanding of how plants have adapted to the stresses of their habitats, particularly in harsh or extreme environments such as deserts, the alpine, the arctic tundra, and tropical rain forests. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 348L. Physiological Plant Ecology. (1 h)**

Physiological plant ecology lab. P or C-BIO 348.

**BIO 349. Tropical Biodiversity of the Amazon and Andes. (4 h)**

Intensive field course in tropical biodiversity focusing on ecosystems, natural resource management, and conservation. Students will travel to major tropical biomes in the vast tropical wildernesses of Andean and Amazonian Peru. Lectures emphasize the basic ecological principles important in each ecosystem. Field-based labs focus on student-designed projects. Offered in the summer only. POI required.

**BIO 352. Developmental Neuroscience. (4 h)**

Examines the development of neural structures and the plasticity of the mature nervous system. Laboratory covers the basics of embryology, immunocytochemistry, and primary neuron culture. P- BIO 265 or BIO 343 or BIO 346/346L.

**BIO 353. Functional Neuroanatomy. (3 h)**

Focuses on the functional organization of the vertebrate central nervous system, including regions, systems, and circuits, with emphasis on application to current topics, neuropathology, and clinical cases. P-BIO 245 or NEU 200.

**BIO 354. Methods in Neuroscience. (3 h)**

Introduces the techniques used in the field of neuroscience. Anatomical, physiological, molecular and behavioral methods are covered through lectures, laboratory work, and reading the primary literature. Also offered in Salamanca. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 354L. Neuroscience Methods Lab. (1 h)**

Introduces the techniques used in the field of neuroscience. Offered in Salamanca. (C-BIO 354)

**BIO 356. Ecology and Resource Management of Southeast Australia. (4 h)**

Intensive field-oriented course focusing on ecosystems, natural resource management and environmental conservation of southeastern Australia. Students travel to major biomes including sub-tropical rainforests, coral reefs and the Australian urban environment. Laboratories are field-based, with some consisting of student-designed projects. Taught only in summers in Australia. P-BIO 150, 150L, 160, and BIO 160L or POI.

**BIO 360. Metabolic Diseases. (3 h)**

Explores genetic and biochemical pathways in the context of inborn errors of metabolism. P-BIO 370/CHM 370/BMB 370.

**BIO 361. Principles of Biological Microscopy. (4 h)**

Introduces the fundamentals of biological imaging techniques. Students will explore a variety of microscopic methods as well as image acquisition, post-image processing, and scientific figure creation. Emphasis will be on both a theoretical and practical understanding of microscopic imaging principles. Concepts of experimental design and data critique will be explored through student projects and presentations. P-BIO 265.

**BIO 362. Immunology. (3 h)**

Study of the components and protective mechanisms of the human immune system, including innate and acquired immunity. P-BIO 265.

**BIO 363. Sensory Biology. (3 h)**

Introduction to sensory physiology and other aspects of sensory systems, e.g. molecular biology and anatomy. Also offered in Salamanca. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 363L. Sensory Biology Lab. (1 h)**

Laboratory emphasizing electrophysiological and behavioral techniques to examine sensory systems. Students will design and complete their own projects. C-BIO 363.

**BIO 365. Biology of the Cell. (3 h)**

Lecture course on classic and recent experiments in cell biology. Analysis and interpretation of experimental data from the primary literature is emphasized. P-any BIO course at the 211 level or above.

**BIO 365L. Biology of the Cell Lab. (1 h)**

Laboratory course introducing basic techniques in cell biology, leading to an independent project. P or C-BIO 365.



**BIO 367. Virology. (3 h)**

Introduces molecular virology, including viral replication, viral-cell interactions, viral disease, and methods for studying and controlling viruses. P-BIO 265.

**BIO 369. Cancer Biology. (3 h)**

Analysis of molecular and cellular mechanisms that transform normal cells, trigger abnormal proliferation, and lead to tumor formation. Emphasis is on the biological basis of cancer, with some exploration of clinical consequences. P-BIO 235 or BIO 245 or BIO 265.

**BIO 370. Biochemistry I: Macromolecules and Metabolism. (3 h)**

Introduces principles of biochemistry including structure, function, and biosynthesis of biological molecules, analysis of enzyme function and activity, bioenergetics, and regulation of metabolic pathways. Also listed as BMB 370 and CHM 370. P-any two of the following with associated labs: CHM 122 (or CHM 123), CHM 280, or BIO 265.

**BIO 370L. Biochemistry Lab. (1 h)**

Overview of biochemical approaches to study structure and function of macromolecules. Also listed as CHM 370L. Credit allowed for BIO 370L/CHM 370L or BIO 371L/BMB 371L/CHM 371L, but not both. P or C-BIO 370/BMB 370/CHM 370.

**BIO 371L. Advanced Biochemistry Lab. (1.5 h)**

Emphasizes approaches for isolation and analysis of enzymes. Required for BMB major and the chemistry major with concentration in biochemistry. Recommended for research focused students. Also listed as BIO 371L and CHM 371L. Credit allowed for BIO 370L/CHM 370L, or BMB 371L/BIO 371L/CHM 371L, but not both. P or C-BMB 370/BIO 370/CHM 370.

**BIO 372. Advanced Molecular Biology. (3 h)**

Presents molecular mechanisms by which stored genetic information is expressed including the mechanisms for and regulation of gene expression, protein synthesis, and genome editing. Emphasizes analysis and interpretation of experimental data from the primary literature. Also listed as BMB 372. P-BIO 265 and BIO 370/BMB 370/CHM 370.

**BIO 372L. Advanced Molecular Biology Laboratory. (1.5 h)**

Introduces modern methods of molecular biology to analyze and manipulate expression of genes and function of gene products. Also listed as BMB 372L. P or C-BIO 372/BMB 372 or BMB 373/CHM 373.

**BIO 374. Neuroparmacology. (3 h)**

Introduces how pharmacological agents affect cellular and molecular functions in the nervous system of normal and disease states. Lecture and case studies will be used to examine topics including drugs targeting mood and emotion, memory and dementia, and movement disorders. Drugs of abuse and the neurological basis of addiction will also be evaluated. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 379. Introduction to Geographic Information Systems (GIS). (4 h)**

Introduces the concepts and use of GIS as a mapping and analytical tool with emphasis on applications environmental modeling, global change, sociodemographic change, and site suitability analyses. Also listed as ENV 379. P-BIO 150, 150L, 160, and BIO 160L or POI.

**BIO 380. Biostatistics. (3 h)**

Introduction to inferential methods in biology. Focuses on recognizing, quantifying, and communicating uncertainty in biological data. Topics include summarizing data, making predictions, and testing hypotheses. Special emphasis on communicating statistics to scientific and general audiences. P-BIO 150, 150L, 160, and BIO 160L. (QR)

**BIO 381. Epigenetics. (3 h)**

Studies the molecular mechanisms for inheritance of genome modifications. Uses primary literature to explore the environmental and developmental signals that influence epigenetic controls of gene expression and disease. Also listed as BMB 381. P-BIO 265 and BIO/BMB/CHM 370.

**BIO 381L. Epigenetics Laboratory. (1 h)**

Provides hands-on experiences with genome editing and molecular genetics to address the function and expression of genes. Also listed as BMB 381L. P or C-BIO 381 or POI.

**BIO 382. Molecular Signaling. (3 h)**

Examines the molecular and biochemical mechanisms by which hormones, neurotransmitters, and other signaling molecules act to change growth, development, and physiological and behavioral responses of organisms with a focus on discussion of primary literature. Also listed as BMB 382. P-BIO 265 and BIO 370/BMB 370/CHM 370.

**BIO 383. Genomics. (3 h)**

Examines the architecture, expression, and evolution of genomes. Uses current primary literature to examine the functional and evolutionary dynamics of genomes and the modern analytic techniques used to investigate genome-wide phenomena. Also listed as BMB 383. P-BIO 235.

**BIO 383L. Genomics Lab. (1 h)**

Introduces analytic methods and interpretation of genome wide data through practical tutorials. Also listed as BMB 383L. P or C-BIO 383.

**BIO 385. Bioinformatics. (3 h)**

Introduction to computational approaches essential to modern biological inquiry. Approaches may include large biological dataset analyses, sequence similarity and motif searches, and analysis of high-throughput genomic technologies. Emphasizes interdisciplinary interaction and communication. Also listed as CSC 385 and PHY 385. P-CSC 201 or 221 (and BIO 150, 150L, 160, and BIO 160L if taken as BIO 385) or POI.

**BIO 386. Genetics & African Diaspora. (3 h)**

Study of modern human population divergence from a genomic perspective, focusing on the role of parasites in driving evolutionary adaptations. Explores the intersection of genetic diversity, health and disease in humans of the African diaspora. P-BIO 265.

**BIO 387. Computational Systems Biology. (3 h)**

Introduction of concepts and development of skills for comprehension of systems biology problems, including both biological and computational aspects. Topics may include genome-wide transcriptomic analysis, protein interaction networks, large-scale proteomics experiments, and computational approaches for modeling, storing, and analyzing the resulting data sets. Emphasizes interdisciplinary interaction and communication. Also listed as CSC 387. P-CSC 201 or 221 (also requires BIO 150, 150L, 160, and BIO 160L if taken as BIO 387) or POI.

**BIO 388. Methods in Molecular Genetics. (4 h)**

Hybrid lecture/laboratory course gives students a hands-on introduction to a diverse array of techniques commonly used in molecular genetics laboratories. P-BIO 150, 150L, 160, and BIO 160L.

**BIO 390. Mentored Research. (2 h)**

Introduces the technology and techniques of research. Working under the supervision of a faculty member or research staff, students will obtain experience in experimental design and analysis. Credit not given for both BIO 390 and BIO 391. Satisfies the research requirement for the BA and BS degrees. Pass/Fail only. P-BIO 150, 150L, 160, 160L, and POI required.

**BIO 391. Independent Research. (2 h)**

Students participate in a research project involving collection or analysis of data to investigate a defined research question. Students are required to submit a written paper or poster documenting research progress.

The same numbered course cannot be repeated. Subsequent courses must be taken in consecutive order. Credit not given for both BIO 390 and BIO 391. Satisfies the research requirement for the BA and BS degree.

May not be taken pass/fail. P-BIO 150, 150L, 160, 160L and POI required.

**BIO 392. Independent Research. (2 h)**

Continuation of research beyond BIO 391. Students are required to submit a written paper or poster documenting research progress. The same numbered course cannot be repeated. Pass/Fail option. P-BIO 391 and POI required.

**BIO 393. Research in Biology. (2 h)**

Continuation of research beyond BIO 392. Students are required to submit a written paper or poster documenting research progress. The same numbered course cannot be repeated. Pass/Fail option. P-BIO 392 and POI required.

**BIO 394. Research in Biology. (2 h)**

Continuation of research beyond BIO 393. Students are required to submit a written paper or poster documenting research progress. The same numbered course cannot be repeated. Pass/Fail option. P-BIO 393 and POI required.

**BIO 399. Mentored Biology. (2 h)**

Students explore career opportunities in biology-related fields or experiences. Students are required to submit a written paper or poster describing research internship or experience to their adviser. Plans must be approved in advance by the adviser. Course can be repeated for credit, but only 4 total hours will count toward the BA BIO major. Does not count toward the BS BIO major or the BIO minor. Pass/Fail only. P-BIO 150, 150L, 160, 160L and POI required.

## Faculty

**Chair** Erik C. Johnson

**Andrew Sabin Family Foundation Presidential Chair in Conservation Biology** Miles R. Silman

**Charles M. Allen Professor of Biology** Gloria K. Muday

**Reynolds Babcock Chaired Professor of Biology** William K. Smith

**Reynolds Professor** Susan E. Fahrbach

**Professors** David J. Anderson, T. Michael Anderson, Miriam A. Ashley-Ross, James F. Curran, Erik C. Johnson, Clifford W. Zeyl

**Teaching Professors** A. Daniel Johnson, Pat C. W. Lord

**Associate Professors** Sarah Esstman, James B. Pease, Ke Reid, Brian W. Tague

**Associate Teaching Professors** Diana R. Arnett, Anna Kate Lack

**Assistant Professors** Regina J. Cordy, Joshua Currie, Sheri A. Floge, Nicholas Kortessis, Lara do Amaral Silva

**Assistant Teaching Professor** Anna Parker, Andrew R. St. James

**Director of Microscopy** Glen S. Marrs

## Biology, B.A.

### Requirements

Requires at least 34 hours in the department.

Code	Title	Hours
<b>Required Major Courses</b>		
BIO 150 & 150L	Biology I and Biology I Lab	4

BIO 160 & 160L	Biology II and Biology II Lab	4
Select at least three 300-level four-hour Biology courses		12
BIO 390 or BIO 391 or BIO 399	Mentored Research Independent Research Mentored Biology	2
Additional hours in Biology beyond BIO 201		12
<b>Co-Requirements</b>		
Choose five of the following *		15-20

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*Note that co-requirements cannot be satisfied with courses that are cross-listed between Biology and another department or between Biology and the BMB major. Co-required courses may be used to satisfy a minor in another department or interdisciplinary program but cannot be counted toward a second major. Note that some of the courses listed may have non-BIO prerequisites.*

Code	Title	Hours
Any CHM course at the 100-, 200-, 300-level except CHM 108, 301, 302, 381, 390, 391, 392, or CHM 395		
ANT 113	Introduction to Biological Anthropology	3
ANT 339	Culture and Nature: Introduction to Environmental Anthropology	3
ANT 360	Anthropology of Global Health	3
ANT 362	Medical Anthropology	3
ANT 366	Human Evolution	3
ANT 368	Human Osteology	4
CNS 335	Health and Human Services in a Diverse Society	3
CNS 340	Professional Orientation to Health and Human Services	3
COM 345	Rhetoric of Science and Technology	3
COM 356	Health Communication: Patient-Provider	3
COM 358	Health Communication and Bioethics	3
CSC 111	Introduction to Computer Science	4
CSC 112	Fundamentals of Computer Science	4
CSC 201	Data Structures and Algorithms	3
CSC 221	Data Structures and Algorithms I	3
ECN 240	Economics of Health and Medicine	3
ECN 241	Environmental and Natural Resource Economics	3
EDU 201	Educational Policy and Practice	3
EDU 311	Learning and Cognitive Science	3
ENG 341	Literature and the Environment	3
ENG 361	Literature and Science	3
HES 262	Statistics in the Health Sciences	3
HES 350	Human Physiology	3
HES 352	Human Gross Anatomy	4
HES 360	Epidemiology	3
HMN 365	Humanity and Nature	3
HPA 150	Introduction to Public Health	3
HST 113	Health, Disease and Healing in World History	3

HST 339	Sickness and Health in American History	3
JOU 375	Special Topics in Journalism (when topic is Environmental and Science Reporting)	1-3
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
PHY 113	General Physics I	4
PHY 114	General Physics II	4
PHY 120	Physics and Chemistry of Environment	4
PHY 123	General Physics I - Studio Format	4
PHY 124	General Physics II - Studio Format	4
POL 281	Environmental Political Thought	3
REL 307	Magic, Science and Religion	3
REL 329	Chinese Medicine	3
REL 341	Religion and Ecology	3
STA 111	Elementary Probability and Statistics	4
STA 112	Introduction to Regression and Data Science	3
WRI 320	Writing in and about Science: Scientists as Writers and Writers as Scientists	3

For the B.A. major, the schedule of biology and related courses is flexible. After completing BIO 150, BIO 150L, BIO 160, and BIO 160L, students should select courses from the 200- and 300-levels in accord with their interests and career goals. Students may elect to take BIO 150, BIO 150L, BIO 160, and BIO 160L in the first year, BIO 150 and BIO 150L only in the first year, or take BIO 150, BIO 150L, BIO 160, and BIO 160L in fall and spring of the second year. Students taking the B.A. major with an interest in a health profession career are advised to take CHM 111 and CHM 111L in the fall of the first year and to select additional co-requirements after consulting with a health professions adviser.

A maximum of four hours of 390-sequence courses may be counted as hours in the major, but an additional four hours may be taken and applied toward graduation as elective hours. A minimum GPA of 2.0 in biology courses taken at Wake Forest is required for graduation with a major in biology. The Biology Department may require participation in assessment activities as part of ongoing program evaluation.

## Honors

Highly qualified majors are invited by the department to apply for admission to the honors program in biology during the Fall Semester of their senior year. To be graduated with the distinction "Honors in Biology," a graduating student must have a minimum GPA of 3.0 in all courses and a 3.3 in biology courses. In addition, the student must submit an honors paper describing his or her independent research project, written in the form of a scientific paper, which must be submitted to and approved by an advisory committee. Students are also required to make a short oral presentation to the Biology department at the end of Spring Semester. Specific details regarding the honors program, including selecting an adviser and an advisory committee, deadlines, and writing of the honors thesis, may be obtained from the chair of the departmental Undergraduate Research Committee.

## Biology, B.S. Requirements

Requires at least 34 hours in the department.

Code	Title	Hours
<b>Required Major Courses</b>		
BIO 150 & 150L	Biology I and Biology I Lab	4
BIO 160 & 160L	Biology II and Biology II Lab	4
Select at least three 300-level four-hour Biology courses		12
BIO 390 or BIO 391	Mentored Research or Independent Research	2
Additional hours in Biology beyond BIO 201		12
<b>Co-Requirements</b>		
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
STA 111	Elementary Probability and Statistics *	4
Choose three of the following **		9-12

\*

STA 111 is recommended, but this co-requirement may also be fulfilled by one of the following: ANT 380, HES 262, PSY 311, SOC 271, or STA 112. BIO 380 may be used to fill this requirement, but in that case cannot be counted toward the major requirement as hours in biology. Similarly STA 112 may be used to fill this requirement but in that case cannot be counted towards the major requirement as an "other" co-requisite course.

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Note that co-requirements cannot be satisfied with courses that are cross-listed between Biology and another department or between Biology and the BMB major. Co-required courses may be used to satisfy a minor in another department or interdisciplinary program but cannot be counted toward a second major. Note that some of the courses listed may have non-BIO prerequisites.

Code	Title	Hours
Any CHM course at the 100-, 200-, or 300-level except CHM 108, 301, 302, 381, 390, 391, 392, or CHM 395		
CSC 111	Introduction to Computer Science	4
CSC 112	Fundamentals of Computer Science	4
CSC 201	Data Structures and Algorithms	3
CSC 221	Data Structures and Algorithms I	3
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
PHY 113	General Physics I	4
PHY 114	General Physics II	4
PHY 123	General Physics I - Studio Format	4
PHY 124	General Physics II - Studio Format	4
STA 112	Introduction to Regression and Data Science	3

For the B.S. major, the schedule of biology and related courses is flexible. After completing BIO 150, BIO 150L, BIO 160, and BIO 160L, students

should select courses from the 200- and 300-levels in accord with their interests and career goals. It is recommended that all prospective majors take CHM 111 and CHM 111L in the fall of the first year and complete BIO 150 and BIO 150L and STA 111 or an equivalent course during either the fall or spring of the first year. Students taking the B.S. major with an interest in a health profession career are additionally advised to take CHM 122 and CHM 122L in the spring of the first year. These students should select additional co-requirements after consulting with a health professions adviser.

A maximum of four hours of 390-sequence courses (except BIO 399) may be counted as hours in the major, but an additional four hours may be taken and applied toward graduation as elective hours. A minimum GPA of 2.0 in biology courses taken at Wake Forest is required for graduation with a major in biology. The Biology Department may require participation in assessment activities as part of ongoing program evaluation.

## Honors

Highly qualified majors are invited by the department to apply for admission to the honors program in biology during the Fall Semester of their senior year. To be graduated with the distinction "Honors in Biology," a graduating student must have a minimum GPA of 3.0 in all courses and a 3.3 in biology courses. In addition, the student must submit an honors paper describing his or her independent research project, written in the form of a scientific paper, which must be submitted to and approved by an advisory committee. Students are also required to make a short oral presentation to the Biology department at the end of Spring Semester. Specific details regarding the honors program, including selecting an adviser and an advisory committee, deadlines, and writing of the honors thesis, may be obtained from the chair of the departmental Undergraduate Research Committee.

## Biology, Minor Requirements

A minor in Biology requires a total of 18 hours. All minors must complete BIO 150, BIO 150L, BIO 160, BIO 160L and at least one 300-level lab or field course (3 h lecture and 1 h lab or 4 h integrated lecture and lab class). No more than 4 hours in the minor can be fulfilled with biology research courses. BIO minors may not count BIO 399 as hours in the minor. A minimum overall GPA of 2.0 must be earned on all Wake Forest Biology courses taken to complete the minor. The requirements for the minor are those that are in effect at the time of the declaration of the minor, as the curriculum and the departmental requirements may change slightly during the student's period of residence. A minimum of eight hours in Biology must be taken at Wake Forest.

## Chemistry (CHM)

The department offers programs leading to the BA and BS degrees in chemistry. The BS degrees are certified by the American Chemical Society. A minimum GPA of 2.0 in the first two years of chemistry is required of students who elect to major in the department. Admission to any class is contingent upon satisfactory grades in prerequisite courses, and registration for advanced courses must be approved by the department. Candidates for either the BA or BS degree with a major in chemistry must have a minimum GPA of 2.0 in their chemistry courses numbered 200 or above. Unless otherwise stated, all chemistry courses are open to chemistry majors and minors on a letter-grade basis only (even those courses not required for the major or minor). Majors are required to complete on a letter-grade basis the required physics, biology,

and mathematics courses. The BS programs are designed for those students who plan a career in chemistry at the bachelor or advanced degree level. The BA program is designed for those students who do not plan to do graduate work in the physical sciences but desire a stronger background in chemistry than is provided by the chemistry minor program.

The department will accept transfer courses completed at four-year colleges and universities but will not award transfer credit towards the chemistry major and minor except from schools offering a major in chemistry. These courses must be equivalent in content and level to courses offered at Wake Forest (as judged by the department). Transfer credit will not be awarded for online lab classes nor for online lecture courses that have co-requisite labs on our campus. Courses taken in summer school elsewhere, or in study abroad programs, must meet these same criteria and receive pre-approval. Advanced courses, 300-level and above, are typically not transferable. Students enrolled at Wake Forest may not take courses in chemistry at other institutions to satisfy divisional requirements.

**The Health Professions Program** at Wake Forest recommends that students take the following chemistry courses and their associated labs before the end of the third year:

Code	Title	Hours
CHM 111	College Chemistry I	3
CHM 122 or CHM 123	Organic Chemistry I Organic Chemistry I Honors	3
CHM 223	Organic Chemistry II	3
CHM 280	College Chemistry II	3

Students interested in this track should see the Health Professions Program adviser for more information.

## Contact Information

Chemistry Department (<http://college.wfu.edu/chemistry/>)  
Salem Hall, Box 7486  
Phone 336-758-6139

## Programs Majors

- Chemistry, B.A.
- Chemistry, B.S.
- Chemistry with Concentration in Biochemistry, B.S.
- Chemistry with Concentration in Materials Chemistry, B.S.
- Chemistry with Concentration in Medicinal Chemistry and Drug Discovery, B.S.

## Minor

- Chemistry, Minor

## Courses

Course listings specify prerequisites and corequisites, although admission by permission of instructor, POI, may be granted under special circumstances.



## Chemistry (CHM)

### CHM 108. Everyday Chemistry. (4 h)

Introduction to chemistry for non-science majors. Laboratory covers experimental aspects of topics discussed in lecture. Does not count towards the major or minor in chemistry. C-CHM 108L. (D, QR)

### CHM 108L. Everyday Chemistry Lab. (0 h)

C-CHM 108.

### CHM 111. College Chemistry I. (3 h)

Fundamental chemical principles. Also offered in Salamanca. C-CHM 111L. (D, QR) (Offered Fall Only)

### CHM 111L. College Chemistry I Lab. (1 h)

Laboratory covers experimental aspects of basic concepts. C-CHM 111. (Offered Fall Only)

### CHM 111S. Problem Solving in Chemistry. (1 h)

Explores and introduces problem-solving skills in chemistry through active and peer-to-peer learning. Pass/Fail only. P-POI. C-CHM111.

### CHM 120. Physics and Chemistry of the Environment. (4 h)

Covers the basic physical and chemical processes in the earth's atmosphere, biosphere and the oceans. Also listed as PHY 120. (D, QR)

### CHM 120L. Physics and Chemistry of the Environment Lab. (0 h)

C-CHM 120.

### CHM 122. Organic Chemistry I. (3 h)

Principles and reactions of organic chemistry. Students may not receive credit for both CHM 122 and CHM 123. P-a grade of C or higher in CHM 111. C-CHM 122L. (D)

### CHM 122L. Organic Chemistry I Lab. (1 h)

P-CHM 111. C-CHM 122. (Offered Spring Only)

### CHM 123. Organic Chemistry I Honors. (3 h)

Principles and reactions of organic chemistry. Freshmen only, by invitation. P-CHM 111. C-CHM 123L. (D) (Offered Fall Only)

### CHM 123L. Organic Chemistry I Honors Lab. (1 h)

P-CHM 111. C-CHM 123. (Offered Fall Only)

### CHM 223. Organic Chemistry II. (3 h)

Principles and reactions of organic chemistry. P-a grade of C or higher in CHM 122 or 123.

### CHM 223L. Organic Chemistry II Lab. (1 h)

P or C-CHM 223.

### CHM 280. College Chemistry II. (3 h)

Advanced study of fundamental chemical principles. P-CHM 111. (D, QR) (Offered Spring Only)

### CHM 280L. Theory and Methods of Quantitative Analysis Lab. (1 h)

Emphasizes technique development for accuracy and precision. P or C-CHM 280. (Offered Spring Only)

### CHM 301. Elective Research. (0 h)

P-POI. Summers only.

### CHM 302. Elective Research. (0 h)

P-POI. Summers only.

### CHM 311. Current Topics. (1-4 h)

Course exploring current topics in chemistry. May be repeated for credit if course content differs. Does not count toward the major or minor in chemistry. P-POI.

### CHM 321. Intermediate Organic Chemistry. (3 h)

Survey of advanced topics in organic chemistry including stereochemistry, conformational analysis, reaction mechanisms, organometallic chemistry and asymmetric synthesis. P-CHM 223, CHM 223L, and CHM 280.

### CHM 324. Medicinal Chemistry I. (3 h)

An introduction to drug targets, mechanism, design, and synthesis. P-CHM 223, 370. (Offered Fall Only)

### CHM 324L. Medicinal Chemistry Laboratory. (1.5 h)

A lab designed to introduce the concept of structure-activity relationships (SAR) using computation, synthetic chemical, physiochemical, and biological techniques. P-CHM 223L. P or C-CHM 324.

### CHM 334. Chemical Analysis. (4 h)

Theoretical and practical applications of modern methods of chemical analysis. P-CHM 280L. C-CHM 334L. (Offered Fall Only)

### CHM 334L. Chemical Analysis Lab. (0 h)

Lab only. No credit. C-CHM 334.

### CHM 341. Physical Chemistry I. (3 h)

Fundamentals of thermodynamics and phenomenological kinetics, and introductory computational methods. Also offered in Salamanca. P-CHM 280, MTH 112. P or C-PHY 114 or 124. (Offered Fall Only)

### CHM 341L. Physical Chemistry I Lab. (1 h)

P-CHM 280L. P or C-CHM 341, PHY 114 or 124.

### CHM 342. Physical Chemistry II. (3 h)

Fundamentals of quantum mechanics, statistical thermodynamics, and introductory computational methods. P-CHM 341, MTH 112, and PHY 114 or 124. P or C-MTH 113. (Offered Spring Only)

### CHM 342L. Physical Chemistry II Lab. (1 h)

P or C-CHM 342.

### CHM 351. Special Topics in Chemistry. (3 h)

Courses in selected special topics in chemistry. May be repeated for credit if course content differs. P-POI.

### CHM 361. Inorganic Chemistry. (3 h)

Principles and reactions of inorganic chemistry. P or C-CHM 280. C-CHM 361L. (Offered Spring only)

### CHM 361L. Inorganic Chemistry Lab. (1 h)

P-CHM 280L. C-CHM 361.

### CHM 362. Nanochemistry in Energy and Medicine. (3 h)

Advanced topics in nanomaterials science, photochemistry, energy conversion optoelectronics and biomedical photonics. P-CHM 280 and CHM 280L.

### CHM 364. Materials Chemistry. (3 h)

A survey of inorganic-, organic-, bio-, and nano-materials, including hybrid materials and applications. P-CHM 280 (Offered every other spring).

### CHM 364L. Materials Chemistry Lab. (1 h)

Synthesis of inorganic and organic based materials and their characterization. P-CHM 280L. P or C-CHM 364.

### CHM 366. Chemistry and Physics of Solid State Materials. (3 h)

Design, synthesis, structure, chemical and physical properties, and the application of solid state materials. P-CHM 280.

### CHM 370. Biochemistry I: Macromolecules and Metabolism. (3 h)

Introduces principles of biochemistry including structure, function, and biosynthesis of biological molecules, analysis of enzyme function and activity, bioenergetics, and regulation of metabolic pathways. Also listed as BIO 370 and BMB 370. P-any two of the following with associated labs: CHM 122 (or CHM 123), CHM 280, or BIO 265.



**CHM 370L. Biochemistry Lab. (1 h)**

Overview of biochemical approaches to study structure and function of macromolecules. Does not count towards the chemistry major with concentration in biochemistry. Also listed as BIO 370L. Credit allowed for CHM 370L/BIO 370L or CHM 371L/BIO 371L/BMB 371L, but not both. P or C-CHM 370/BIO 370/BMB 370.

**CHM 371L. Advanced Biochemistry Lab. (1.5 h)**

Emphasizes approaches for isolation and analysis of enzymes. Required for BMB major and the chemistry major with concentration in biochemistry. Recommended for research focused students. Also listed as BIO 371L and BMB 371L. Credit allowed for BIO 370L/CHM 370L, or BMB 371L/BIO 371L/CHM 371L, but not both. P or C-BMB 370/BIO 370/CHM 370.

**CHM 373. Biochemistry II. (3 h)**

Examines the structure, function, and synthesis of proteins and nucleic acids and includes advanced topics in biochemistry including catalytic mechanisms of enzymes and ribozymes, use of sequence and structure databases, and molecular basis of disease and drug action. Also listed as BMB 373. P-CHM 223 and BIO 370/BMB 370/CHM 370.

**CHM 376. Biophysical Chemistry. (3 h)**

Fundamentals of physical chemistry applied to biological molecules, including thermodynamics, kinetics, quantum mechanics, and spectroscopy. Emphasizes modern experimental approaches used to analyze biological systems. Also listed as BMB 376. P-CHM 280, BIO/BMB/CHM 370, PHY 114. P or C-MTH 112.

**CHM 381. Chemistry Seminar and Literature. (0.5 h)**

Discussions of contemporary research and introduction to the chemical literature and acquisitions of chemical information. Pass/Fail only. P-CHM 122 or 123. (Offered Fall Only)

**CHM 390. Chemical Research Experience. (0, 1.5 h)**

Research experience and written report. Requires pre-approval of research project conducted off the Reynolda campus, by prearrangement. Pass/Fail only. May be repeated for credit.

**CHM 391. Undergraduate Research. (0.5-3 h)**

Undergraduate research and written report. Lab-3-16 hours. May be repeated for credit. P-POI. (Offered Fall Only)

**CHM 392. Undergraduate Research. (0.5-3 h)**

Undergraduate research and written report. Lab-3-16 hours. May be repeated for credit. P-POI. (Offered Spring Only)

**CHM 395. Senior Capstone. (0.5 h)**

Discussions of contemporary research and integration of chemical information with scientific dissemination. Pass/fail only. P or C-CHM 361. (Offered Spring Only)

## Faculty

**Thurman D. Kitchin Professor of Chemistry and Chair** S. Bruce King

**John B. White Professor of Chemistry** Willie L. Hinze

**William L. Poteat Professor of Chemistry** Mark E. Welker

**Professors** Rebecca W. Alexander, Ulrich Bierbach, Christa L. Colyer, Patricia Dos Santos, Bradley T. Jones, Abdessadek Lachgar, Akbar Salam  
**Associate Professors** Lindsay R. Comstock-Ferguson, Amanda C. Jones, Paul B. Jones, John C. Lukesh

**Assistant Professors** Wendu Ding, Elham Ghadiri, Cedric Schaack, Troy A. Stich

**Teaching Professors** Angela Glisan King

**Associate Teaching Professor** Scott Geyer, John Tomlinson

**Associate Teaching Professor and Director of Chemistry Center** David Wren

**Assistant Teaching Professor** Jes Bolduc

**Research Associate Professor** George L. Donati

**Visiting Associate Professor** Carthene Bazemore-Walker

## Chemistry, B.A.

### Requirements

Requires a minimum of 34 hours in chemistry and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
Select two of the following:		6
CHM 223	Organic Chemistry II	
CHM 321	Intermediate Organic Chemistry	
CHM 324	Medicinal Chemistry I	
CHM 342	Physical Chemistry II	
CHM 351	Special Topics in Chemistry	
CHM 362	Nanochemistry in Energy and Medicine	
CHM 364	Materials Chemistry	
CHM 366	Chemistry and Physics of Solid State Materials	
CHM 373	Biochemistry II	
CHM 376	Biophysical Chemistry	
Select one of the following:		0-3
CHM 381	Chemistry Seminar and Literature	
CHM 390	Chemical Research Experience	
CHM 391	Undergraduate Research	
CHM 392	Undergraduate Research	
<b>Co-Requirements</b>		
MTH 112	Calculus with Analytic Geometry II	4
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	

PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	

For the **B.A. major**, the following schedule of chemistry and related courses is typical:

Code	Title	Hours
<b>First Year</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
<b>Sophomore</b>		
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
<b>Junior or Senior</b>		
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
Select one of the following:		0-3
CHM 381	Chemistry Seminar and Literature	
CHM 390	Chemical Research Experience	
CHM 391	Undergraduate Research	
CHM 392	Undergraduate Research	
One upper-level CHM elective		
<b>Senior</b>		
CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
Upper-level CHM elective		

*Variations in the schedules above are possible to accommodate study abroad and other special circumstances, in which case, the student should consult a member of the faculty in chemistry.*

## Honors

Qualified majors are considered for honors in chemistry. To be graduated with the designation "Honors in Chemistry," a student must have a minimum GPA in chemistry courses of 3.3 and a minimum overall GPA of 3.0. In addition, the honors candidate must satisfactorily complete an approved research project, prepare a paper describing the project, and

present results at a seminar for departmental approval. Honors thesis research must be conducted on the Wake Forest University campus with a WFU Chemistry faculty member as research adviser or co-adviser. For additional information, members of the departmental faculty should be consulted.

## Chemistry, B.S. Requirements

Requires 43-46 hours in chemistry and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
CHM 223	Organic Chemistry II	3
CHM 223L	Organic Chemistry II Lab	1
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 342	Physical Chemistry II	3
CHM 342L	Physical Chemistry II Lab	1
CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
CHM 381	Chemistry Seminar and Literature	0.5
CHM 395	Senior Capstone	0.5
Select one of the following options:		0-3
Option 1:		
CHM 390	Chemical Research Experience	
Option 2:		
Select no fewer than 1.5 hours of the following:		
CHM 391	Undergraduate Research	
CHM 392	Undergraduate Research	
Select two of the following:		6
CHM 321	Intermediate Organic Chemistry	
CHM 324	Medicinal Chemistry I	
CHM 351	Special Topics in Chemistry	
CHM 362	Nanochemistry in Energy and Medicine	
CHM 364	Materials Chemistry	
CHM 366	Chemistry and Physics of Solid State Materials	

CHM 373	Biochemistry II	
CHM 376	Biophysical Chemistry	
Any chemistry graduate class (POI)		
<b>Co-Requirements</b>		
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4

For the **B.S. major**, the following schedule of chemistry and related courses is typical:

Code	Title	Hours
<b>First Year</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
<b>Sophomore</b>		
CHM 223	Organic Chemistry II	3
CHM 223L	Organic Chemistry II Lab	1
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
MTH 113	Multivariable Calculus	4
<b>Junior</b>		
CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 342	Physical Chemistry II	3
CHM 342L	Physical Chemistry II Lab	1
CHM 381	Chemistry Seminar and Literature	0.5
<b>Junior or Senior</b>		
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
CHM 391	Undergraduate Research	0-3
or CHM 392	Undergraduate Research	
or CHM 390	Chemical Research Experience	
Upper-level CHM elective		

### Senior

CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 395	Senior Capstone	0.5

Upper-level CHM elective

## Honors

Qualified majors are considered for honors in chemistry. To be graduated with the designation "Honors in Chemistry," a student must have a minimum GPA in chemistry courses of 3.3 and a minimum overall GPA of 3.0. In addition, the honors candidate must satisfactorily complete an approved research project, prepare a paper describing the project, and present results at a seminar for departmental approval. Honors thesis research must be conducted on the Wake Forest University campus with a WFU Chemistry faculty member as research adviser or co-adviser. For additional information, members of the departmental faculty should be consulted.

## Chemistry with Concentration in Biochemistry, B.S. Requirements

Requires 39.5-42.5 hours in chemistry and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
CHM 223	Organic Chemistry II	3
CHM 223L	Organic Chemistry II Lab	1
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 371L	Advanced Biochemistry Lab	1.5
CHM 373	Biochemistry II	3
CHM 381	Chemistry Seminar and Literature	0.5
CHM 395	Senior Capstone	0.5
Select one of the following options:		0-3
<b>Option 1:</b>		
CHM 390	Chemical Research Experience	
<b>Option 2:</b>		

Select no fewer than 1.5 hours of the following:		
CHM 391	Undergraduate Research	
CHM 392	Undergraduate Research	
Select one of the following:		3
CHM 321	Intermediate Organic Chemistry	
CHM 324	Medicinal Chemistry I	
CHM 342	Physical Chemistry II	
CHM 351	Special Topics in Chemistry	
CHM 362	Nanochemistry in Energy and Medicine	
CHM 364	Materials Chemistry	
CHM 366	Chemistry and Physics of Solid State Materials	
CHM 376	Biophysical Chemistry	
Any chemistry graduate class (POI)		
<b>Co-Requirements</b>		
BIO 265	Cellular and Molecular Biology	3
MTH 112	Calculus with Analytic Geometry II	4
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	

For the **B.S. major with concentration in biochemistry**, the following schedule of chemistry and related courses is typical:

Code	Title	Hours
<b>First Year</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
BIO 150	Biology I	3
BIO 150L	Biology I Lab	1
BIO 160	Biology II	3
BIO 160L	Biology II Lab	1
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
<b>Sophomore</b>		
CHM 223	Organic Chemistry II	3
CHM 223L	Organic Chemistry II Lab	1
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
BIO 265	Cellular and Molecular Biology	3
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
<b>Junior</b>		

CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 371L	Advanced Biochemistry Lab	1.5
CHM 381	Chemistry Seminar and Literature	0.5
<b>Junior or Senior</b>		
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 391	Undergraduate Research	0-3
or CHM 392	Undergraduate Research	
or CHM 390	Chemical Research Experience	
<b>Senior</b>		
CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 373	Biochemistry II	3
CHM 395	Senior Capstone	0.5
Upper-level CHM elective		

Honors

Qualified majors are considered for honors in chemistry. To be graduated with the designation “Honors in Chemistry,” a student must have a minimum GPA in chemistry courses of 3.3 and a minimum overall GPA of 3.0. In addition, the honors candidate must satisfactorily complete an approved research project, prepare a paper describing the project, and present results at a seminar for departmental approval. Honors thesis research must be conducted on the Wake Forest University campus with a WFU Chemistry faculty member as research adviser or co-adviser. For additional information, members of the departmental faculty should be consulted.

Chemistry with Concentration in Materials Chemistry, B.S. Requirements

Requires 43-46 hours in chemistry and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 342	Physical Chemistry II	3

CHM 342L	Physical Chemistry II Lab	1
CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 364	Materials Chemistry	3
CHM 364L	Materials Chemistry Lab	1
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
CHM 381	Chemistry Seminar and Literature	0.5
CHM 395	Senior Capstone	0.5
Select one of the following Options:		0-3
Option 1:		
CHM 390	Chemical Research Experience	
Option 2:		
Select no fewer than 1.5 hours of the following:		
CHM 391	Undergraduate Research	
CHM 392	Undergraduate Research	
Select two of the following:		6
CHM 223	Organic Chemistry II	
CHM 321	Intermediate Organic Chemistry	
CHM 324	Medicinal Chemistry I	
CHM 351	Special Topics in Chemistry	
CHM 362	Nanochemistry in Energy and Medicine	
CHM 366	Chemistry and Physics of Solid State Materials	
CHM 373	Biochemistry II	
CHM 376	Biophysical Chemistry	
PHY 354	Introduction to Solid State Physics	

**Co-Requirements**

PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4

For the **B.S. major with concentration in materials chemistry**, the following schedule of chemistry and related courses is typical:

Code	Title	Hours
<b>First Year</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
<b>Sophomore</b>		
CHM 223	Organic Chemistry II (Elective)	3
CHM 280	College Chemistry II	3

CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
MTH 113	Multivariable Calculus	4

**Junior**

CHM 341	Physical Chemistry I	3
CHM 341L	Physical Chemistry I Lab	1
CHM 342	Physical Chemistry II	3
CHM 342L	Physical Chemistry II Lab	1
CHM 381	Chemistry Seminar and Literature	0.5

**Junior or Senior**

CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 364	Materials Chemistry	3
CHM 364L	Materials Chemistry Lab	1
CHM 391	Undergraduate Research	0-3
or CHM 392	Undergraduate Research	
or CHM 390	Chemical Research Experience	

**Senior**

CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
CHM 395	Senior Capstone	0.5

Upper-level CHM or PHY elective

## Honors

Qualified majors are considered for honors in chemistry. To be graduated with the designation "Honors in Chemistry," a student must have a minimum GPA in chemistry courses of 3.3 and a minimum overall GPA of 3.0. In addition, the honors candidate must satisfactorily complete an approved research project, prepare a paper describing the project, and present results at a seminar for departmental approval. Honors thesis research must be conducted on the Wake Forest University campus with a WFU Chemistry faculty member as research adviser or co-adviser. For additional information, members of the departmental faculty should be consulted.

## Chemistry with Concentration in Medicinal Chemistry and Drug Discovery, B.S.

### Requirements

Requires 39.5-45.5 hours in chemistry and must include the following courses:



Code	Title	Hours
<b>Required Major Courses</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
CHM 223	Organic Chemistry II	3
CHM 223L	Organic Chemistry II Lab	1
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
CHM 324	Medicinal Chemistry I	3
CHM 324L	Medicinal Chemistry Laboratory	1.5
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 361	Inorganic Chemistry	3
CHM 361L	Inorganic Chemistry Lab	1
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
CHM 381	Chemistry Seminar and Literature	0.5
CHM 395	Senior Capstone	0.5
Select one of the following Options:		0-3
Option 1:		
CHM 390	Chemical Research Experience	
Option 2:		
Select no fewer than 1.5 hours of the following:		
CHM 391	Undergraduate Research	
CHM 392	Undergraduate Research	
Select one of the Medicinal Chemistry electives:		
CHM 321	Intermediate Organic Chemistry	3
CHM 373	Biochemistry II	3
CHM 376	Biophysical Chemistry	3
BIO 265	Cellular and Molecular Biology	3
Select one of the following:		3
CHM 321	Intermediate Organic Chemistry *	
CHM 342	Physical Chemistry II	
CHM 351	Special Topics in Chemistry	
CHM 362	Nanochemistry in Energy and Medicine	
CHM 364	Materials Chemistry	
CHM 366	Chemistry and Physics of Solid State Materials	
CHM 373	Biochemistry II *	
CHM 376	Biophysical Chemistry *	
Any chemistry graduate class (POI)		
<b>Co-Requirements</b>		
BIO 150	Biology I	3
BIO 150L	Biology I Lab	1
MTH 112	Calculus with Analytic Geometry II	4

PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	

\*

Can only be used to fulfill this requirement if not also used to fill the medicinal chemistry elective requirement.

For the **B.S. major with concentration in medicinal chemistry and drug discovery**, the following schedule of chemistry and related courses is typical:

Code	Title	Hours
<b>First Year</b>		
CHM 111	College Chemistry I	3
CHM 111L	College Chemistry I Lab	1
CHM 122	Organic Chemistry I	3
or CHM 123	Organic Chemistry I Honors	
CHM 122L	Organic Chemistry I Lab	1
or CHM 123L	Organic Chemistry I Honors Lab	
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
<b>Sophomore</b>		
BIO 150	Biology I	3
BIO 150L	Biology I Lab	1
CHM 223	Organic Chemistry II	3
CHM 223L	Organic Chemistry II Lab	1
CHM 280	College Chemistry II	3
CHM 280L	Theory and Methods of Quantitative Analysis Lab	1
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
<b>Junior</b>		
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 370L	Biochemistry Lab	1
or CHM 371L	Advanced Biochemistry Lab	
CHM 381	Chemistry Seminar and Literature	0.5
<b>Junior or Senior</b>		
CHM 334	Chemical Analysis	4
CHM 334L	Chemical Analysis Lab	0
CHM 341	Physical Chemistry I	3
CHM 391	Undergraduate Research	0-3
or CHM 392	Undergraduate Research	
or CHM 390	Chemical Research Experience	
Medicinal Chemistry Elective		
<b>Senior</b>		
CHM 324	Medicinal Chemistry I	3
CHM 324L	Medicinal Chemistry Laboratory	1.5
CHM 361	Inorganic Chemistry	3

CHM 361L	Inorganic Chemistry Lab	1
CHM 395	Senior Capstone	0.5
Upper-level CHM elective		

## Honors

Qualified majors are considered for honors in chemistry. To be graduated with the designation "Honors in Chemistry," a student must have a minimum GPA in chemistry courses of 3.3 and a minimum overall GPA of 3.0. In addition, the honors candidate must satisfactorily complete an approved research project, prepare a paper describing the project, and present results at a seminar for departmental approval. Honors thesis research must be conducted on the Wake Forest University campus with a WFU Chemistry faculty member as research adviser or co-adviser. For additional information, members of the departmental faculty should be consulted.

## Chemistry, Minor

### Requirements

Requires at least 19 hours in chemistry and must include at least one of:

Code	Title	Hours
CHM 321	Intermediate Organic Chemistry	3
CHM 324	Medicinal Chemistry I	3
CHM 334	Chemical Analysis	4
CHM 341	Physical Chemistry I	3
CHM 342	Physical Chemistry II	3
CHM 351	Special Topics in Chemistry	3
CHM 361	Inorganic Chemistry	3
CHM 362	Nanochemistry in Energy and Medicine	3
CHM 364	Materials Chemistry	3
CHM 366	Chemistry and Physics of Solid State Materials	3
CHM 370	Biochemistry I: Macromolecules and Metabolism	3
CHM 373	Biochemistry II	3
CHM 376	Biophysical Chemistry	3

No more than nine hours of chemistry courses completed elsewhere can be counted toward the minor, and a minimum grade point average of 2.0 in Wake Forest chemistry courses is required to complete the minor.

## Classics (CLA)

The Department of Classics offers four majors and three minors: majors in Classical Languages, Classical Studies, Greek, and Latin, and minors in Classical Studies, Greek, and Latin. An overall minimum GPA of 2.0 is required for graduation in courses that compose a major in the department.

**Major/minor combinations.** Within the department no more than six hours of major credit may also count toward a minor.

**Greek and Latin courses** at the 100-level may not be taken pass-fail. Any exception to the policy must arise from exceptional circumstances and must be approved by the Chair of the department.

## Contact Information

Department of Classics (<http://college.wfu.edu/classics/>)s (<http://classics.wfu.edu/>)  
Tribble Hall C301, PO Box 7343  
Phone 336-758-5330

## Programs Majors

- Classical Languages, B.A.
- Classical Studies, BA
- Greek, B.A.
- Latin, B.A.

## Minors

- Classical Studies, Minor
- Greek, Minor
- Latin, Minor

## Courses Classics (CLA)

### CLA 151. Ethics in Greece and Rome. (1.5, 3 h)

Study and reflection on ethical questions, practices, values, and decision-making in ancient Greece and/or Rome. (D only with the 3-hour option)

### CLA 152. Women, Gender, and Sexuality in Antiquity. (3 h)

Exploration of women's roles in the ancient Mediterranean world and the intersections of gender, sexuality, and power in Greek and Roman society through the study of historical, archaeological, artistic, and literary sources, with a variety of theoretical and methodological approaches. A knowledge of the Greek and Latin languages is not required. (CD, D)

### CLA 155. Classical Epic: Iliad, Odyssey, Aeneid. (3 h)

Study of the three principal epic poems from ancient Greece and Rome. A knowledge of the Greek and Latin languages is not required. (D)

### CLA 159. Vergil and His English Legacy. (3 h)

Study of Vergil's Eclogues, Georgics, and selected passages of Aeneid, and their reception by English literature, using translations and original works by writers of the sixteenth through the eighteenth centuries, including Spenser, Marlowe, Milton, Dryden, and Pope. Knowledge of Latin is not required. (D)

### CLA 161. Greek Myth. (3 h)

Consideration, principally through close study of selected literary works, of Greek myth from the Classical, Archaic, and Hellenistic periods, and in Roman literature; the course also will consider Greek myth's afterlife in the modern period. A knowledge of the Greek language is not required. (D)

### CLA 163. Greek Tragedy. (3 h)

Study of the plays of Aeschylus, Sophocles, and Euripides. A knowledge of the Greek language is not required. (D)

### CLA 164. Greek & Roman Comedy. (3 h)

Study of representative works of Aristophanes, Menander, Plautus, and Terence, with attention to the performance and audiences of comedy and to the differences among and within comic genres. A knowledge of the Greek and Latin languages is not required. (D)

### CLA 172. A Survey of Latin Literature (in English). (3 h)

Study of selections from Latin literature in English translation. A knowledge of Latin language is not required. (D)

**CLA 174. Special Topics. (1.5-3 h)**

Special topics in classical literature and culture. May be repeated for credit.

**CLA 175. The Age of Pericles. (3 h)**

Study of Greek culture in all its aspects during the 5th century. A knowledge of the Greek language is not required. (CD, D)

**CLA 176. The Age of Augustus. (3 h)**

Study of Roman culture in all its aspects during the early Empire. A knowledge of the Latin language is not required. (CD, D)

**CLA 179. The Art, Archaeology, and Culture of the Ancient World. (1.5 h)**

Study abroad. Immerse yourself in the physical world and material culture of the ancient world. Encounter some of the most important sites of antiquity, and examine in-person and up-close aspects of ancient history, prehistory, art, and culture. This program will embed readings of literature and modern scholarship in the physical contexts of the ancient world. Study abroad required. P-POI.

**CLA 180. Topics in the Ancient Mediterranean World. (3 h)**

Study of topics in the literary and material culture of the Greco-Roman World. (CD, D)

**CLA 181. Classics Beyond Whiteness. (1.5, 3 h)**

Studies misconceptions that ancient Greeks and Romans were white; race in Graeco-Roman societies; the role of Classics in modern racial politics; and non-white approaches to Classics. Considers race as social construct; white supremacy, fragility, and privilege; and critical-race-theoretical study of ancient cultures. (CD, D only with the 3-hour option)

**CLA 381. Seminar in Classical Studies. (3 h)**

Offered by members of the faculty on topics of their choice. A knowledge of Greek and Latin languages is not required. May be repeated for credit. P-any previous course in Classics, Greek, or Latin, or POI.

**CLA 388. Individual Study. (1.5, 3 h)**

Course may be repeated for a total of 6 hours. P-POI.

**CLA 391. Honors in Classical Studies. (1.5 h)**

Directed research for the honors paper. P-POD.

**CLA 392. Honors in Classical Studies. (1.5 h)**

Directed research for the honors paper. P-POD .

## Greek (GRK)

**GRK 111. Elementary Greek. (3 h)**

Introduction to the language; provides a foundation for reading the ancient authors. P-POD.

**GRK 112. Elementary Greek. (3 h)**

Introduction to the language; provides a foundation for reading the ancient authors. P-POD.

**GRK 113. Intensive Elementary Greek. (3 h)**

Accelerated introduction to the language; provides a foundation for reading the ancient authors. Not open to students who have received credit GRK 111-112. C-GRK 113L.

**GRK 113L. Intensive Elementary Greek Lab. (2 h)**

Concentration on sight-reading and composition in Greek. Must be taken in the same semester as GRK 113.

**GRK 153. Intermediate Greek. (3 h)**

Review of grammar; readings in classical authors. P-Greek 112 or equivalent.

**GRK 154. Intensive Intermediate Greek. (3 h)**

Review of grammar in the context of reading classical authors. P - 113 or equivalent. C-GRK 154L.

**GRK 154L. Intensive Intermediate Greek Lab. (2 h)**

Concentration on sight-reading and composition in Greek. Must be taken in the same semester as GRK 154.

**GRK 201. Intermediate Greek. (3 h)**

Review of grammar; readings in classical authors. P-GRK 153.

**GRK 211. Introduction to Greek Prose. (3 h)**

Selections from the dialogues of Plato or other Attic prose. P-GRK 153, 154 or equivalent.

**GRK 312. Greek Poetry. (3 h)**

Selections from the Iliad and the Odyssey or from didactic and lyric poetry. P - Greek 211 or equivalent.

**GRK 321. Greek Readings. (1.5, 3 h)**

Designed to meet individual needs and interests. Course may be repeated for a total of six credit hours. P-POI.

**GRK 325. Advanced Grammar and Composition. (3 h)**

Intensive work in morphology and syntax, with practice in composition and stylistic analysis of selected readings. P—GRK 211 or equivalent.

**GRK 331. Greek Biblical Texts. (3 h)**

Selections from Greek Biblical texts. P-GRK 211 or equivalent.

**GRK 341. Greek Tragedy. (3 h)**

Close study of a selected tragedy or tragedies. P—GRK 211 or equivalent.

**GRK 342. Greek Comedy. (3 h)**

Close study of a selected comedy or comedies of Aristophanes or Menander. P—GRK 211 or equivalent.

**GRK 391. Honors in Greek. (1.5 h)**

Directed research for honors paper. P-POD.

**GRK 392. Honors in Greek. (1.5 h)**

Directed research for honors paper. P-POD.

## Latin (LAT)

**LAT 111. Elementary Latin. (3 h)**

Introduction to the language; provides a foundation for reading in the ancient authors.

**LAT 112. Elementary Latin. (3 h)**

Introduction to the language; provides a foundation for reading in the ancient authors.

**LAT 113. Intensive Elementary Latin. (3 h)**

An introduction to the language; the course covers the material of LAT 111 and LAT 112 in one semester. Not open to students who have had LAT 111 or LAT 112.

**LAT 113L. Intensive Elementary Latin Lab. (2 h)**

Concentration on sight-reading and composition in Latin. Must be taken in the same semester as LAT 113.

**LAT 120. Reading Medieval Latin. (1.5-3 h)**

Introduction to post-classical Latin with readings in selected works from late antiquity and the middle ages. P-LAT 112 or equivalent.

**LAT 153. Intermediate Latin. (3 h)**

Review of grammar and selected introductory readings. P-LAT 112, 113 or equivalent.

**LAT 153L. Intermediate Latin Lab. (2 h)**

Concentration on sight-reading and composition in Latin. Must be taken in the same semester as LAT 153.

**LAT 211. Introduction to Latin Poetry. (3 h)**

Readings from selected poets mainly of the late Republic and early Empire, with an introduction to literary criticism. P-LAT 153 or equivalent.

**LAT 212. Introduction to Latin Prose. (3 h)**

Readings primarily from the works of Cicero, with attention to their artistry and historical context. P-LAT 153 or equivalent.

**LAT 316. Roman Lyric Poetry. (3 h)**

Interpretation and evaluation of lyric poetry through readings from the poems of Catullus and Horace. P-LAT 211 or 212, or equivalent.

**LAT 318. Roman Epic Poetry. (3 h)**

Reading in the epics of Virgil and Ovid, with attention to their position in the epic tradition. P-LAT 211 or 212, or equivalent.

**LAT 321. Roman Historians. (3 h)**

Readings in the works of Sallust, Livy, or Tacitus, with attention to the historical background and the norms of ancient historiography. P-LAT 211 or 212, or equivalent.

**LAT 325. Roman Epistolography. (3 h)**

Selected readings from the correspondence of Cicero and Pliny the Younger and the verse epistles of Horace and Ovid. P-LAT 211 or 212, or equivalent.

**LAT 326. Roman Comedy. (3 h)**

Readings of selected comedies of Plautus and Terence, with a study of the traditions of comedy and dramatic techniques. P-LAT 211 or 212, or equivalent.

**LAT 331. Roman Elegy. (3 h)**

Readings from the poems of Tibullus, Propertius, and Ovid, with study of the elegiac tradition. P-LAT 211 or 212, or equivalent.

**LAT 333. Lucretius. (3 h)**

Selected readings from Lucretius' *De Rerum Natura*, with attention to its position in Graeco-Roman traditions of philosophy and hexameter poetry. P-LAT 211 or 212, or equivalent.

**LAT 341. Roman Satire. (3 h)**

Selected readings from Horace, Lucilius, Persius, or Juvenal, with attention to the origin and development of hexameter satire. P-LAT 211 or 212, or equivalent.

**LAT 343. Latin Readings. (1.5, 3 h)**

Designed to meet individual need and interests. Course may be repeated for a total of six credit hours. P-POI.

**LAT 350. Advanced Grammar and Composition. (3 h)**

Intensive work in morphology and syntax, with practice in composition and stylistic analysis of selected readings. P-LAT 211 or 212, or equivalent.

**LAT 360. Seminar in Latin Poetry. (3 h)**

Advanced study in selected poets and genres. A research paper is required. P-LAT 211 or 212, or equivalent.

**LAT 380. Seminar in Latin Prose. (3 h)**

Advanced study in selected authors and topics. A research paper is required. P-LAT 211 or 212, or equivalent.

**LAT 391. Honors in Latin. (1.5 h)**

Directed research for the honors paper. P-POD.

**LAT 392. Honors in Latin. (1.5 h)**

Directed research for the honors paper. P-POD.

**LAT 555. Latin Literature. (3 h)**

## Faculty

**Chair** E. Ashley Hairston

**Professor** Michael C. Sloan

**Associate Professors** T.H.M. Gellar-Goad, Amy K. Lather, John M. Oksanish

**Associate Teaching Professor** Brian M. Warren

**Assistant Professors** Vivian Laughlin, Cassandra Tran

## Classical Languages, B.A.

### Requirements

Requires at least 27 hours in the Department.

For students emphasizing Latin the following are required:

Code	Title	Hours
<b>Required Major Courses</b>		
Select four courses in Latin beyond 153 *		12
Select 12 hours in Greek including at least one course above 154		12
CLA 181	Classics Beyond Whiteness	1.5,3

\*

*Three must be at the 300-level and include LAT 350.*

For students emphasizing Greek the following are required:

Code	Title	Hours
<b>Required Major Courses</b>		
Select four courses in Greek beyond 154 *		12
Select 12 hours in Latin including at least one course above 153		12
CLA 181	Classics Beyond Whiteness	1.5,3

\*

*Three must be at the 300-level.*

## Honors

Highly qualified majors are invited by the department to participate in the honors program in Latin, Greek, or Classical Studies. To be graduated with the designation "Honors in Latin," "Honors in Greek," or "Honors in Classical Studies," a student must complete an honors research project and pass a comprehensive oral examination. For additional information, members of the departmental faculty should be consulted. (Refer to the section "Honors Study" in this bulletin for minimum college requirements.)

## Classical Studies, BA

### Requirements

Requires 30 hours in the department. The following are required:

Code	Title	Hours
CLA 175	The Age of Pericles	3
CLA 176	The Age of Augustus	3
CLA 181	Classics Beyond Whiteness	1.5,3
CLA 381	Seminar in Classical Studies	3

Other courses may be substituted by permission of the department.

## Honors

Highly qualified majors are invited by the department to participate in the honors program in Latin, Greek, or Classical Studies. To be graduated with the designation "Honors in Latin," "Honors in Greek," or "Honors

in Classical Studies,” a student must complete an honors research project and pass a comprehensive oral examination. For additional information, members of the departmental faculty should be consulted. (Refer to the section “Honors Study” in this bulletin for minimum college requirements.)

## Greek, B.A. Requirements

Requires 27 hours in the department beyond GRK 112 or GRK 113.

Code	Title	Hours
Select 24 hours in Greek		24
CLA 181	Classics Beyond Whiteness	1.5, 3

## Honors

Highly qualified majors are invited by the department to participate in the honors program in Latin, Greek, or Classical Studies. To be graduated with the designation “Honors in Latin,” “Honors in Greek,” or “Honors in Classical Studies,” a student must complete an honors research project and pass a comprehensive oral examination. For additional information, members of the departmental faculty should be consulted. (Refer to the section “Honors Study” in this bulletin for minimum college requirements.)

## Latin, B.A. Requirements

Requires 27 hours in the department beyond LAT 153.

Code	Title	Hours
Select 21 hours in Latin		21
LAT 350	Advanced Grammar and Composition	3
CLA 181	Classics Beyond Whiteness	1.5, 3

## Honors

Highly qualified majors are invited by the department to participate in the honors program in Latin, Greek, or Classical Studies. To be graduated with the designation “Honors in Latin,” “Honors in Greek,” or “Honors in Classical Studies,” a student must complete an honors research project and pass a comprehensive oral examination. For additional information, members of the departmental faculty should be consulted. (Refer to the section “Honors Study” in this bulletin for minimum college requirements.)

## Classical Studies, Minor Requirements

Requires a minimum of 18 hours in the department.

Code	Title	Hours
<b>Required Courses</b>		
CLA 175 or CLA 176	The Age of Pericles The Age of Augustus	3
CLA 181	Classics Beyond Whiteness	1.5, 3
CLA 381	Seminar in Classical Studies	3

## Greek, Minor Requirements

Requires 15-17 hours:

Code	Title	Hours
GRK 153	Intermediate Greek	3
Or		
GRK 154 & 154L	Intensive Intermediate Greek and Intensive Intermediate Greek Lab	5
Select two 200 or 300 level courses in Greek		6
CLA 181	Classics Beyond Whiteness	1.5, 3
Select one additional course in CLA, GRK (300-level), or LAT		1.5-3

## Latin, Minor Requirements

Requires 15 hours:

Code	Title	Hours
Select three 200- or 300-level courses in Latin		9
CLA 181	Classics Beyond Whiteness	1.5, 3
Select one or two additional course(s) in CLA, GRK, or LAT (300-level)		3-4.5

## Communication (COM)

The Communication Department studies the phenomenon of human communication in all its aspects. We support a liberal arts approach to communication through scholarship, creative production, and teaching in six concentrations: a general concentration, communication science, health communication, integrated communication strategies, media studies, and public advocacy. Our goal for undergraduate majors and minors is to prepare them for the responsibilities of citizenship and for the many career paths in which knowledge of communication is a critical asset.

## Contact Information

Communication Department (<http://college.wfu.edu/communication/>)  
Carswell Hall 117, Box 7347  
Phone 336-758-5405

## Programs Major

- Communication, B.A.
- Critical and Creative Media, B.A.

## Minor

- Communication, Minor
- Marketing Communication, Minor



## Courses

### Communication (COM)

#### COM 100. Introduction to Communication and Rhetoric. (1.5 h)

An introduction to the discipline of Communication through an overview of related subfields, including their history, influential theories, and trends in research and practice.

#### COM 102. Debate and Advocacy. (3 h)

The use of argumentative techniques in oral advocacy: research, speeches, and debate. (D)

#### COM 110. Public Speaking. (3 h)

A study of the theory and practice of public address. Lab experiences in the preparation, delivery, and critique of informative and persuasive speeches. (D)

#### COM 113. Relational Communication. (3 h)

Introduction to relational communication theory, research and principles. (D)

#### COM 120. Introduction to Critical and Creative Media. (3 h)

Introduction to the major theories and aesthetics of motion pictures and other media forms through a study of styles related to writing, directing, cinematography, editing, and sound. Students are introduced to oral, written, and visual competencies required for successful completion of the major or minor. (D)

#### COM 162. Introduction to Integrated Marketing Communications. (3 h)

Provides a broad and basic understanding of the principles of integrated marketing communication in all its forms. The course is a foundational course for the ICS concentration for those wishing to pursue marketing communication as a career. Covers the building blocks of integrated marketing communication, the strategic use of such communication to reach a specific target across multiple media platforms, and the understanding of how to develop and shape messages to suit platform, purpose and audience.

#### COM 215. Broadcast Journalism. (3 h)

An introduction to the theory and practice of broadcast journalism. Topics will include ethics, technology, and the media as industry. Projects will address writing, producing, and performing for radio and television. Also listed as JOU 355.

#### COM 220. Empirical Research in Communication. (3 h)

An introduction to methodological design and univariate statistics as used in communication research. (QR)

#### COM 225. Rhetorical Theory and Criticism. (3 h)

Introduces students to rhetorical theory and criticism with a view to researching and composing a critical essay in the field.

#### COM 230. Interactive Digital Media. (3 h)

Theoretical and applied study of new digital technologies. Students produce a short-form interactive media project. Offered only in Salamanca.

#### COM 245. Introduction to Mass Communication. (3 h)

A historical survey of mass media and an examination of major contemporary media issues. (D)

#### COM 246. Black Popular Culture. (3 h)

Explores the various forms of Black popular culture and the cultural and intellectual politics that inform its reception and representation by scholars and the general public. Also listed as AAS 207.

#### COM 247. Media Production I. (3 h)

Students produce a variety of short-form media projects. P-COM 120.

#### COM 249. Sound Design & Soundtracks. (3 h)

A project-based exploration of sound design and soundtracks for media, film, and performance. Assignments will include field recording, Foley, ADR, synthesis, mixing, mastering, and using artificial intelligence for soundtracking and underscoring. No prior knowledge or experience is necessary. CCM, production.

#### COM 250. Communicating for an Entrepreneurial Mindset. (3 h)

Exploration of communication in today's workplaces and the expectations for leaders and employees to communicate "entrepreneurially." Focus on communication across settings where teamwork is prioritized. Also listed as ENT 250.

#### COM 262. Writing for Public Relations and Advertising. (3 h)

Principles and techniques of public relations and applied advertising. Students use case studies to develop public relations and advertising strategies. Also listed as JOU 350. P-COM 162. (D)

#### COM 270. Special Seminar. (1-3 h)

An examination of selected topics in communication.

#### COM 271. Sports Broadcasting. (3 h)

Learn about sportscasting through hands-on projects that involve writing, reporting, anchoring, play-by-play and hosting. Go behind the scenes with a diverse group of working sportscasters, who will show and tell what their jobs entail.

#### COM 280. Communication Internship I. (1.5-3 h)

Individual communication internships to be approved, supervised, and evaluated by an appropriate faculty adviser. Pass/Fail only. P-POI.

#### COM 282. Debate Practicum I. (1.5 h)

Individual projects in debate to be approved, supervised and evaluated by an appropriate faculty adviser. Pass/Fail only. P-POI.

#### COM 283. Debate Practicum II. (1.5 h)

Individual projects in debate to be approved, supervised and evaluated by an appropriate faculty adviser. Pass/Fail only. P-POI.

#### COM 284. Production Practicum I. (1.5 h)

Individual projects or collaborations with appropriate professionals in media production to be approved, supervised, and evaluated by a faculty advisor. Pass/Fail only. P-POI.

#### COM 285. Production Practicum II. (1.5 h)

Individual projects or collaborations with appropriate professionals in media production to be approved, supervised, and evaluated by a faculty advisor. Pass/Fail only. P-POI.

#### COM 286. Individual Study. (1-3 h)

Directed study in an area of interest to be approved and supervised by a faculty adviser. P-POI.

#### COM 287. Research Practicum I. (1.5 h)

Credit opportunities for students to collaborate with faculty on research projects. Awards credit to students assisting faculty with research initiatives led by the faculty. Projects may be short term, culminating in presentation or publication, or longitudinal, where the student participates in an on-going effort. Pass/Fail only. P-POI.

#### COM 288. Research Practicum II. (1.5 h)

Credit opportunities for students to collaborate with faculty on research projects. Awards credit to students assisting faculty with research initiatives led by the faculty. Projects may be short term, culminating in presentation or publication, or longitudinal, where the student participates in an on-going effort. Pass/Fail only. P-POI.

**COM 300. Ancient Persuasions: Rhetoric and Democracy in Greece and Rome. (3 h)**

A study of major writings in Greek and Roman rhetorical theory from the Sophists to Augustine.

**COM 301. Film Genre. (3 h)**

Explores the conventions and variations of film and media genres such as Science Fiction, Horror, Western, Anime, Epic, Noir, and others (content variable). Explores the history of the content in an international context from the beginning of the genre to the present. Film Genre may be repeated for credit as long as the genre type is different.

**COM 302. Argumentation Theory. (3 h)**

An examination of argumentation theory and criticism; examines both theoretical issues and social practices.

**COM 305. Communication and Ethics. (3 h)**

A study of the role of communication in ethical controversies.

**COM 307. The Prophetic Mode in American Public Discourse. (3 h)**

Investigates prophetism as a rhetorical act by examining Biblical forms of prophetic speech and investigating how these forms influence American public discourse.

**COM 308. Speechwriting. (3 h)**

Examines representative historic and contemporary speechwriting, including composition and delivery of ceremonial, legal, and political speeches. Builds practical knowledge through delivery, discussion, and interviews with professional speechwriters.

**COM 309. Visual Storytelling. (3 h)**

The course overviews digital media as well as studying the meaning of how visual images are used in our society. The course is designed to look at the changing landscape of visual storytelling.

**COM 310. Media Production II. (3 h)**

Students produce advanced media projects over which they assume significant creative control. P-COM 247.

**COM 311. Narrative Production. (3 h)**

From script to screen, covers theory and practice of digital cinema production by creating short fiction films with emphasis placed on storytelling and collaboration. Working solo and in groups, students develop their storytelling skills and gain experience with conceptualization, project development, camerawork, sound recording, and editing. P-COM 247.

**COM 312. Film History to 1945. (3 h)**

A survey of the developments of motion pictures to 1945. Includes lectures, readings, reports, and screenings.

**COM 313. Film History Since 1945. (3 h)**

A survey of the development of motion pictures from 1946 to the present day. Includes lectures, readings, reports, and screenings.

**COM 314. Media Effects. (3 h)**

Theory and research on the influence and effects of mass media on audiences. These include reception, cognitive processing, and attitudinal and behavioral influences.

**COM 315. Communication and Technology. (3 h)**

An exploration of how communication technologies influence the social, political, and organizational practices of everyday life.

**COM 316. Screenwriting. (3 h)**

Introduction to the art and practice of writing for the screen. Through numerous exercises, students learn to use experiences, observations, and imagination to create compelling characters and stories for a variety of mediums and complete an original, short screenplay.

**COM 317. Communication and Popular Culture. (3 h)**

Explores the relationship between contemporary media and popular culture from a cultural studies perspective using examples from media texts.

**COM 318. Culture and Sitcom. (3 h)**

Explores the intersection of American culture and the television situation comedy, one of the oldest and most ubiquitous forms of television programming.

**COM 319. Media Ethics. (3 h)**

Examines historical and contemporary ethical issues in the media professions within the context of selected major ethical theories while covering, among other areas, issues relevant to: journalism, advertising, public relations, filmmaking, and media management.

**COM 320. Media Theory and Criticism. (3 h)**

Critical study of media including a survey of major theoretical frameworks. P-COM 120.

**COM 323. Superheroes, Cinema, and American Mythology. (3 h)**

Examines the emergence of superhero films in American cinema as a representation and response to historical and ideological contexts.

**COM 324. Children and Media. (3 h)**

Investigates theory and research in media and child development in order to explore how children and adolescents process and are affected by electronic media from television to new media.

**COM 325. On Camera Performance. (3 h)**

Introduces the theory and practice of performing for the camera. Covers basic camera, commercial work, how-to videos, newscasting, and other performance formats.

**COM 326. Advanced Screenwriting. (3 h)**

An advanced approach to narrative theory as well as examination of the role of the screenwriter in the motion picture industry, the influence of film genre on screenwriting, and the politics of nontraditional narrative structures. Students are expected to complete an original, feature-length screenplay. P-COM 316.

**COM 327. Social Media Effects. (3 h)**

Explores how we use, make sense of and are affected by social media both intrapersonally and interpersonally. Traditional media and information processing theories are explored; recent research on social media effects is discussed.

**COM 329. The Arab-Israeli-Palestinian Conflict as a Communication Phenomenon. (3 h)**

Explores the evolution of the Arab-Israeli-Palestinian conflict as a communication phenomenon; focusing on the narratives of the parties to the conflict as viewed through the lens of extant communication-grounded conflict theory.

**COM 330. Communication and Conflict. (3 h)**

A review of the various theoretical perspectives on conflict and negotiation as well as methods for managing relational conflict.

**COM 331. Communication and Terrorism. (3 h)**

Examines domestic and international terrorism as grounded in extant communication theory, with emphasis on explicating the role that communication plays in current conceptualizations and responses to terrorism.

**COM 332. Sports, Culture, and Society. (3 h)**

Examines how sport media coverage frames our understanding of society's biggest social issues, including race, gender, and human rights and challenges students to find their voices on these issues through participatory exercises and production projects.

**COM 333. Business of Sports Media. (3 h)**

Examines the intersection of media content, production and business practices, and examines how the digital revolution is changing the game for content creators, leagues and teams.

**COM 334. Entrepreneurial Communities and Winston-Salem. (3 h)**

This course uses narrative theory to examine how myths, stories, and other tropes form the basis on which we understand entrepreneurs and entrepreneurship. Attention is given to diverse and alternative stories and practices. Students will collect and analyze entrepreneur narratives. Also listed as ENT 334.

**COM 335. Survey of Organizational Communication. (3 h)**

An overview of the role of communication in constituting and maintaining the pattern of activities that sustain the modern organization.

**COM 336. Organizational Rhetoric. (3 h)**

Explores the persuasive nature of organizational messages—dealing with risk, reputation, image, legitimacy and strategic communication—including those exchanged between organizational members and those presented in behalf of the organization as a whole.

**COM 337. Social Media Marketing in the Creative Arts. (3 h)**

Explores how social media is changing not just what content creators produce, but also how creators engage with their audience through the use of social media and marketing techniques.

**COM 338. African-American Rhetoric. (3 h)**

This course explores how African Americans have invented a public voice in the twentieth century. The course focuses on how artistic cultural expression, in particular, has shaped black public speech. (CD)

**COM 339. Practices of Citizenship. (3 h)**

Explores the history and theory of citizenship as a deliberative practice linked to the rhetorical tradition of communication with an emphasis on participatory and deliberative skills as part of the process in which communities are formed and citizens emerge as members.

**COM 340. Democracy, Slavery and Sex: Emancipation Discourse from the Founding to the Civil War. (3 h)**

Examines the influence of emancipation movements on American public discourse by reading and analyzing original speeches and documents with emphasis on abolition of slavery and woman's rights.

**COM 341. Class, Race, Sex and War: Emancipation Discourse from the Civil War to the Second Wave of Feminism. (3 h)**

Examines the influence of emancipation movements on American public discourse by reading and analyzing original speeches and documents. Among the movements addressed are labor, civil rights, student protest, and women's liberation.

**COM 342. Political Communication. (3 h)**

Study of electoral communication, including candidate and media influences on campaign speeches, debates, and advertising.

**COM 343. Presidential Rhetoric. (3 h)**

Examines theory and practice of speechmaking and mediated presidential communication.

**COM 344. Conspiracy Theories in American Public Discourse. (3 h)**

Study of the role of conspiracy discourse in American public discourse from the nation's founding through modern events.

**COM 345. Rhetoric of Science and Technology. (3 h)**

Examination of how scientific and technological discourses function rhetorically in public arenas to affect non-scientific publics' understanding.

**COM 346. Sport, Media, and Communication. (3 h)**

Examines the role of sport in society, cultural, and institutional practice. Surveys the value represented by interpersonal and mediated messages regarding key dimensions of sport including competition, ethics, gender, and race.

**COM 347. Rhetoric of the Law. (3 h)**

Examination of legal discourses including trial and appeal processes through motions to closing arguments.

**COM 348. Legal Theory, Practice, and Communication. (3 h)**

Introduces students to legal education, the legal system and legal analysis. (Co-taught by Law and Communication faculty - summer)

**COM 349. Advocacy, Debate and the Law. (3 h)**

Students develop and critique speeches, debates, trial practice and moot court across a variety of legal speaking venues. (Co-taught by Law and Communication Faculty - summer).

**COM 350. Intercultural Communication. (3 h)**

Introduction to the study of communication phenomena between individuals and groups with different cultural backgrounds. (CD)

**COM 351. Comparative Communication. (1.5, 3 h)**

A comparison of communicative and linguistic processes in one or more national cultures with those of the United States. Also listed as LIN 351 and INS 349. Credit not given for both COM 351A and INS 349. (CD)

**COM 351A. Comparative Communication: Japan. (1.5, 3 h)****COM 351B. Comparative Communication: Russia. (1.5, 3 h)****COM 351C. Comparative Communication: Great Britain. (1.5, 3 h)****COM 351D. Comparative Communications: Multiple Countries. (1.5, 3 h)****COM 351E. Comparative Communication: China. (1.5, 3 h)****COM 352. Interpersonal Seminar. (3 h)**

Advanced study of theories and research in one or more of the specialized concentrations of interpersonal communications.

**COM 353. Persuasion. (3 h)**

An examination of theories and research concerning the process of social influence in contemporary society.

**COM 354. International Communication. (3 h)**

An in-depth look at the role of mass media in shaping communication between and about cultures using examples from traditional and emerging media systems. (CD)

**COM 355. Survey of Health Communication. (3 h)**

An examination of theories, research, and processes of health communication in contemporary society.

**COM 356. Health Communication: Patient-Provider. (3 h)**

Explores contemporary issues related to communication in health care contexts, notably theories and research on patient-provider communication.

**COM 357. Health Communication Campaigns. (3 h)**

Examination of the principles behind designing, implementing, and evaluating a health campaign, including message design and application of media theories for behavior change.

**COM 358. Health Communication and Bioethics. (3 h)**

Examination of the problems of justice in health care and the meaning of human dignity in the face of illness and the technologies of treatment.

**COM 359. Diversity in the Media. (3 h)**

This course examines the role of media in the construction of social categories such as gender, race, class, and sexual orientation. The course presents a variety of perspectives that address diversity in relation to media, with an emphasis on entertainment media.

**COM 360. Communication and Cultures of India: Immersed in India. (3 h)**

Examines the different patterns of communication of the people of India through an immersive experience, a journey from the Himalayas to the oceans, studying the connections between the geography, history, and cultures of India.

**COM 361. Family Communication and Health across the Lifespan. (3 h)**

Investigates how family communication intersects with physical, psychological, and social health across the lifespan.

**COM 362. Advanced Campaigns. (3 h)**

Creation of fully integrated communication campaigns for major brands, from uncovering target audience insights to articulating brand strategy and key messaging, through development of the big campaign idea and activation plans for the market. Culminates with team presentation pitches to their "client" and is designed for Communication majors who have demonstrated interest in pursuing careers in marketing communication. P-COM 262 or JOU 350.

**COM 363. Communication and Consumer Behavior. (3 h)**

Focuses on understanding the psychology of consumer purchasing behavior and how marketing communications can influence that. Examines consumer motivations, influences, decision-making processes, and behaviors as they relate to the development of a marketing communications strategy. P-COM 162.

**COM 364. Narrative, Communication, and Health. (3 h)**

Combines theory and research in social science with narrative in multiple forms: film, visual art, memoir, short story, and poetry. Explores the power of story to transform human lives with an emphasis on health. Asks: What is narrative? How does narrative shape who we are? How does narrative inform our understanding and experience of wellness and illness? How does narrative influence health communication in our personal relationships? What role can narrative play in medical education, medical practice, and public health campaigns? Through careful study and reflection, students discover how story can create positive change on a personal, professional, and societal level.

**COM 365. Imagination Project. (3 h)**

The production of short films, digital study guides, or E-books and/or other types of multimedia materials on important social, political, cultural and economic issues. Opportunities for students to immerse themselves in a topic and interact with scholars from various disciplines (topics vary each year).

**COM 366. Rhetoric of the South. (3 h)**

This course analyzes the wide range of public discourse that constitutes the "South" and what it means to be "Southern." Students will engage in texts ranging from founding documents to secession speeches to music and even Southern food. The goal of the course is to come to a clearer understanding of where concepts of the South come from, how they circulate, and whether or not they have room for change.

**COM 370. Special Topics. (1-3 h)**

An examination of topics not covered in the regular curriculum.

**COM 371. Feminist Media Studies. (3 h)**

Employs critical and transnational approaches to media texts and the industry that produces them. Students will gain a deeper theoretical and critical understanding of media texts and how they both reflect and construct the human condition through reading, viewing, discussion, and writing.

**COM 372. Environmental Communication: Risk & Crisis. (3 h)**

Explores scholarship and practice of environmental risk and crisis communication for attitude and behavior change. Applies theory to strategic environmental risk and crisis communication plans for community organizations.

**COM 380. Great Teachers. (1-3 h)**

An intensive study of the ideas of three noted scholars and teachers in the field of communication. Students will interact with each teacher during a two- to three-day visit to Wake Forest.

## Faculty

**Chair** Steven M. Giles

**Associate Chair** Marina Krcmar

**Larry J. and LeeAnn E. Merlo Presidential Chair in Communication and Entrepreneurship and Associate Professor** Rebecca Gill

**Professors** Robert J. Atchison, Mary M. Dalton, Sandra Dickson, Michael David Hazen, Woodrow Hood, Marina Krcmar, Ananda Mitra, Randall G. Rogan

**Associate Professors** Steven M. Giles, John T. Llewellyn, Jennifer Johnson Priem, Alessandra Von Burg, Ron Von Burg, Eric Watts, Margaret D. Zulick

**Assistant Professor** Mollie Rose Canzona, Rowena Kirby-Straker

**Full Professor of the Practice** Justin Green (Head Debate Coach)

**Associate Teaching Professor** Katharine (Polly) A. Black, T. Nathaniel French

**Assistant Professors of the Practice** S. Cagney Gentry, Amber E. Kelsie (Associate Debate Coach)

**Assistant Teaching Professor** Rowena Rowie J.L. Kirby-Straker

**Visiting Assistant Professors** Thomas G. Southerland

**Manager of Communication/Media Laboratory** Ernest S. Jarrett

**Affiliated Teaching Professors** Peter Gilbert, Cara Pilson

**Adjunct Professor of the Practice (Bioethics)** Richard Robeson

## Communication, B.A.

Requires 30 hours, at least 12 of which must be at the 300-level.

All majors should begin their study of communication with these courses:

Code	Title	Hours
<b>Required Major Courses</b>		
COM 102 or COM 110	Debate and Advocacy Public Speaking	3
COM 220	Empirical Research in Communication	3
COM 225	Rhetorical Theory and Criticism	3

An overall minimum GPA of 2.0 in all communication courses attempted is required for graduation.

## Concentrations

The Department of Communication offers its majors the opportunity to concentrate (<https://bulletin.wfu.edu/undergraduate/departments-programs/communication/ba-communication/#concentrationtext>) in special areas of study. Communication majors may choose to



concentrate in Health, Environmental and Risk Communication; Integrated Communication Strategies; Media Studies; and Public Advocacy. Students may also opt to choose courses across the concentrations as a general communication major.

In addition to the major course requirements, COM 102 or COM 110, COM 220, and COM 225, students who want to declare a concentration must successfully complete four courses within their chosen concentration. Students may declare two concentrations within the department; however, they may not count a course used to meet the required four courses for one concentration to fulfill requirements for a second concentration. A list of courses approved to fulfill the concentrations in Health, Environment, and Risk Communication; Integrated Communication Strategies; Media Studies; and Public Advocacy is maintained by the Communication Department. Students declaring a concentration must do so prior to the beginning of their final semester.

## Study Abroad and Transfer Credit

Up to half of a student's total hours toward their communication degree can come from study abroad or transfer credits. Courses that do not significantly match COM courses in the academic bulletin may earn elective credit in COM (COM 500) or general University elective credit not applied to COM (COM 520). These courses do not satisfy the 300-level requirement. Transfer and study abroad courses must be approved by the Department prior to enrollment in those courses.

## Internship and Practicum

Internship and Practicum is open only to majors and minors who satisfy departmental requirements. For three hours of internship credit, students need a minimum of 120 on-site contact hours; applications for internship hours need to be approved by a faculty supervisor and the internship director, or the director of undergraduate studies. Only three internship credit hours can count towards a major or minor. Students may enroll in up to three hours of practicum in any semester (see course listings for practicum options). Practicum hours need to be approved by supervising faculty. In total, students can earn a maximum of six hours of practicum credit; however only three hours of these may be counted toward a major or minor in communication. All internship and practicum credits are graded pass/fail.

## Concentrations

### Communication Concentrations

#### The General Concentration

Some Communication majors may wish to focus their coursework on a particular area in the communication discipline. The five concentrations explained below provide a range of choices. However, it is important to note that It is entirely acceptable for communication majors to opt instead to pursue a general concentration. In this approach, students can sample widely and follow their own interests in selecting from departmental offerings while fulfilling the requirements of the major. Whether one selects a general concentration or one of the focal areas defined below, communication courses present a strong foundation for a Wake Forest liberal arts education.

#### Health, Environmental, and Risk Communication Concentration

The Health, Environmental, and Risk Communication Concentration (HERC) offers a course of study that investigates how communication

shapes health, environmental, and risk issues from a socio-ecological perspective. HERC classes explore the use of empirical, rhetorical, and critical/creative methods to build a more equitable, sustainable world. In these classes students investigate (1) intrapersonal processes of communication (beliefs, values, attitudes), (2) social influence factors like stigma, stereotyping, and group norms, (3) interpersonal/relational aspects ranging from family coping to patient-provider interactions, (4) public and mass media contexts such as public health crises, health/risk communication campaigns, community change programs, and integrated arts initiatives, and (5) societal discourses informing health and environmental policy. HERC concentration students have the option to obtain course credit by working with faculty and community advisers to complete community-based research, internships, and other forms of local civic engagement. Students who complete the HERC concentration will be better prepared for careers in healthcare practice, the helping professions, public health advocacy, medical and science journalism, federal agencies, and nonprofit health and environmental organizations.

Code	Title	Hours
<b>Select 4 courses from:</b>		
<i>Core Group (at least 3 courses from this group)</i>		
COM 270	Special Seminar (Community Narratives: Environmental Justice; Environmental Risk Communication)	1-3
COM 355	Survey of Health Communication	3
COM 356	Health Communication: Patient-Provider	3
COM 357	Health Communication Campaigns	3
COM 361	Family Communication and Health across the Lifespan	3
COM 364	Narrative, Communication, and Health	3
COM 370	Special Topics (Body Image and Communication; Health Communication in Developing Countries; Environmental Communication: Risk & Crisis)	1-3
<i>Electives</i>		
COM 113	Relational Communication	3
COM 270	Special Seminar (Intergroup Dialogues; Listening to Community Stories)	1-3
COM 315	Communication and Technology	3
COM 330	Communication and Conflict	3
COM 336	Organizational Rhetoric	3
COM 339	Practices of Citizenship	3
COM 345	Rhetoric of Science and Technology	3
COM 349	Advocacy, Debate and the Law	3
COM 350	Intercultural Communication	3
COM 353	Persuasion	3
COM 370	Special Topics ( Rotating Courses)	1-3
COM 380	Great Teachers (Rotates Among Concentrations)	1-3

#### Integrated Concentration Strategies Concentration

The Integrated Communication Strategies (ICS) concentration educates students about the integration of communications in both online and offline contexts including traditional forms of mass communication such as TV, radio, print, and public speaking as well as new forms such as websites, blogs and social media. The goal is to ensure that all messages emanating from an organization or social movement are coordinated and aligned across all contexts to strengthen and focus the communication.



The concentration is intended for those students wishing to pursue a career that involves positioning, defining or promoting organizations and their mission, services and products.

Code	Title	Hours
<b>Select 4 courses from:</b>		
COM 162	Introduction to Integrated Marketing Communications	3
COM 215	Broadcast Journalism	3
COM 245	Introduction to Mass Communication	3
COM 250	Communicating for an Entrepreneurial Mindset	3
COM 262	Writing for Public Relations and Advertising	3
COM 270	Special Seminar (Digital and Social Media Marketing; Sports Broadcasting)	1-3
COM 271	Sports Broadcasting	3
COM 305	Communication and Ethics	3
COM 308	Speechwriting	3
COM 309	Visual Storytelling	3
COM 315	Communication and Technology	3
COM 327	Social Media Effects	3
COM 334	Entrepreneurial Communities and Winston-Salem	3
COM 335	Survey of Organizational Communication	3
COM 336	Organizational Rhetoric	3
COM 342	Political Communication	3
COM 346	Sport, Media, and Communication	3
COM 350	Intercultural Communication	3
COM 353	Persuasion	3
COM 354	International Communication	3
COM 357	Health Communication Campaigns	3
COM 362	Advanced Campaigns	3
COM 363	Communication and Consumer Behavior	3

## Media Studies Concentration

The Media Studies concentration considers the production, interpretation, and theoretical analysis of communication that is (1) disseminated to a broad and largely anonymous audience and (2) mediated by the various technological devices that make such broad dissemination of the message possible. Production courses combine technical instruction in the use of the relevant tools with aesthetic instruction in how to use those tools most effectively. The study of the interpretation, criticism, and production of the moving image receives a special emphasis in our curriculum in a core of film studies courses. Practicum work and internship experience enhance the program to prepare students to begin a career in film and media or for further study as graduate students.

Code	Title	Hours
<b>Select 4 courses from:</b>		
COM 120	Introduction to Critical and Creative Media	3
COM 215	Broadcast Journalism	3
COM 245	Introduction to Mass Communication	3
COM 247	Media Production I	3
COM 250	Communicating for an Entrepreneurial Mindset	3
COM 262	Writing for Public Relations and Advertising	3

or JOU 355	Broadcast Journalism	
COM 270	Special Seminar (Soundtracks & Sound Design)	1-3
COM 271	Sports Broadcasting	3
COM 284	Production Practicum I	1.5
COM 285	Production Practicum II	1.5
COM 286	Individual Study	1-3
COM 287	Research Practicum I	1.5
COM 288	Research Practicum II	1.5
COM 301	Film Genre (Science Fiction Cinema; Horror Cinema; Sports and Cinema)	3
COM 305	Communication and Ethics	3
COM 310	Media Production II	3
COM 312	Film History to 1945	3
COM 313	Film History Since 1945	3
COM 314	Media Effects	3
COM 315	Communication and Technology	3
COM 316	Screenwriting	3
COM 317	Communication and Popular Culture	3
COM 318	Culture and Sitcom	3
COM 319	Media Ethics	3
COM 320	Media Theory and Criticism	3
COM 323	Superheroes, Cinema, and American Mythology	3
COM 324	Children and Media	3
COM 325	On Camera Performance	3
COM 326	Advanced Screenwriting	3
COM 327	Social Media Effects	3
COM 337	Social Media Marketing in the Creative Arts	3
COM 342	Political Communication	3
COM 346	Sport, Media, and Communication	3
COM 351	Comparative Communication	1.5,3
COM 354	International Communication	3
COM 370	Special Topics (Black Popular Culture; Black Athletes, Media, and Memory; Diversity in the Media; Documentary Production; International Cinema; Great Film Directors; Intro to Feminist Television Studies; Narrative Production)	1-3
COM 380	Great Teachers (Rotates Among Concentrations)	1-3

## Public Advocacy Concentration

In line with the Wake Forest University motto, *Pro Humanitate*, the Public Advocacy concentration combines public speaking, debate, rhetorical theory, and public address with a focus on direct engagement with the community. This concentration prepares students to serve as leaders, practicing what they learn in class and teaching, sharing, and collaborating with others both within and outside of Wake Forest. The Public Advocacy concentration provides students with the critical thinking and communication skills necessary to advance careers and causes in multiple settings: academic, legal, political, entrepreneurial, environmental, medical, and social.

Code	Title	Hours
<b>Select 4 courses from:</b>		
COM 262	Writing for Public Relations and Advertising	3
COM 270	Special Seminar (Rhetorics of Activism and Advocacy; Community Narratives: Environmental Justice; Peer Consulting in Oral Communication; Speaking & Listening for Understanding)	1-3
COM 282	Debate Practicum I	1.5
COM 283	Debate Practicum II	1.5
COM 300	Ancient Persuasions: Rhetoric and Democracy in Greece and Rome	3
COM 302	Argumentation Theory	3
COM 305	Communication and Ethics	3
COM 307	The Prophetic Mode in American Public Discourse	3
COM 308	Speechwriting	3
COM 317	Communication and Popular Culture	3
COM 334	Entrepreneurial Communities and Winston-Salem	3
COM 335	Survey of Organizational Communication	3
COM 336	Organizational Rhetoric	3
COM 338	African-American Rhetoric	3
COM 339	Practices of Citizenship	3
COM 340	Democracy, Slavery and Sex: Emancipation Discourse from the Founding to the Civil War	3
COM 341	Class, Race, Sex and War: Emancipation Discourse from the Civil War to the Second Wave of Feminism	3
COM 342	Political Communication	3
COM 344	Conspiracy Theories in American Public Discourse	3
COM 345	Rhetoric of Science and Technology	3
COM 346	Sport, Media, and Communication	3
COM 347	Rhetoric of the Law	3
COM 348	Legal Theory, Practice, and Communication	3
COM 349	Advocacy, Debate and the Law	3
COM 366	Rhetoric of the South	3
COM 370	Special Topics (Environmental Communication: Risk & Crisis; Music and the American Voice; Queer and Trans Rhetoric; Rhetoric of the South; Where Are You From?)	1-3
COM 380	Great Teachers (Rotates Among Concentrations)	1-3

## Honors

Highly qualified majors are invited by the department to apply for admission to the honors program in communication. Invitations are sent to eligible students in late fall of their senior year. To graduate with the designation "Honors in Communication," students must have a major GPA of 3.8 or above prior to entering their final semester, declare for honors by the week before the last add/drop date in their final semester, select a faculty advisor and work with that advisor to revise a paper or creative work adapted from an existing piece. The final version of a paper

or creative work must be submitted to the advisor and Undergraduate Committee for acceptance by the Committee. If accepted, the student must present the work at the award ceremony of the Department of Communication.

## Communication, Minor Requirements

The minor requires 18 hours.

Minors are encouraged to begin their study of communication with these courses:

Code	Title	Hours
<b>Required Courses</b>		
COM 102 or COM 110	Debate and Advocacy Public Speaking	3
COM 220 or COM 225	Empirical Research in Communication Rhetorical Theory and Criticism	3
12 elective credit hours at least six of which at the 300-level		

An overall minimum GPA of 2.0 in all communication courses attempted is required for graduation.

## Study Abroad and Transfer Credit

Up to half of a student's total hours toward their communication degree can come from study abroad or transfer credits. Courses that do not significantly match COM courses in the academic bulletin may earn elective credit in COM (COM 500) or general University elective credit not applied to COM (COM 520). These courses do not satisfy the 300-level requirement. Transfer and study abroad courses must be approved by the Department prior to enrollment in those courses.

## Internship and Practicum

Internship and Practicum is open only to majors and minors who satisfy departmental requirements. For three hours of internship credit, students need a minimum of 120 on-site contact hours; applications for internship hours need to be approved by a faculty supervisor and the internship director, or the director of undergraduate studies. Only three internship credit hours can count towards a major or minor. Students may enroll in up to three hours of practicum in any semester (see course listings for practicum options). Practicum hours need to be approved by supervising faculty. In total, students can earn a maximum of six hours of practicum credit; however only three hours of these may be counted toward a major or minor in communication. All internship and practicum credits are graded pass/fail.

## Critical and Creative Media, B.A. Requirements

A major in Critical and Creative Media requires a total of 33 hours. At least 5 classes must be at the 300-level.

Code	Title	Hours
<b>Required Courses</b>		
COM 102 or COM 110	Debate and Advocacy Public Speaking	3
COM 120	Introduction to Critical and Creative Media	3

COM 319	Media Ethics	3
COM 320	Media Theory and Criticism	3
<i>At least one production course</i>		3
COM 215	Broadcast Journalism	
COM 247	Media Production I	
COM 310	Media Production II	
COM 316	Screenwriting	
COM 365	Imagination Project	
<i>Four electives in Critical and Creative Media</i>		
COM 215	Broadcast Journalism	
COM 247	Media Production I	
COM 270	Special Seminar	
COM 280	Communication Internship I *	
COM 284	Production Practicum I *	
COM 285	Production Practicum II *	
COM 286	Individual Study *	
COM 301	Film Genre	
COM 316	Screenwriting	
COM 310	Media Production II	
COM 312	Film History to 1945	
COM 313	Film History Since 1945	
COM 318	Culture and Sitcom	
COM 323	Superheroes, Cinema, and American Mythology	
COM 365	Imagination Project	
COM 370	Special Topics	
Any 200 or 300 level COM course		3

\*

No student may take more than a total of 9 hours in internship, practicum, and individual study combined, and only 3 hours of internship, practicum, or individual study can count toward the major.

## Concentrations

### Film Studies Concentration

Film Studies concentration for Critical and Creative Media requires 18 hours.

Code	Title	Hours
<b>Required Courses</b>		
COM 120	Introduction to Critical and Creative Media	3
COM 312	Film History to 1945	3
COM 313	Film History Since 1945	3
COM 380	Great Teachers	3
<i>Two production courses</i>		6
COM 215	Broadcast Journalism	
COM 247	Media Production I	
COM 310	Media Production II	
COM 316	Screenwriting	
COM 365	Imagination Project	
<b>Total Hours</b>		<b>18</b>

## Honors

Highly qualified majors are invited to apply for admission to the honors program in Critical and Creative Media. To be graduated with the designation "Honors in Critical and Creative Media," students must have a major GPA of 3.8 or above prior to entering their final semester, declare for honors by the week before the last add/drop date, select a paper or creative project to work on at an advanced level, secure a faculty member to advise the scholarly or creative project, and submit the final version of the project to the Honors Committee for acceptance.

## Marketing Communication, Minor

The minor requires 18 hours, of which up to 9 credit hours may be double counted between the COM Major and the MarCom Minor. All minors are required to take the following:

Code	Title	Hours
<b>Required Courses</b>		
COM 102 or COM 110	Debate and Advocacy Public Speaking	3
COM 162	Introduction to Integrated Marketing Communications	3
<i>Additional electives *</i>		12
COM 250	Communicating for an Entrepreneurial Mindset	
COM 262	Writing for Public Relations and Advertising	
COM 270	Special Seminar (Integrated Communication: Digital & Social Media Marketing)	
COM 280	Communication Internship I	
COM 309	Visual Storytelling	
COM 315	Communication and Technology	
COM 334	Entrepreneurial Communities and Winston-Salem	
COM 336	Organizational Rhetoric	
COM 346	Sport, Media, and Communication	
COM 353	Persuasion	
COM 354	International Communication	
COM 357	Health Communication Campaigns	
COM 362	Advanced Campaigns	
COM 363	Communication and Consumer Behavior	
COM 370	Special Topics (Social Media and Marketing)	
JOU 270 or JOU 278 or JOU 330	Introduction to Journalism News Literacy Podcasting	
<b>Total Hours</b>		<b>18</b>

\*

6 hours must be at the 300 level.

## Computer Science (CSC)

A minimum GPA of 2.0 in the computer science courses that comprise a major or minor in the department is required for graduation.

Students who are enrolled at Wake Forest University may not take courses in computer science at other institutions to satisfy divisional requirements.

Students with a special interest in multidisciplinary work should consider a program of study that combines computer science with another discipline through either a double major or a minor.

## Planning for a Major or Minor in Computer Science

Students do **not** need prior computer science experience to major in computer science. While not required, students interested in the major are encouraged to:

- take CSC 111 and MTH 117 in their freshman year. Students with AP scores of 4 or 5 may receive credit for CSC 111 and begin the computer science curriculum with CSC 112.
- take CSC 112 and CSC 201 as early as feasible. Completing these courses in the sophomore year provides the most flexibility in scheduling other required courses and electives. While not necessary, completing CSC 111, CSC 112, CSC 201, and MTH 117 by the end of the fall semester of the sophomore year provides the best flexibility, especially for the BS.
- consider taking another 200-level course in the sophomore year. Reviewing prerequisites for the 300-level electives may help in the decision regarding which 200-level courses to take early. For example, CSC 250 and CSC 251 are prerequisites for CSC 348.

To declare a major or minor in computer science, the student must have a minimum 2.0 GPA in computer science courses required for the major or minor including CSC 112.

## Transfer Credit

A maximum of 7 hours at the 200-level or above may be transferred toward the BA or BS in computer science, with a maximum of 3 hours at the 300 level. For the computer science minor, all computer science electives at 193-level and above must be taken at Wake Forest.

## Contact Information

Department of Computer Science (<http://college.wfu.edu/cs/>)  
Manchester Hall 233, Box 7311  
Phone 336-758-4982

## Programs Majors

- Computer Science, B.A.
- Computer Science, B.S.

## Minor

- Computer Science, Minor

## Courses

### Computer Science (CSC)

#### CSC 101. Overview of Computer Science. (3 h)

An introduction to fundamental principles of computer science including abstraction, data and information, the World Wide Web, algorithms, programs, creative computer use, and the global impact of computing. Students cultivate their understanding by working with data, logically solving problems individually and collaboratively, and writing simple computer programs. May not be counted towards the computer science major or minor. (D)

#### CSC 102. Problem Solving with Python. (3 h)

An introduction to fundamental principles of computer science including abstraction, data and information, algorithm development, and computer programming. Students apply computational problem solving skills to representative problems from a range of domains using the Python programming language. Appropriate for students who want computing experience applicable to other disciplines. May not be counted towards the computer science major or minor. (D)

#### CSC 111. Introduction to Computer Science. (4 h)

Introduction to computer programming and algorithmic problem solving in an object-oriented programming language. Topics include basic control structures, methods, parameters, objects, classes, arrays, and program testing and debugging. Recommended as the first course for students considering a major or minor in computer science. (D)

#### CSC 112. Fundamentals of Computer Science. (4 h)

A study of algorithm development and problem solving using top-down design, data abstraction, object-oriented programming, and program debugging and testing. Topics include memory allocation, recursion, data structures such as arrays, lists, stacks, queues, and trees, simple sorting and searching algorithms, and algorithm complexity. P-CSC 111 or POI. (D)

#### CSC 165. Problem Solving Seminar. (1 h)

A weekly seminar designed for students to develop their problem solving skills designing and implementing software. Does not count towards the computer science major or minor. May be taken twice. Pass/Fail. P-CSC 112 or POI.

#### CSC 181. Introduction to Computer Science Research. (3 h)

Introduction to concepts, conventions, and techniques used in computer science research. Students will learn research methods, evaluation of data, the presentation and dissemination of results, and research ethics within the context of computer science. Students interested in the Honors in Computer Science program are encouraged to take this course. Does not count towards the computer science major or minor. P-CSC 201 or POI.

#### CSC 191. Special Topics. (1-3 h)

Topics in computer science that are not covered in regular courses or that give special practice in skills used in other courses. Not to be counted toward the bachelor of science in computer science. May be repeated for up to 6 hours if the topic changes.

#### CSC 192. STEM Incubator. (1 h)

An engaging and relevant introduction to STEM (science, technology, engineering, and mathematics) through creative exploration, collaboration, and computational problem-solving. Pass/Fail. May be repeated once.

**CSC 192H. Honors STEM Incubator. (1 h)**

Leadership role in developing STEM (science, technology, engineering, and mathematics) ideas and applications through scientific exploration, creative collaboration, and computational problem-solving. For students with some programming experience. Pass/Fail. May be repeated once. P - POI.

**CSC 193. Independent Study. (1-3 h)**

A course of independent study directed by a faculty adviser, not to be counted toward the bachelor of science in computer science. May be repeated for up to 3 hours. Enrollment requires prearrangement with a computer science faculty member and departmental approval P-POI.

**CSC 201. Data Structures and Algorithms. (3 h)**

A study of fundamental data structures and the algorithms that act upon them. Data structure topics include the application, implementation, and complexity analysis of trees, hash tables, heaps, maps, sets, and graphs. Algorithmic topics include advanced sorting and searching methods and an introduction to divide-and-conquer and greedy techniques, graph algorithms, backtracking, and dynamic programming. P-CSC 112 and MTH 117. (D)

**CSC 211. Computer Organization. (4 h)**

Lecture and laboratory. Computer organization from the perspective of instructions, including the central processor, busses, input and output units, and memory units. A weekly two-hour laboratory covers combinational logic, loaders and linkers, assembly language, address computation, and other architecture-related functions. Lab-2 hours. P-CSC 111. (D)

**CSC 221. Data Structures and Algorithms I. (3 h)**

Analysis, implementation, and application of abstract data structures such as lists, stacks, queues, trees, hash tables, heaps, and graphs. Complexity analysis of algorithms that operate upon these structures. P-CSC 112. P or C-MTH 117. (D)

**CSC 222. Data Structures and Algorithms II. (3 h)**

Study of algorithms, algorithm design strategies, and the derivation of time complexity bounds. Case studies illustrate greedy algorithms, divide and conquer, backtracking, and dynamic programming techniques. An introduction to the classes P, NP, NP-complete, and Turing decidability is included. P-CSC 221 and MTH 111 or 112. (QR)

**CSC 231. Programming Languages. (3 h)**

Comparative study of programming language paradigms, including imperative languages, functional programming, logic programming, and object-oriented programming. Syntax, semantics, parsing, grammars, and issues in language design are covered. P-CSC 112 and MTH 117.

**CSC 241. Computer Systems. (4 h)**

Lecture and laboratory. Introduction to concepts of operating systems and networks including processor and memory management, concurrency, and protocol independent data communications. Lab-2 hours. P-CSC 112 and MTH 117.

**CSC 250. Computer Systems I. (4 h)**

Study of computer system mechanisms supporting program execution, with a focus on mapping programs to underlying hardware. Topics include data representation, assembly language, processor architecture, and the memory system, with an introduction to system-level programming. P-CSC 112 and MTH 117. (D)

**CSC 251. Computer Systems II. (3 h)**

Study of computer system mechanisms supporting program execution, with a focus on process and resource management. Topics include process control, virtual memory, concurrency, parallelism, file-based and network-based I/O, and additional coverage of system-level programming. P-CSC 250.

**CSC 301. Algorithm Design and Analysis. (3 h)**

A study of techniques for designing algorithms, analyzing their time and space complexity, and demonstrating their correctness. The algorithm design techniques include divide-and-conquer, greedy algorithms, dynamic programming, randomized algorithms, string processing algorithms, and parallel algorithms. The algorithm analysis includes computational models, best/average/worst case analysis, and computational complexity (including lower bounds and NP-completeness). P-CSC 201 and MTH 112. (QR)

**CSC 311. Computer Architecture. (3 h)**

An in-depth study of computer system and architecture design. Topics include processor design, memory hierarchy, external storage devices, interface design, and parallel architectures. P-CSC 211 or 250.

**CSC 321. Database Management Systems. (3 h)**

Introduction to database management systems. Topics include data independence, database models, query languages, security, integrity, and transactions. P-CSC 201 or 221.

**CSC 322. Data Management and Analytics. (3 h)**

Management, analysis, and visualization of large-scale data sets. Topics include key-value databases, distributed file systems, map-reduce techniques, similarity measures, link analysis, and clustering. P-CSC 321.

**CSC 331. Software Engineering. (3 h)**

Study of fundamental topics in software engineering including software processes, agile software development and project management, requirements engineering, system modeling, design patterns and implementation, and software testing. Students practice software engineering principles through team projects. P-CSC 201 or 221.

**CSC 332. Mobile and Pervasive Computing. (3 h)**

Study of the fundamental design concepts and software principles underlying mobile and pervasive computing, including mobile interface design, data management, mobile networks, location aware computing, and mobile security. Involves significant programming on modern mobile platforms. P-CSC 201 or 221.

**CSC 333. Principles of Translators for Compilers and Interpreters. (3 h)**

Study of techniques for translating high-level programming languages to a target language. Typical target languages include Java bytecode and assembly language. Topics include lexical analysis, parsing, intermediate representations, language semantics, code generation, and optimization. P-CSC 231 and either CSC 211 or 250.

**CSC 341. Operating Systems. (3 h)**

Study of the different modules that compose a modern operating system. In-depth study of concurrency, processor management, memory management, file management, and security. P-CSC 241 or 251.

**CSC 343. Internet Protocols. (3 h)**

Study of wide area connectivity through interconnection networks. Emphasis is placed on Internet architecture and protocols. Topics include addressing, routing, multicasting, quality of service, and network security. P-CSC 241 or 251.



**CSC 346. Parallel Computation. (3 h)**

Study of techniques for parallel and high performance computing. Topics include an overview of modern high-performance computer design, pipelining, concurrency, data dependency, shared memory, message passing, and graphics processors. Select parallel algorithms and methods for asymptotic scalability analysis are also presented. Assignments may include coding with OpenMP, MPI, and the CUDA library. P-CSC 201 or 221.

**CSC 347. GPU Programming. (3 h)**

An introduction to general purpose parallel program development on Graphics Processing Units (GPUs). Topics covered will include data parallelism, memory and data locality, parallel algorithm patterns and performance metrics, and application test studies. P-CSC 201 or 221 and MTH 121 or 205.

**CSC 348. Computer Security. (3 h)**

Introduction to computer security concepts and associated theory. Detailed coverage of the core concepts of access control, cryptography, trusted computing bases, digital signatures, authentication, network security, and secure architectures. Legal issues, security policies, risk management, certification and accreditation are covered in their supporting roles. Students will learn to analyze, design, and build secure systems of moderate complexity. P-CSC 241 or 251.

**CSC 352. Numerical Linear Algebra. (3 h)**

Numerical methods for solving matrix and related problems in science and engineering using a high-level matrix-oriented language such as MATLAB. Topics include systems of linear equations, least squares methods, and eigenvalue computations. Special emphasis given to applications. Also listed as MTH 326. P-MTH 112; and MTH 121 or 205. (D)

**CSC 355. Introduction to Numerical Methods. (3 h)**

Numerical computations on modern computer architectures; floating-point arithmetic and round-off error. Programming in a scientific/engineering language such as MATLAB, C, or FORTRAN. Algorithms and computer techniques for the solution of problems such as roots of functions, approximation, integration, systems of linear equations, and least squares methods. Also listed as MTH 355. P-MTH 112; and MTH 121 or 205. (D)

**CSC 361. Digital Media. (3 h)**

Study of the mathematics and algorithms underlying digital sounds, image, and video manipulation. Topics may include sampling and quantization, resolution, filters, transforms, data encoding and compression, multimedia file types and transmission, 3D printing, and digital media in multimedia and web programming. P-CSC 201 or 221 and MTH 111 or 112.

**CSC 363. Computer Graphics. (3 h)**

Study of software and hardware techniques in computer graphics. Topics include line and polygon drawing, hidden line and surface techniques, transformations, and ray tracing. P-CSC 201 or 221; and either MTH 121 or 205.

**CSC 365. Image Processing Fundamentals. (3 h)**

Study of the basic theory and algorithms for image enhancement, restoration, segmentation, and analysis. P-CSC 112; and MTH 121 or 205.

**CSC 371. Artificial Intelligence. (3 h)**

An overview of areas of study in artificial intelligence. Topics are chosen from among knowledge representation, formal logic, fuzzy logic, intelligent agents, expert systems, machine learning, robotics, and natural language processing. P-CSC 201 or 221.

**CSC 373. Data Mining. (3 h)**

An overview of data mining methods and algorithms for classification, association analysis, clustering, and anomaly detection. A major focus will be on the implementation of algorithms for and design and construction of solutions to data mining problems. Applications and ethical considerations of data mining in humanities, arts, and healthcare are discussed. P-CSC 201 or 221.

**CSC 374. Machine Learning. (3 h)**

An introduction to concepts and application of machine learning algorithms and techniques, focusing on supervised and unsupervised learning. Students learn the theoretical concepts behind several types of machine learning algorithms and gain practical experience applying them. Algorithms covered could include logistic regression, support vector machines, regularization, dimensional reduction, clustering, and neural networks. P-CSC 201 or 221, MTH 112 and MTH 121 or 205.

**CSC 375. Neural Networks and Deep Learning. (3 h)**

An introduction to concepts and applications of neural networks and deep learning, a branch of machine learning that uses additional layers of high-level representations of data to maximize performance on a given task. The topics covered may include basic neural networks, deep neural networks, and convolutional and recurrent neural networks. Students learn the theoretical concepts behind several types of neural network algorithms and gain practical experience applying them. P-CSC 201 or 221, MTH 112, and MTH 121 or 205.

**CSC 385. Bioinformatics. (3 h)**

Introduction to computational approaches essential to modern biological inquiry. Approaches may include large biological dataset analyses, sequence similarity and motif searches, and analysis of high-throughput genomic technologies. Emphasizes interdisciplinary interaction and communication. Also listed as BIO 385 and PHY 385. P-CSC 201 or 221 (and BIO 150, 150L, 160, and 160L if taken as BIO 385) or POI.

**CSC 387. Computational Systems Biology. (3 h)**

Introduction of concepts and development of skills for comprehension of systems biology problems, including both biological and computational aspects. Topics may include genome-wide transcriptomic analysis, protein interaction networks, large-scale proteomics experiments, and computational approaches for modeling, storing, and analyzing the resulting data sets. Emphasizes interdisciplinary interaction and communication. Also listed as BIO 387. P-CSC 201 or 221 (also requires BIO 150, 150L, 160, and 160L if taken as BIO 387) or POI.

**CSC 391. Selected Topics. (1-3 h)**

Topics in computer science that are not studied in regular courses or which further examine topics covered in regular courses. May be repeated if topic changes. P - any 200-level CSC course and POI.

**CSC 393. Individual Study. (1-3 h)**

Independent study directed by a faculty adviser. By prearrangement. No more than three hours may be counted toward a computer science major or minor. Enrollment requires prearrangement with a computer science faculty member and departmental approval. P-any 200-level CSC course and POI.

**CSC 399. Computer Science Mastery Exam. (0 h)**

Evaluation of student mastery of core topics in the computer science discipline through standardized testing. Taken during the senior year. Pass/Fail.

## Faculty

Chair William Turkett

Reynolds Professor of Computer Science and Mathematics (Emeritus)

Robert Plemmons

**Professors** Errin Fulp, V. Paúl Pauca, Peter Santiago  
**Professors Emeritus** Jennifer J. Burg, David John  
**Associate Professors** Grey Ballard, Daniel Cañas, Samuel Cho, William Turkett  
**Associate Professor Emeritus** Stan Thomas  
**Assistant Professors** Sarra Alqahtani, Minghan Chen, Aditya Devarakonda, Xueuyan (Michael) Han, Natalia Khuri, Fan Yang  
**Assistant Teaching Professor** William Cochran  
**Katherine and Dickerson Wright Presidential Chair in Computer Science and Entrepreneurship** Ron Doyle  
**Affiliate Professor** Jennifer Erway  
**Affiliate Associate Professor** James Pease  
**Affiliate Assistant Professor** Kyle Luthy  
**Adjunct Professors** Sean Anderson, Bruno Belkhit, Adam Carlson, Sami Khuri, Kelly Kuykendall, Rob Robless, Sarah Parsons, Cody Stevens

## Computer Science, B.A.

### Requirements

Requires a minimum of 30 hours in computer science and three courses in mathematics or statistics.

Code	Title	Hours
<b>Required Major Courses</b>		
CSC 111	Introduction to Computer Science	4
CSC 112	Fundamentals of Computer Science	4
CSC 201	Data Structures and Algorithms	3
CSC 250	Computer Systems I	4
CSC 251	Computer Systems II	3
CSC 399	Computer Science Mastery Exam	0
Select three hours at the 191-level or higher		3
Select three hours at the 200-level or higher		3
Select six hours at the 300-level or higher		6
<b>Co-Requirements</b>		
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	4
or MTH 205	Introduction to Linear Algebra and Differential Equations	
Select one of the following:		3-4
MTH 112	Calculus with Analytic Geometry II	
STA 111	Elementary Probability and Statistics	
STA 112	Introduction to Regression and Data Science	
Any statistics course approved by the Computer Science Department		

### Honors

Highly qualified majors are invited by the department chair to apply for admission to the Honors program. Students not invited may petition the department chair to enter the Honors program. To be graduated with a designation of “Honors in Computer Science,” students must satisfactorily complete a senior Honors report and graduate with a minimum GPA of 3.5 in the major and 3.0 in all college work. The Honors designation does not carry academic credit. Rather, it is intended as a special project that reflects the student’s ability to go above and beyond

the usual course work and carries significant prestige for graduation. The Honors designation appears on the student’s transcript.

## Computer Science, B.S.

### Requirements

Requires a minimum of 36 hours in computer science and three courses in mathematics.

Code	Title	Hours
<b>Required Major Courses</b>		
CSC 111	Introduction to Computer Science	4
CSC 112	Fundamentals of Computer Science	4
CSC 201	Data Structures and Algorithms	3
CSC 231	Programming Languages	3
CSC 250	Computer Systems I	4
CSC 251	Computer Systems II	3
CSC 301	Algorithm Design and Analysis	3
CSC 399	Computer Science Mastery Exam	0
Select at least 12 hours in computer science courses at the 300-level or higher		12
<b>Co-Requirements</b>		
MTH 112	Calculus with Analytic Geometry II	4
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	4
or MTH 205	Introduction to Linear Algebra and Differential Equations	

### Honors

Highly qualified majors are invited by the department chair to apply for admission to the Honors program. Students not invited may petition the department chair to enter the Honors program. To be graduated with a designation of “Honors in Computer Science,” students must satisfactorily complete a senior Honors report and graduate with a minimum GPA of 3.5 in the major and 3.0 in all college work. The Honors designation does not carry academic credit. Rather, it is intended as a special project that reflects the student’s ability to go above and beyond the usual course work and carries significant prestige for graduation. The Honors designation appears on the student’s transcript.

## Computer Science, Minor

Requires a minimum of 17 hours in computer science and MTH 117.

Code	Title	Hours
CSC 111	Introduction to Computer Science	4
CSC 112	Fundamentals of Computer Science	4
CSC 201	Data Structures and Algorithms	3
Select three hours at the 191-level or higher		3
Select three hours at the 300-level or higher		3
MTH 117	Discrete Mathematics	4

## Contemporary Global Studies (CGS)

Interdisciplinary Minor

The minor provides an opportunity to explore the various facets of an increasingly globalized world. It is designed to expose students to a variety of trans-regional themes on the one hand and particular knowledge of specific regions on the other. Building upon an approved study abroad experience, students are able to develop a broader understanding of the complex and interdependent global forces that shape our current world. The minor concludes with the capstone seminar (CGS 250) in which students in their senior year are given an opportunity to pull together many of the themes that they have studied in the relevant courses and explore a particular research topic in great detail through the writing of a major paper.

## Contact Information

Contemporary Global Studies (<https://global.wfu.edu/global-campus/international-minors/international-studies/>)

## Programs

### Minor

- Contemporary Global Studies, Minor

## Courses

### Contemporary Global Studies (CGS)

#### CGS 101. Overseas Study. (1-3 h)

Directed reading and/or field work as part of an approved overseas program under the supervision of a professor, instructor, or the program director/coordinator or the Center for Global Programs and Studies. P-POI.

#### CGS 105. City as Text. (1-3 h)

Introduction to the historical, cultural, and physical geography of the host city for Wake Forest study abroad programs. Participants travel throughout the city visiting plazas, neighborhoods, museums and other points of interest. Specific attention is given to areas of artistic, architectural, cultural, and historical significance. Students maintain journals and complete reflection papers. Only offered at Wake Forest study abroad locations.

#### CGS 120. Language and Culture Study. (1-3 h)

Provides communicative and cultural training to students studying on Wake Forest study abroad programs in locations where the languages of the host country is not currently taught at Wake Forest. Course intended to ensure students are not linguistically isolated while abroad; prepares students to interact with locals and increase their ability to reflect on the cross-cultural experience of living in the host country. Topics include explorations of language, culture, art, history, film, and current events. Only offered at Wake Forest study abroad locations.

#### CGS 130. Global Village Living and Learning Community. (1-3 h)

This interdisciplinary course is designed to create discussion around global issues and global citizenship for residents of the Global Village Living and Learning Community. Students are exposed to a variety of ways to view global citizenship through five global competencies - expression, engagement, discourse, inquiry, and connections. This class is designed to be taken twice, once in the Fall semester and once in Spring semester.

#### CGS 150. Preparing for Cross-Cultural Engagement Abroad. (1 h)

Introduces students to theoretically-based issues and skills needed for understanding and interacting with people in other cultures. Taken in the semester before the student studies abroad. Pass/Fail only. P-POI.

#### CGS 151. Cross-Cultural Engagement Abroad. (1 h)

Gives students the opportunity to apply knowledge and skills gained from CGS 150 to develop a better understanding of cultural variables such as value orientations, communication styles, and nonverbal communication. Taken while the student is abroad. Pass/Fail only. P-POI.

#### CGS 152. Cross-Cultural Engagement and Re-entry. (1 h)

Students reflect on their experience abroad and the cultural learning that occurred there. They also develop strategies for dealing with re-entry and applying the lessons learned now and in the future. Taken in the semester after the student has studied abroad. Pass/ Fail only. P-POI.

#### CGS 153. Intro US and Univ Culture. (1-3 h)

This course provides students with a better understanding of the framework and cultural milieu of life in the U.S. and at U.S. universities in order to help them make sense of the cultural differences they (will) encounter in academics, customs, politics, media, and sports, among others. Taken by international students prior to or during their first semester at Wake Forest. Pass/Fail only.

#### CGS 154. Community Based Global Learning. (0-3 h)

Focuses on understanding community based global service engagement in a global context. Students explore the history of service, charity, and ethical service around the world. Using case studies, students consider the role of volunteers as effective global change agents, causes of and barriers to success for global service providers, and the structure and operation of international nonprofit organizations. The course introduces students to theoretically-based issues and skills needed for understanding and interacting with people from cultures different from their own.

#### CGS 170. Special Topics. (0-3 h)

Topics that are not covered in other international studies courses. May be repeated for up to six hours if the topic changes.

#### CGS 228. Individual Study. (1-3 h)

Intensive research leading to the completion of an individual project conducted under the supervision of a faculty member. Students are responsible for initiating the project and securing permission of an appropriate faculty member. P-POI.

#### CGS 229. Internship in International Studies. (1-3 h)

Field work directly related to international issues in a public or private setting under the supervision of a faculty member. Related readings and an analytical paper are minimum requirements. Students are responsible for initiating the project and securing the permission of an appropriate instructor. P-POI.

#### CGS 250. Introduction to Contemporary Global Studies. (3 h)

An overview of key themes related to the study of international issues. Topics include but are not limited to migration, urbanization, economic development, trade, foreign aid, nationalism and identity, consumerism, gender and culture. (CD)

#### CGS 260. Seminar in Global Trade and Commerce Studies. (3 h)

Provides integrative knowledge in global trade and commerce. Focuses on understanding the global environment and the variety of issues associated with global trade and commerce.

#### CGS 363. Global Capitalism. (3 h)

An analysis of changing patterns of industrial organization, market, and labor relations, and institutional frameworks that have resulted from the growth of an integrated global capitalist economy. Also listed as SOC 363.

## Faculty

**Coordinator, Professor of Sociology and Contemporary Global Studies** Ian Taplin

**Research Associate Professor** Nelson Brunsting

**Research Assistant Professor** Patrick Bingham

## Contemporary Global Studies, Minor Requirements

Consists of a total of 18 hours which must include:

Code	Title	Hours
CGS 250	Introduction to Contemporary Global Studies *	3
Select 15 additional hours from approved International Courses including:		15
Three courses from Global Thematic Studies		
Two courses from Regional Studies		
Approved Study Abroad Program **		3

\*

*Must be taken in either the fall or spring semester of the senior year, and it must follow completion of the other aforementioned requirements.*

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*In which a minimum of three credits are earned. International students residing in the U.S. in a non-immigrant visa status are exempt from the study abroad requirement.*

No more than six of the 18 hours for the minor may be taken from a single discipline.

The current list of approved courses is available in the Center for Global Programs and Studies and on its website. Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this publication.

## Global Thematic Studies

Three courses (preferably selected from two categories). Categories include cultural studies (religion, music, and literature), socioeconomic studies, and geopolitical studies.

Code	Title	Hours
<b>Cultural Studies</b>		
ANT 336	Myth, Ritual and Symbolism	3
ANT 350	Language, Indigeneity and Globalization	3
ANT 355	Language and Culture	3
ANT 360	Anthropology of Global Health	3
ANT 383 & ANT 384	Field program in Cultural Anthropology and Field Program in Cultural Anthropology	6
ART 260	Classics of World Cinema	3
COM 350	Intercultural Communication	3
COM 351A	Comparative Communication: Japan	3
COM 354	International Communication	3

COM 370	Special Topics (when topic is Cross-Cultural Communication in Multinational Organizations)	3
ENG 358	Postcolonial Literature	3
ENG 359	Studies in Postcolonial Literature	3
FRH 216	Studies in French and Francophone Literature and Culture	3
FRH 370	Seminar in French and Francophone Studies	3
HMN 225	Literature, Travel, and Discovery	3
HMN 290	The Humanities through Film, Literature and Media	3
HST 256	The U.S and the World, 1763-1914	3
HST 257	The U.S and the World since 1914	3
HST 341	Africans in the Atlantic World, 1750-1815	3
HST 343	The Silk Roads	3
HST 384	Global Outlaws History since 1500	3
CGS 150 & CGS 151 & CGS 152	Preparing for Cross-Cultural Engagement Abroad and Cross-Cultural Engagement Abroad and Cross-Cultural Engagement and Re-entry (all 3 courses must be taken to count for the minor)	3
MSC 101	Introduction to the Music of World Cultures	3
PSY 357	Cross-Cultural Psychology	3
REL 305	Ethnography of Religion	3
REL 361	Topics in Buddhism	3
REL 362	Topics in Islam	3
REL 381	Zen Buddhism	3
SPA 347	Contemporary Theater in Spain and Spanish America	3
SPA 356	Transgressing Borders: Identity in Latin-American and U.S. Latino Cultures	3
THE 374	Contemporary World Drama	3
<b>Socio-economic Studies</b>		
ANT 337	Economic Anthropology	3
BEM 315	Managing in a Global Context	3
BEM 322	Global Marketing Strategy	3
BEM 391	Global Business Studies	3
ECN 351	International Trade	3
ECN 352	International Finance	3
ECN 358	Economic Growth and Development	3
FIN 234	International Finance	3
HST 350	World Economic History: Globalization, Wealth and Poverty, 1500-Present	3
CGS 260	Seminar in Global Trade and Commerce Studies	3
CGS 363	Global Capitalism	3
POL 239	State, Economy, and International Competitiveness	3
SOC 363	Global Capitalism	3
<b>Geopolitical Studies</b>		
EDU 271	Geography: The Human Environment	3
EDU 273	Geography: The Natural Environment	3

EDU 274	Environmental Geography	3
HST 309	European International Relations since World War I	3
HST 369	Modern Military History	3
POL 237	The Comparative Politics of Welfare States	3
POL 238	Comparative Economic and Political Development	3
POL 245	Ethnonationalism	3
POL 253	International Political Economy	3
POL 255	Terrorism and Political Violence	3
POL 256	International Security	3
POL 261	International Law	3
POL 262	International Organizations	3
POL 263	U.S. Foreign Policy in the Middle East	3
POL 264	Moral Dilemmas in International Politics	3
PHI 366	Global Justice	3
WGS 329	Politics of Gender and Sexuality: Cross-Cultural Perspectives	3

## Regional Studies

Two courses preferably selected from a single region. Regions include Africa, Asia, Europe, Latin America, and the Middle East.

Code	Title	Hours
<b>Africa</b>		
ENG 356	Literature of the Caribbean	3
HST 269	African History since 1850	3
HST 336	Gender and Power in African History	3
HST 340	Urban Africa	3
HST 341	Africans in the Atlantic World, 1750-1815	3
HST 378	Race, Memory, and Identity	3
POL 242	Topics in Comparative Politics	3
POL 252	Topics in International Politics	3
REL 339	Religion, Power, and Society in Modern Africa	3
<b>Asia</b>		
ANT 334	People and Cultures of South Asia	3
ART 204	South Asian Art and Architecture	3
EAL 271	Mass Culture in Modern China	3
EAL 272	Fiction and Film from Hong Kong, Taiwan, and Beyond	3
EAL 375	Senior Research Seminar	3
EAS 311	Special Topics in East Asian Studies	1-3
EAS 381	Independent Research in East Asian Studies	1-3
HST 245	Modern China since 1850	3
HST 247	Japan since 1600	3
HST 347	The Rise of Asian Economic Power since WWII	3
POL 241	Contemporary India	3
POL 246	Politics and Policies in South Asia	3
POL 248	Chinese Politics	3
REL 263	The Religions of Japan	3
REL 282	Religion and Culture in China	3

REL 361	Topics in Buddhism	3
REL 381	Zen Buddhism	3
REL 385	Topics in South Asian Religions	3
REL 386	Indian Epics	3
<b>Europe</b>		
ART 230	Spanish Art and Architecture	3
ART 235	Arts of London	3
ART 276	Austrian Art and Architecture	3
ECN 372	Selected Areas in Economics	1-3
ENG 362	Irish Literature in the Twentieth Century	3
ENG 368	Studies in Irish Literature	3
FRH 360	Cinema and Society	3
FRH 363	Trends in French and Francophone Poetry	3
FRH 364	French and Francophone Prose Fiction	3
FRH 365	French and Francophone Drama	3
GER 214	Masterpieces of Austrian Literature	3
GER 321	German Culture and Civilization II	3
GER 350	German-Jewish Literature and Culture	3
GER 381	German Literature from 1700-1815	3
GER 383	German Literature from 1815-1900	3
GER 385	German Literature from 1900 to Present	3
GES 331	Weimar Germany	3
GES 335	German Film	3
GES 337	Myth and National Identity Formation	3
GES 341	Austrian Literature in Translation	3
GES 390	German Women Writers	3
GES 397	Intellectual History of Weimar	3
HST 218	France since 1815	3
HST 220	Germany: Unification to Unification 1871 to 1990	3
HST 224	Great Britain since 1750	3
HST 225	History of Venice	3
HST 231	Russia and Soviet Union: 1865 to Present	3
HST 232	Introduction to Russian and East European Studies	3
HST 309	European International Relations since World War I	3
HST 318	Weimar Germany	3
HST 328	History of the English Common Law	3
HST 333	European Diplomacy 1848-1914	3
HST 389	The British Empire in the Middle East	3
HMN 228	Viennese Culture 1860-1914	3
IAS 325	Italian Neorealism in Films and Novels	3
ITA 324	Italian Regional Cultures	3
ITA 326	Comedy in Italian Cinema	3
ITA 327	Modern Italian Cinema	3
ITA 333	Italian Theatre	3
ITA 335	Italian Women Writers	3
ITA 336	Italian Women and the City	3
ITA 338	South in Contemporary Italy	3
POL 202	Political Structures of Present-day Spain	3
POL 231	Western European Politics	3
POL 232	Politics in Russia and Eastern Europe	3



POL 233	The Politics of Modern Germany	3
POL 234	United Kingdom Politics in a Global Age	3
POL 235	European Integration	3
RUS 210	Russians and Their World	3
RUS 341	Russian Literature in Translation	3
SPA 334	Voices of Modern Spain	3
SPA 342	From Colonial to Postcolonial Voices	3
SPA 346	Transatlantic Transitions: Postdictatorship in Spain and the Southern Cone	3
SPA 348	Contemporary Women Novelists and their Female Characters	3
SPA 349	Great Authors and Directors	1.5-3
SPA 351	Cinema and Society	3
<b>Latin America</b>		
BEM 322	Global Marketing Strategy	3
EDU 373	Comparative and International Education (offered in Spain)	3
HST 275	Modern Latin America	3
HST 284	Latin America's Colonial Past	3
HST 374	Protest and Rebellion in Latin America	3
LAS 210	Introduction to Latin-American and Latino Studies	3
LAS 220C	Afro-Cuban Cultural Expression	3
LAS 310	Special Topics in Latin American and Latino Studies	3
LAS 398	Individual Study	3
MSC 104	Music of Latin America	3
POL 236	Government and Politics in Latin America	3
POL 257	Politics of International Development	3
SPA 342	From Colonial to Postcolonial Voices	3
SPA 347	Contemporary Theater in Spain and Spanish America	3
SPA 355	Romantic Nationalism, Avant-garde Nihilism, and the Deconstruction of Utopia	3
SPA 356	Transgressing Borders: Identity in Latin-American and U.S. Latino Cultures	3
SPA 360	Contemporary Theatre	3
<b>Middle East</b>		
HST 388	Nation, Faith, and Gender in the Middle East	3
HST 389	The British Empire in the Middle East	3
POL 259	Palestine and the Arab-Israeli Conflict	3
POL 263	U.S. Foreign Policy in the Middle East	3
POL 274	Arab and Islamic Political Thought	3

## Counseling (CNS)

The Department of Counseling offers courses at the graduate and undergraduate levels.

The Health and Human Services minor allows students to learn basic concepts and skills applicable to allied helping fields that are identified as health and human services. The goal of health and human services work is to improve the quality of life for those who are served and facilitate positive changes for individuals and communities. Therefore this minor focuses on knowledge and abilities for the service professions such as

counseling, social work, medicine, dentistry, health policy, allied medical sciences, athletic training, physical therapy, and health promotion. Students supplement their major field of study by learning skills related to health and human services.

## Contact Information

Department of Counseling (<http://college.wfu.edu/counseling/>)  
 Carswell 216, Box 7406  
 Phone 336-758-6502

## Programs

- Health and Human Services, Minor

## Courses

### Counseling (CNS)

#### CNS 253. Peer Education. (2 h)

Investigation into the creation, implementation, and evaluation of a peer education program. Covers general peer education competencies including programming strategies, behavior change models, and assisting distressed peers.

#### CNS 334. Ethics in Health and Human Services. (3 h)

Investigation of the ethical parameters of health and human services work. Topics include least restrictive interventions, privacy, human dignity and compassionate service. NOHS standards will be studied.

#### CNS 335. Health and Human Services in a Diverse Society. (3 h)

Covers the range and characteristics of health and human services systems and organization, the populations served and their needs and the models for prevention, maintenance, intervention, rehabilitation and healthy functioning. (CD)

#### CNS 337. Skills in Human Services. (3 h)

Introduction to communication skills of listening, reflecting, questioning, and problem-solving. These skills will be examined and practiced using role play and simulations.

#### CNS 340. Professional Orientation to Health and Human Services. (3 h)

Provides an overview of health and human services including history, roles, organizational structures, ethics, standards, specializations, and credentialing. Public policy processes and contemporary issues are also considered.

#### CNS 342. Group Procedures. (3 h)

A conceptual exploration of the psychological dynamics and interpersonal communication of teams and systems including structure, leadership models, process and practice, stages of development, techniques, and ethical principles.

#### CNS 350. Wellness and Prevention. (3 h)

An investigation of holistic approaches to wellness and prevention; frameworks for increasing positive well-being through empirically supported, strength-based concepts; levels of prevention across applied health and human services settings.

#### CNS 352. Addiction. (3 h)

An exploration of the causes of addiction and pathways to recovery. Medical aspects of addiction and the impact of addiction on the brain and body, theories and models of addiction and recovery, and diagnosis and treatment of persons with substance abuse and co-occurring disorders are considered.

**CNS 353. College Student Development. (2 h)**

A course of study for resident advisors that provides the skills and knowledge necessary to work successfully with college students in a residence environment. Includes student development theory, coping with behavior problems, crisis management, mediating conflict, and other issues.

**CNS 364. Creative Arts in Counseling. (3 h)**

Examines the history, theories, processes and techniques of using the creative arts in counseling with clients throughout the lifespan. Attention is given to the visual and performing arts such as drawing, imagery, photography, cartooning, cinema, movement, dance, literature, drama and music. Juniors and Seniors only.

**CNS 396. Independent Study. (1-3 h)**

Independent study with faculty guidance. May be repeated for up to 6 credit hours. By prearrangement.

## Faculty

**Chair** Nathaniel N. Ivers

**Professors** Mark B. Scholl, José A. Villalba

**Associate Professors** Erin E. Binkley, Philip B. Clarke, Jamie E. Crockett, Seth C. Hayden, Nathaniel N. Ivers, David A. Johnson, Jennifer L. Rogers

**Assistant Professors** Donald R. Casares, Isabel C. Farrell, Michelle R. Ghoston, Jeremy R. Goshorn, Jasmine Graham, Amy Grybush, Michelle D. Mitchell

**Associate Teaching Professor** Tammy H. Cashwell, Allison M. Forti

**Assistant Teaching Professors** Cheyenne Carter, Nikki C. Elston, J. Robert Nations, George Stoupas

**Visiting Assistant Professor** Sarah A. Moore

**Clinical Program Manager** Carla H. Emerson

## Health and Human Services, Minor Requirements

Requires a minimum of 15 hours. Each course must be completed with a grade of C or better. Courses taken as pass/fail do not count toward the minor. Students intending to complete this minor should consult with the health and human services minor coordinator early in their sophomore year.

Code	Title	Hours
CNS 334	Ethics in Health and Human Services	3
CNS 335	Health and Human Services in a Diverse Society	3
CNS 337	Skills in Human Services	3
CNS 340	Professional Orientation to Health and Human Services	3
CNS 342	Group Procedures	3

## Cultural Heritage and Preservation Studies (CHP)

Interdisciplinary Minor

The Departments of Anthropology, Art, History, and Music offer an interdisciplinary minor in Cultural Heritage and Preservation Studies which gives students education and experience in the field of historic preservation and cultural heritage studies aimed at the protection and enhancement of archaeological, historical, and architectural resources.

The minor provides focused preparation for graduate study and/or employment in museums; preservation, conservation, and other cultural non-profit organizations; and public cultural agencies.

## Contact Information

Cultural Heritage & Preservation Studies (<http://college.wfu.edu/chp/>)

## Programs Minor

- Cultural Heritage & Preservation Studies, Minor

## Courses Cultural Heritage and Preservation Studies (CHP)

**CHP 200. Special Topics. (1-3 h)**

Cultural Heritage and Preservation Studies topics of special interest. Topic varies with instructor. May be repeated for credit.

**CHP 300. Internship. (1-3 h)**

Internship in the community that involves both hands-on experience and academic study in the broad field of cultural heritage and preservation studies. To be arranged in advance with the program coordinator. P - POI.

## Faculty

**Director**

Dr. Lisa Blee, Associate Professor of History

**Core Faculty**

Dr. Chanchal Dadlani, Associate Professor of Art History

Dr. Morna O'Neill - Professor of Art History

Dr. Elizabeth Clendinning - Associate Professor of Music

**Affiliated Faculty**

Dr. Merih Danali - Assistant Professor of Art

Dr. Andrew Gurstelle - Associate Teaching Professor of Anthropology and Director of the Timothy S.Y. Lam Museum of Anthropology

Dr. Stephanie Koscak - Associate Professor of History

Dr. Jessica MacLellan - Assistant Professor of Anthropology

Dr. John Pickel - Associate Professor of Art

Dr. John Ruddiman - Associate Professor of History

Dr. Paul Thacker - Associate Professor of Anthropology

**Research Associate**

Dr. Terry Brock - Manager of Archaeology and Research, Wake Forest Historical Museum

## Cultural Heritage & Preservation Studies, Minor

## Requirements

The minor requires 18 hours distributed among at least three departments.

Code	Title	Hours
<b>Core Courses</b>		
Select three of the following required courses distributed across three departments:		9

ANT 112	Introduction to Archaeology	
ANT 190	Introduction to Museum Studies	
ART 105	History of Global Architecture	
ART 241	Ancient Art and Architecture	
ART 250	Artistic Exchanges in the Mediterranean, 500-1400	
HST 366	Historic Preservation and Conservation	
HST 367	Public History	
HST 372	Queer Public Histories	
MSC 101	Introduction to the Music of World Cultures	
Select a three hour internship or practicum course in one of the affiliated departments		3
Select the remaining six hours from the following:		6
Additional Core Courses		
Approved Elective Courses		

Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list (<http://chp.wfu.edu/classes-offered/>) of all approved elective courses. For course descriptions, see the relevant department's listings in this bulletin.

## Cultural Resource Preservation Electives

Code	Title	Hours
CHP 200	Special Topics (may be repeated for credit if topic changes)	1-3
ANT 305	Museum Anthropology	3
ANT 315	Artifact Analysis and Laboratory Methods in Archaeology	4
ANT 339	Culture and Nature: Introduction to Environmental Anthropology	3
ANT 370	Origins to Empires: The Archaeology of Africa and Eurasia	3
ANT 374	North American Archaeology	3
ANT 378	Conservation Archeology	1.5
ANT 381	Field Program in Anthropological Archaeology	3
ANT 382	Field Program in Anthropological Archaeology	3
ANT 385	Special Problems Seminar (subject to approval)	3
ART 203	Islamic Art and Architecture	3
ART 204	South Asian Art and Architecture	3
ART 206	Art and Empire: India and Europe, 1500-1900	3
ART 207	Building Empire: Early Modern Islamic Architecture	3
ART 208	Ottoman Art and Architecture	3
ART 240	Ancient American Art and Architecture	3
ART 244	Greek Art and Architecture	3
ART 245	Art and Architecture of the Roman World	3
ART 246	Byzantine Art and Architecture	3
ART 259	The History of Photography	3
ART 396	Art History Seminar (subject to approval)	4
HST 161	History Museums	1.5
HST 266	The History of the Slave South	3

HST 267	The Making of the Modern South since the Civil War	3
HST 302	Plants of Empire: Power and Pleasure	3
HST 323	Wives, Writers, and Witches: Women and Gender in Early Modern Europe, 1500-1800	3
HST 324	Fashion in the Eighteenth Century	3
HST 325	English Kings, Queens, and Spectacle	3
HST 361	A History of Hip Hop	3
HST 368	U.S. Environmental History	3
HST 370	Topics in North Carolina History (subject to approval)	3
MSC 105	Performing Arts of Asia	3
MSC 106	Performing Arts of Bali	3

## Internships Approved for Cultural Heritage & Preservation Studies Minors

Code	Title	Hours
CHP 300	Internship	1-3
ANT 391	Internship in Anthropology	1-3
ART 293	Practicum	3,4
HST 395	Internship in History	1-3

Students intending to minor in Cultural Heritage & Preservation Studies should consult the program coordinator. Equivalent courses must be approved by the program coordinator.

## East Asian Languages and Cultures (EAL)

The department offers courses of study leading to majors and minors in Chinese Language and Culture and Japanese Language and Culture respectively. Because of the number of prerequisite courses and the study abroad requirement for the majors, students are encouraged to start the major as early as possible. Requests for substitutions and exceptions to the stated curriculum should be made to the department chair. The requirements for completion of each degree program are those in effect in the bulletin year when the students declare the major or minor.

Code	Title	Hours
<b>Prerequisites</b>		
CHI 101 or JPN 101	First-year Chinese I First-year Japanese I	4
CHI 102 or JPN 102	First-year Chinese II First-year Japanese II	4
CHI 153 or JPN 153	Second-year Chinese I Second-year Japanese I	4
CHI 201 or JPN 201	Second-year Chinese II Second-year Japanese II	4

**Study abroad credit transfer.** Non-equivalent courses approved as CHI/JPN/EAL 500 will count toward the major or minor. Courses approved as CHI/JPN/EAL 520 will count as elective hours toward graduation only.

Chinese and Japanese courses at the 100-level may not be taken pass-fail. Any exception to the policy must arise from exceptional circumstances and must be approved by the Chair of the department.

## Contact Information

Department of East Asian Languages and Cultures (<https://ealc.wfu.edu>)  
Carswell Hall 022, Box 7457  
Phone 336-758-4817

## Programs

### Majors

- Chinese Language and Culture, B.A.
- Japanese Language and Culture, B.A.

### Minors

- Chinese Language and Culture, Minor
- Japanese Language and Culture, Minor

## Courses

### East Asian Languages and Cultures (EAL; Taught in English)

#### EAL 219. Major Works of Japanese Literature I. (3 h)

Surveys major works of Japanese and Japanophone literatures from the late-19th century to the present with special attention to their cultural and socio-historical contexts. (CD, D)

#### EAL 220. Major Works of Japanese Literature II. (3 h)

Surveys major works of premodern and early modern Japanese literature in the major genres (mythology, fiction, poetry, travelogues, diaries, and drama) with special attention to their cultural and socio-historical contexts. (CD, D)

#### EAL 221. Themes in Chinese Literature I. (3 h)

Examines selected themes in Chinese fiction, drama, and poetry with an emphasis on the modern and early modern periods. (CD, D)

#### EAL 222. Themes in Chinese Literature II. (3 h)

Examines selected themes in Chinese fiction, drama, and poetry with an emphasis on the early modern and pre-modern periods. (CD, D)

#### EAL 223. Traditional Chinese Literature. (3 h)

Surveys the history of the traditional Chinese fictional narrative across a variety of genres and forms such as the classical anecdote, folktale, vernacular story, dramas, and novel. (CD, D)

#### EAL 231. Experiments in Modern Chinese Literature and Visual Culture. (3 h)

Explores experiments in modern Chinese literature, photography, art, architecture and design. (CD)

#### EAL 241. Gender and Sexuality in Modern and Contemporary Japan. (3 h)

Explores representations, expressions, and ideologies of gender and sexuality in modern and contemporary Japanese culture through close examinations of literature, film, and visual culture. (CD)

#### EAL 252. Chinese Cinemas. (3 h)

Examines Chinese-language cinemas from mainland China, Hong Kong, and Taiwan, paying special attention to films' aesthetic responses to historical change, political upheaval, and social transformation. (CD)

#### EAL 253. Japanese Film: Themes and Methods. (3 h)

Explores themes, artistic visions, and techniques in a variety of film genres, from historical dramas to contemporary comedies and from realism to fantasy and science fiction. Special focus is given to the films' historical and political context. (CD)

#### EAL 270. Contemporary Japanese Culture. (3 h)

Selected topics in Japanese literature, pop culture, film, animation, and other forms. May be repeated for credit when topic differs. (CD)

#### EAL 271. Mass Culture in Modern China. (3 h)

Inquires into the manifestations of Chinese mass and popular culture in a variety of media forms (including newspapers, fiction, advertising, pop music, film, political propaganda, television and the internet) and traces the aesthetic, political, and affective impacts of cultural production on narratives of modern Chinese history and society. (CD)

#### EAL 272. Fiction and Film from Hong Kong, Taiwan, and Beyond. (3 h)

Explores the historical and critical formulation of the "Sinophone" through film and literature from Hong Kong, Taiwan, Southeast Asia, and the United States. This diversity of geographies, languages, and politics expands, complicates, and challenges received notions of Chinese culture. (CD)

#### EAL 273. Kung Fu China: Culture, Narrative, Globalization. (3 h)

Surveys narratives of Chinese martial arts in fiction, film, and culture from ancient origins to the present day. Explores the forces of physical combat alongside issues such as philosophy, politics, gender, technology, and globalization. (CD)

#### EAL 275. Survey of East Asian Cultures. (3 h)

Explores the cultural traditions of China, Japan and Korean in their historical, regional and global contexts. (CD)

#### EAL 279. Korean Cinema: History, Gender, and Genre. (3 h)

Examines the history of Korean film and its political, historical, and aesthetic contexts. Pays special attention to the issues of gender, memory, technology, and the globalization of contemporary Korean popular culture.

#### EAL 285. Contemporary East Asian Cinema. (3 h)

Explores the cinematic landscape of contemporary East Asia. Focuses on recent works from auteur directors, genre film, and blockbusters. (CD)

#### EAL 290. Special Topics. (3 h)

Selected themes and approaches to East Asian literature, drama, culture, and film. Specific topics decided by faculty prior to the term the course is offered. May be repeated for credit. P-POI.

#### EAL 299. Individual Study. (1-3 h)

P-POI.

#### EAL 303. Field Research Preparation. (1 h)

Development of target language (Chinese or Japanese) field research materials and preparation for field research practicum in China, Japan, or Taiwan. P-POI.

#### EAL 304. Field Research Practicum. (2 h)

Use of target language research materials in field research project in China, Japan, or Taiwan to investigate aspects of culture and belief systems and to apply specific disciplinary frameworks. Not offered at the Wake Forest campus. P-POI.

#### EAL 375. Senior Research Seminar. (3 h)

Provides a critical and practical foundation for developing students' capstone research projects in the field of East Asian cultural studies.

#### EAL 376. Honors Thesis. (3 h)

Directed research for the honors thesis. P-EAL 375 and POI.

## Chinese (CHI)

### CHI 101. First-year Chinese I. (4 h)

Two-semester sequence designed to develop students' elementary Chinese communication skills in simple daily life contexts. Reading, writing, listening, and speaking are given equal weight, with emphasis on listening and speaking skills in class.

### CHI 102. First-year Chinese II. (4 h)

Two-semester sequence designed to develop students' elementary Chinese communication skills in simple daily life contexts. Reading, writing, listening, and speaking are given equal weight, with emphasis on listening and speaking skills in class. P-CHI 101 or equivalent.

### CHI 153. Second-year Chinese I. (4 h)

Two-semester sequence designed to develop students' Chinese communication skills in a wide range of daily life contexts, including some work scenarios. Students will gain a basic appreciation of cultural differences. P - CHI 102 or equivalent.

### CHI 201. Second-year Chinese II. (4 h)

Two-semester sequence designed to develop students' Chinese communication skills in a wide range of daily life contexts, including some work scenarios. Students will gain a basic appreciation of cultural differences. P - CHI 153 or equivalent.

### CHI 220. Third-year Chinese I. (4 h)

Two-semester sequence designed to enhance students' Chinese communication skills, with emphasis on accuracy and fluency on various topics at more abstract levels. Students will deepen their understanding of cultural differences. P - CHI 201.

### CHI 230. Third-year Chinese II. (4 h)

Two-semester sequence designed to enhance students' Chinese communication skills, with emphasis on accuracy and fluency on various topics at more abstract levels. Students will deepen their understanding of cultural differences. P - CHI 220 or POI.

### CHI 231. Fourth-year Chinese. (3 h)

Continuation of CHI 230, with emphasis on comprehending and producing more complex and sophisticated Chinese. Students will develop an advanced understanding of cultural differences. P - CHI 230 or POI.

### CHI 255. Business Chinese. (3 h)

Communicating in Mandarin Chinese for business purposes. This course will prepare students to start a job search and build partnerships in Chinese-speaking areas, with emphasis on developing advanced intercultural communicative capability. P-CHI 230 or POI.

### CHI 291. Special Topics in Chinese. (3 h)

Develops students' confidence and skills in handling topical issues in Chinese society and culture using authentic materials. Designed for students who have completed CHI 231 at Wake Forest and/or through study abroad. P-CHI 231 or POI.

### CHI 296. Chinese across the Curriculum. (1 h)

Coursework in Chinese completed as an adjunct to specially-designated courses throughout the college curriculum. P-POI.

### CHI 299. Individual Study. (1-3 h)

P-POI.

### CHI 351. Classical Chinese. (3 h)

Teaches vocabulary and syntax of the written Chinese language prior to the 20th century, including readings from Chinese philosophy, historiography, poetry, and traditional tales. P-POI.

## Japanese (JPN)

### JPN 101. First-year Japanese I. (4 h)

Two-semester sequence designed to develop students' elementary Japanese communication skills in simple daily life contexts. Focuses on developing proficiency in listening, speaking, reading, and writing.

### JPN 102. First-year Japanese II. (4 h)

Two-semester sequence designed to develop students' elementary Japanese communication skills in simple daily life contexts. Focuses on developing proficiency in listening, speaking, reading, and writing. P-JPN 101 or equivalent.

### JPN 153. Second-year Japanese I. (4 h)

Two-semester sequence at the intermediate level. Continues to focus on developing proficiency in listening, speaking, reading, and writing. Expands students' ability to communicate in a wide range of daily life contexts with a broader range of vocabulary and grammar. P-JPN 102 or equivalent.

### JPN 201. Second-year Japanese II. (4 h)

Two-semester sequence at the intermediate level. Continues to focus on developing proficiency in listening, speaking, reading, and writing. Expands students' ability to communicate in a wide range of daily life contexts with a broader range of vocabulary and grammar. P-JPN 153 or equivalent.

### JPN 220. Third-year Japanese I. (4 h)

Two-semester sequence that enhances students' reading, speaking, writing, and listening skills by dealing with a variety of topics at an advanced linguistic level. Integrates conversation, discussion, and presentation with emphasis on written and multimedia sources. P-JPN 201 or POI.

### JPN 230. Third-year Japanese II. (4 h)

Two-semester sequence that enhances students' reading, speaking, writing, and listening skills by dealing with a variety of topics at an advanced linguistic level. Integrates conversation, discussion, and presentation with emphasis on written and multimedia sources. P-JPN 220 or equivalent.

### JPN 231. Fourth-year Japanese. (3 h)

Two-semester sequence that enhances students' reading, speaking, writing, and listening skills by dealing with a variety of topics at an advanced linguistic level. Integrates conversation, discussion, and presentation with emphasis on written and multimedia sources. P-JPN 230 or equivalent.

### JPN 250. Introduction to Literature Written in Japanese. (1-3 h)

Develops students' productive skills at the discursive and rhetorical levels using authentic materials. Designed for students who have completed the cycle of Japanese courses at Wake Forest and/or through study abroad. P-JPN 231 or POI.

### JPN 290. Japanese Abroad. (3 h)

Coursework in Japanese taken abroad. Not offered at the Wake Forest campus. May be repeated for credit with POI.

### JPN 291. Special Topics in Japanese. (3 h)

Develops students' confidence and skills in handling topical issues in Japanese society and culture using authentic materials. P-JPN 230 or POI.

### JPN 296. Japanese across the Curriculum. (1 h)

Coursework in Japanese done as an adjunct to specially-designated courses throughout the college curriculum. P-POI.



**JPN 299. Individual Study. (1-3 h)**  
P-POI.

## Faculty

**Chair** Andy Rodekohr

**Associate Professor** Andy Rodekohr, Yaohua Shi, Qiaona Yu

**Assistant Professor** Mari Ishida

**Professor of the Practice** Yasuko T. Rallings

**Assistant Teaching Professor** Ziyi Geng, Kanako Yao

## Chinese Language and Culture, B.A.

### Requirements

Requires 29 hours including four advanced language courses beyond CHI 201. Study abroad in China or Taiwan is also required.\*

Code	Title	Hours
<b>Required Major Courses</b>		
CHI 220	Third-year Chinese I	4
CHI 230	Third-year Chinese II	4
CHI 231	Fourth-year Chinese	3
CHI 255	Business Chinese	3
or CHI 291	Special Topics in Chinese	
EAL 375	Senior Research Seminar	3
Select one elective in Chinese history, religion, or politics:		3
HST 244	Pre-Modern China to 1850	
HST 245	Modern China since 1850	
HST 344	Early Modernity in China	
HST 352	Ten Years of Madness: The Chinese Cultural Revolution, 1966 to 1976	
REL 282	Religion and Culture in China	
POL 248	Chinese Politics	
Select two electives in Chinese literature, film and/or culture:		6
EAL 221	Themes in Chinese Literature I	
EAL 222	Themes in Chinese Literature II	
EAL 223	Traditional Chinese Literature	
EAL 231	Experiments in Modern Chinese Literature and Visual Culture	
EAL 252	Chinese Cinemas	
EAL 271	Mass Culture in Modern China	
EAL 272	Fiction and Film from Hong Kong, Taiwan, and Beyond	
EAL 273	Kung Fu China: Culture, Narrative, Globalization	
Select one elective in East Asian/Korean/Japanese literature, film, or culture:		3
EAL 219	Major Works of Japanese Literature I	
EAL 220	Major Works of Japanese Literature II	
EAL 241	Gender and Sexuality in Modern and Contemporary Japan	
EAL 253	Japanese Film: Themes and Methods	
EAL 270	Contemporary Japanese Culture	
EAL 275	Survey of East Asian Cultures	
EAL 279	Korean Cinema: History, Gender, and Genre	
EAL 285	Contemporary East Asian Cinema	

WGS 363	Gender and Sexuality in Contemporary Korea
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\*

*Under special circumstances, a student may substitute an approved intensive immersion program in the U.S. for the study abroad requirement.*

A minimum C average is required for all courses in the major.

## Honors

To graduate with the designation "Honors in Chinese Language and Culture," following completion of EAL 375, the student must enroll in EAL 376, submit an honors-quality research paper, successfully defend the paper in an oral examination, and earn an overall GPA of 3.0 with an average of 3.3 on work in courses taken as part of the major in Chinese. For additional information, students should consult their Chinese Language and Culture major advisor or the EAL 375 instructor.

## Japanese Language and Culture, B.A.

### Requirements

Requires 29 hours, including three advanced language courses beyond JPN 201.\* Study abroad in Japan is also required.\*\*

Code	Title	Hours
<b>Required Major Courses</b>		
JPN 220	Third-year Japanese I	4
JPN 230	Third-year Japanese II	4
JPN 231	Fourth-year Japanese *	3
or JPN 291	Special Topics in Japanese	
EAL 375	Senior Research Seminar	3
Select three electives in Japanese literature, film and/or culture: *		9
EAL 219	Major Works of Japanese Literature I	
EAL 220	Major Works of Japanese Literature II	
EAL 241	Gender and Sexuality in Modern and Contemporary Japan	
EAL 253	Japanese Film: Themes and Methods	
EAL 270	Contemporary Japanese Culture	
Select one of the following Japanese history and/or religion courses:		3
HST 246	Japan before 1600	
HST 247	Japan since 1600	
HST 347	The Rise of Asian Economic Power since WWII	
HST 348	Samurai and Geisha: Fact, Film, and Fiction	
REL 263	The Religions of Japan	
REL 381	Zen Buddhism	
Select one course in East Asian/Korean/Chinese literature, film, or culture:		3
EAL 221	Themes in Chinese Literature I	
EAL 222	Themes in Chinese Literature II	
EAL 223	Traditional Chinese Literature	
EAL 231	Experiments in Modern Chinese Literature and Visual Culture	
EAL 252	Chinese Cinemas	

EAL 271	Mass Culture in Modern China
EAL 272	Fiction and Film from Hong Kong, Taiwan, and Beyond
EAL 273	Kung Fu China: Culture, Narrative, Globalization
EAL 275	Survey of East Asian Cultures
EAL 279	Korean Cinema: History, Gender, and Genre
EAL 285	Contemporary East Asian Cinema
WGS 363	Gender and Sexuality in Contemporary Korea

\*

Students may take up to fourteen hours of Japanese language courses, three hours of which (either JPN 231 or JPN 291) may substitute as a Japanese literature, film, and culture elective.

\*\*

*Under special circumstances, a student may substitute an approved intensive immersion program in the U.S. for the study abroad requirement.*

A minimum C average is required for all courses in the major.

## Honors

To graduate with the distinction "Honors in Japanese Language and Culture," following the completion of EAL 375 the student must enroll in EAL 376, submit an honors-quality research paper, successfully defend the paper in an oral examination, and earn an overall GPA of 3.0 with an average of 3.3 on work in courses taken as part of the major in Japanese. For additional information, students should consult their Japanese Language and Culture major advisor or the EAL 375 instructor.

## Chinese Language and Culture, Minor Requirements

Requires fourteen hours, including two advanced language courses beyond CHI 201.

Code	Title	Hours
CHI 220	Third-year Chinese I	4
CHI 230	Third-year Chinese II	4
Select two electives in Chinese literature, film and/or culture of China:		6
EAL 221	Themes in Chinese Literature I	
EAL 222	Themes in Chinese Literature II	
EAL 223	Traditional Chinese Literature	
EAL 231	Experiments in Modern Chinese Literature and Visual Culture	
EAL 252	Chinese Cinemas	
EAL 271	Mass Culture in Modern China	
EAL 272	Fiction and Film from Hong Kong, Taiwan, and Beyond	
EAL 273	Kung Fu China: Culture, Narrative, Globalization	
Study abroad is highly recommended but not required		

A minimum C average is required for all courses in the minor.

## Japanese Language and Culture, Minor

### Requirements

Requires fourteen hours, including eight hours of advanced study in the language beyond JPN 201.

Code	Title	Hours
JPN 220	Third-year Japanese I	4
JPN 230	Third-year Japanese II	4
Select two electives in literature, film and/or culture of Japan:		6
EAL 219	Major Works of Japanese Literature I	
EAL 220	Major Works of Japanese Literature II	
EAL 241	Gender and Sexuality in Modern and Contemporary Japan	
EAL 253	Japanese Film: Themes and Methods	
EAL 270	Contemporary Japanese Culture	
EAL 285	Contemporary East Asian Cinema	
Study abroad is highly recommended but not required		

A minimum C average is required for all courses in the minor.

## East Asian Studies (EAS)

Interdisciplinary Minor

The East Asian Studies Minor provides an opportunity for students to undertake interdisciplinary study of the art, film, history, literature, music, philosophy, politics, religion, and culture of East Asia, including connections with Northeast, Central and Southeast Asia.

### Contact Information

East Asian Studies (<http://college.wfu.edu/eas/>)

## Programs Minor

- East Asian Studies, Minor

### Courses

#### EAS 311. Special Topics in East Asian Studies. (1-3 h)

An intensive survey of one or more important issues in East Asian studies not included in the regular course offerings. P-POI.

#### EAS 381. Independent Research in East Asian Studies. (1-3 h)

Supervised independent research project on a topic related to East Asia. May be repeated for credit. P-Permission of both instructor and coordinator of East Asian Studies.

## Faculty

**Coordinator, Associate Professor of History** Robert I. Hellyer

#### List of Affiliated Faculty

Wei-chin Lee, Professor, Politics and International Affairs

Stewart Carter, Professor, Music

Yaohua Shi, Associate Professor, East Asian Languages and Cultures

Qiong Zhang, Associate Professor, History

Andy Rodekohr, Associate Professor, East Asian Languages and Cultures

Mari Ishida, Assistant Professor, East Asian Languages and Cultures  
 Jieun Lee, Assistant Professor, Women's Gender and Sexuality Studies  
 Elizabeth Clendinning, Associate Professor, Music  
 Lina Benabdallah, Assistant Professor, Politics and International Affairs

## East Asian Studies, Minor Requirements

The minor consists of a total of 15 hours.

Code	Title	Hours
Select at least one course from three of the four following curriculum groupings:		
	Literature & Humanities Electives	
	Art, Music, Philosophy, and Study of Religions Electives	
	Social Sciences Electives	
	History Electives	

Nine or more of the hours towards the minor must focus on a geographical area—Japan, China, or Korea.

Appropriate credit in various fields of East Asian Studies also may be obtained by study abroad in programs approved by the coordinator. Interested students are encouraged, preferably in their sophomore year, to consult with the coordinator or an affiliated adviser to discuss their interests and structure a coherent course of study.

Courses may be chosen from among the list of approved courses. Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this bulletin.

## East Asian Studies Electives Group One: Literature & Humanities

Code	Title	Hours
EAL 219	Major Works of Japanese Literature I	3
EAL 220	Major Works of Japanese Literature II	3
EAL 221	Themes in Chinese Literature I	3
EAL 222	Themes in Chinese Literature II	3
EAL 223	Traditional Chinese Literature	3
EAL 231	Experiments in Modern Chinese Literature and Visual Culture	3
EAL 241	Gender and Sexuality in Modern and Contemporary Japan	3
EAL 252	Chinese Cinemas	3
EAL 253	Japanese Film: Themes and Methods	3
EAL 270	Contemporary Japanese Culture	3
EAL 271	Mass Culture in Modern China	3
EAL 272	Fiction and Film from Hong Kong, Taiwan, and Beyond	3
EAL 273	Kung Fu China: Culture, Narrative, Globalization	3
EAL 275	Survey of East Asian Cultures	3
EAL 279	Korean Cinema: History, Gender, and Genre	3
EAL 285	Contemporary East Asian Cinema	3

ENG 345	Studies in Fiction (when the topic is related to Asian-Americans)	3
HMN 219	Introduction to Japanese Literature	3

## East Asian Studies Electives Group Two: Art, Music, Philosophy, and Study of Religions

Code	Title	Hours
ART 104	Topics in World Art (when focus is East Asia)	3
MSC 105	Performing Arts of Asia	3
PHI 235	Main Streams of Chinese Philosophy	3
REL 104C	Introduction to East Asian Religions	3
REL 109	Introduction to Buddhist Traditions	3
REL 263	The Religions of Japan	3
REL 282	Religion and Culture in China	3
REL 329	Chinese Medicine	3
REL 349	Asian Meditation Practices	3
REL 361	Topics in Buddhism	3
REL 381	Zen Buddhism	3
REL 391	Topics in East Asian Religions	3

## East Asian Studies Electives Group Three: Social Sciences

Code	Title	Hours
COM 351A	Comparative Communication: Japan	1.5,3
COM 351E	Comparative Communication: China	1.5,3
POL 242	Topics in Comparative Politics (when topic is China-Africa Encounters)	3
POL 248	Chinese Politics	3
POL 260	United States and East Asia	3
WGS 363	Gender and Sexuality in Contemporary Korea	3

## East Asian Studies Electives Group Four: History

Code	Title	Hours
HST 109	Asia and the World	3
HST 244	Pre-Modern China to 1850	3
HST 245	Modern China since 1850	3
HST 246	Japan before 1600	3
HST 247	Japan since 1600	3
HST 343	The Silk Roads	3
HST 344	Early Modernity in China	3
HST 347	The Rise of Asian Economic Power since WWII	3
HST 348	Samurai and Geisha: Fact, Film, and Fiction	3
HST 352	Ten Years of Madness: The Chinese Cultural Revolution, 1966 to 1976	3

## Economics (ECN)

The objectives of the economics program are to help prepare students for effective participation in the decision-making processes of society, to develop analytical skills in solving economic problems, to promote a better understanding of alternative economic systems, and to provide a balanced curriculum to prepare students for graduate study or positions in industry and government. Any (3h) economics course satisfies a divisional requirement.

## Contact Information

Department of Economics (<http://college.wfu.edu/economics/>)  
Kirby Hall 225, Box 7505  
Phone 336-758-5334

## Programs Majors

- Economics, B.A.
- Mathematical Economics, B.S.

## Minor

- Economics, Minor

## Certificate

- Actuarial Science, Certificate

## Courses Economics (ECN)

### ECN 150. Introduction to Economics. (3 h)

A survey of micro and macroeconomic principles. Introduction to basic concepts, characteristic data and trends, and some analytic techniques. (D)

### ECN 205. Intermediate Microeconomics. (3 h)

Development of demand and supply analysis, neoclassical theory of household and firm behavior, and alternative market structures. P-ECN 150 and MTH 111 or 112. (D)

### ECN 207. Intermediate Macroeconomics. (3 h)

Development of macroeconomic concepts of national income, circular flow, income determination, causes of unemployment, IS-LM analysis, inflation, and growth models. Emphasizes contributions of Keynes and the Keynesian tradition. P-ECN 150 and MTH 111 or 112. (D)

### ECN 209. Applied Econometrics. (3 h)

An introduction to regression analysis methods used to estimate and test relationships among economic variables. Selected applications from microeconomics and macroeconomics are studied. Emphasis is on examining economic data, identifying when particular methods are appropriate and interpreting statistical results. P-ECN 150 and STA 111, (or similar course, including ANT 380; BIO 380; BEM 201; HES 262; SOC 271, or STA 311). (D, QR)

### ECN 210. Intermediate Mathematical Microeconomics. (3 h)

Mathematically intensive approach to demand and supply analysis, neoclassical theory of household and firm behavior, and alternative market structures. P - ECN 150 and MTH 112. (D)

### ECN 211. Intermediate Mathematical Macroeconomics. (3 h)

Mathematically intensive approach to macroeconomic analysis of national income, unemployment, inflation, and growth. P - ECN 150 and MTH 112. (D)

### ECN 215. Econometric Theory and Methods. (3 h)

Estimation and inference in relation to quantitative economic models. Methods covered include Ordinary Least Squares, Generalized Least Squares and Maximum Likelihood. P-ECN 150, STA 111 or MTH 357/STA 310, MTH 113 and MTH 121. (D, QR)

### ECN 240. Economics of Health and Medicine. (3 h)

Applications of the methods of economic analysis to the study of the health care industry. P-ECN 150 and an applied statistics course such as ANT 380, BIO 380, BEM 201, HES 262, PSY 311, SOC 271 or STA 111, or POI. (D)

### ECN 241. Environmental and Natural Resource Economics. (3 h)

Develops the economic theory of natural resource markets and explores public policy issues in natural resources and the environment. P-ECN 150 (D)

### ECN 242. Economics of Gender. (3 h)

Applications of the methods of microeconomic analysis to the study of gender and explores public policy issues in labor and care markets. P-ECN 150 or POI.

### ECN 261. American Economic Development. (3 h)

The application of economic theory to historical problems and issues in the American economy. P-ECN 150. (D)

### ECN 262. History of Economic Thought. (3 h)

Historical survey of the main developments in economic thought from the Biblical period to the 20th century. P-ECN 150. (D)

### ECN 270. Current Economic Issues. (3 h)

Examines current economic issues using economic theory and empirical evidence. Topics may include recent macroeconomic trends, the distribution of income, minimum wages, immigration, Social Security, war, climate change, trade, regulation and deregulation, antitrust policy, health care, labor unions, tax reform, educational reform, and others. P-ECN 150. (D)

### ECN 271. Selected Areas in Economics. (1-3 h)

Survey of an important area in economics not included in the regular course offerings. Students should consult the instructor to ascertain topic before enrolling. May be taken more than once for credit if topic differs. Additional pre-requisites may vary, check with department. P-ECN 150. (D)

### ECN 280. Economics Internship. (1 h)

Receive course credit in the form of an internship class in order to satisfy Curricular Practical Training (CPT) to be approved, supervised, and evaluated by an appropriate faculty advisor. International students must also meet a set of eligibility criteria for CPT. One hour of credit from Washington DC Internship (WDC 100) or Wake West Internship may be approved for ECN 280. Does not count towards the Economics B.A., the Mathematical Economics B.S., or the Economics Minor. Pass/Fail only. P-POI.

### ECN 291. College Fed Challenge I. (1.5 h)

Spring semester preparation course for the annual College Fed Challenge competition. The course will focus on understanding current macroeconomic events and theoretical economic models through the lens of monetary policy. P-POI.

**ECN 292. College Fed Challenge II. (1.5 h)**

Preparation for the annual fall College Fed Challenge competition. The course will focus on preparing a presentation on current economic conditions and a monetary policy recommendation for the competition. P-POI.

**ECN 306. Topics in Advanced Microeconomics. (3 h)**

More advanced theory of maximizing behavior of economic agents with discussion of risk, uncertainty, and economic dynamics. Theory employed in assessment of policy issues. P-ECN 205 or 210. (D)

**ECN 316. Game Theory. (3 h)**

An introduction to mathematical models of social and strategic interactions. P-ECN 205 or 210 and STA 111. (D)

**ECN 317. Market Design. (3 h)**

Theoretical analysis of the design of rules and algorithms to allocate scarce resources. Topics include matching markets, such as those for school choice, entry-level labor markets, and kidney exchanges; auctions with applications to the sale of natural resources, financial assets, and advertising; and online platforms. P-ECN 205 or 210. (D)

**ECN 318. Advanced Topics in Mathematical Economics. (3 h)**

Advanced mathematical techniques such as dynamic programming or lattice theory, and the applications of these techniques to optimization and equilibrium problems in various fields of economics such as growth theory, search theory, and auction theory. P-ECN 210, 211 and MTH 112. (D)

**ECN 319. Behavioral Economics. (3 h)**

This course analyzes ways of decision-making that deviate from the standard economic understanding of rational decision-making. The main focus is on behaviors that fall under the umbrella of prospect theory. P-ECN 205 or 210. (D)

**ECN 321. Public Finance. (3 h)**

An examination of the economic behavior of government. Includes reasons for and against government action, the appropriate response of governments in cases of market failures, and how private agents will respond to those government actions. P-ECN 209 or 215; and ECN 205 or 210.

**ECN 322. Money, Banking, & Financial Markets. (3 h)**

A study of the functions, structure, and performance of financial markets with a focus on monetary policy. P-ECN 207 or ECN 211. (D)

**ECN 324. Law and Economics. (3 h)**

An economic analysis of property, contracts, torts, criminal behavior, due process, and law enforcement. P-ECN 205 or 210. (D)

**ECN 326. Theory of Social Choice. (3 h)**

Development of Constitutional Economics in establishing rules for governmental and group decision-making by democratic means. Implications for various voting rules are considered in terms of both positive and normative criteria. P-ECN 205 or 210. (D)

**ECN 331. Economics of Industry. (3 h)**

Analysis of the link between market structure and market performance in United States industries from theoretical and empirical viewpoints. Examines the efficiency of mergers, cartels, and other firm behaviors. Case studies include automobiles, steel, agriculture, computers, sports, and telecommunications. P-ECN 205 or 210 and ECN 209 or 215.

**ECN 333. Economics in Sports. (3 h)**

Study of the design of sporting contests with particular attention paid to league governance decisions, measuring competitor productivity, and strategies used by competitors. P-ECN 205 or 210. (D)

**ECN 335. Economics of Labor Markets. (3 h)**

A theoretical and empirical survey of labor markets. Topics include: the demand and supply of labor, compensating wage differentials, education and training, discrimination, unions, public sector employment, earnings inequality, and unemployment. P-ECN 205 or 210. (D)

**ECN 336. Economics of Higher Education. (3 h)**

Applies economic theory and data analysis in an investigation of important current issues in higher education. Issues of prestige, admissions, financial aid, access, student and faculty quality, alumni giving and endowments, and externalities will be addressed. P-ECN 205 or 210 and ECN 209 or ECN 215.

**ECN 341. Economics of the Environment. (3 h)**

Introduces environmental economics both in theory and in practice. The efficiency of policy instruments to deal with market failures, non-market valuation methods, and estimation of climate change/pollution effects will be addressed. P-ECN 205 or 210; and ECN 209 or 215.

**ECN 345. Prediction Markets. (3 h)**

Prediction markets help make forecasts about upcoming events, and are used by large companies to manage risk. This course provides background on what these markets are, the theoretical reasons why they might work, and studies real world applications such as election forecasting. Students will participate and trade in a live prediction market throughout the semester. P-ECN 205 or 210; and ECN 209 or 215.

**ECN 351. International Trade. (3 h)**

Development of the theory of international trade patterns and prices and the effects of trade restrictions such as tariffs and quotas. P-ECN 205 or 210. (D)

**ECN 352. International Finance. (3 h)**

The study of the open macroeconomy, with a particular focus on the foreign exchange market and the history of the international monetary system. P-ECN 205 or 210 and ECN 207 or 211. (D)

**ECN 358. Economic Growth and Development. (3 h)**

A study of the problems of economic growth, with particular attention to the less developed countries of the world. P-ECN 205 or 210 or POI. (D)

**ECN 365. Economic Philosophers. (3 h)**

An in-depth study of the doctrines and influence of up to three major figures in economics, such as Smith, Marx, and Keynes. P-ECN 205 or 210 and ECN 207 or 211. (D)

**ECN 372. Selected Areas in Economics. (1-3 h)**

Survey of an important area in economics not included in the regular course offerings. Students should consult the instructor to ascertain topic before enrolling. May be taken more than once for credit if topic differs. Additional pre-requisites may vary, check with department. P-ECN 205 or ECN 210. (D)

**ECN 373. Selected Areas in Economics. (1-3 h)**

Survey of an important area in economics not included in the regular course offerings. Students should consult the instructor to ascertain topic before enrolling. May be taken more than once for credit if topic differs. Additional pre-requisites may vary, check with department. P-ECN 207 or ECN 211. (D)

**ECN 374. Topics in Macroeconomics. (3 h)**

Considers significant issues and debates in macroeconomic theory and policy. Examples might include a New Classical-New Keynesian debate, currency crises, conversion of federal deficit to surplus, competing models of economic growth, alternative monetary and fiscal policy targets. P-ECN 207 or 211. (D)



**ECN 375. Macroeconomic Models. (3 h)**

Development of formal macroeconomic models of both Keynesian and classical types. Involves exploration of comparative statics, dynamic analysis and policy assessment. P-ECN 207 or ECN 211. C or P- MTH 113 and MTH 121. (D)

**ECN 390. Individual Study. (1.5, 3 h)**

Directed readings in a specialized area of economics. P-POI.

**ECN 392. Public Choice. (3 h)**

Traditional tools of economic analysis are employed to explore such topics in political science as political organization, elections, coalition formation, the optimal provision of public goods, and the scope of government. P-ECN 209 or 215; and ECN 205 or 210. (D)

**ECN 398. Honors I. (1.5 h)**

Designed to assist students in selecting a research topic and beginning a research project on the selected topic. P-ECN 209 or 215 and POI.

**ECN 399. Honors II. (1.5 h)**

Completion of a senior research project. Required of candidates for departmental honors. P-ECN 398 and POD.

Faculty

**Chair** Amanda L. Griffith  
**Professor and Burchfield Presidential Chair of Political Economy**  
Koleman Strumpf  
**Professors** Frederick H. Chen, Amanda Griffith, Robert M. Whaples  
**Associate Professors** E. Mark Curtis, Christina M. Dalton, John T. Dalton, Tin Cheuk (Tommy) Leung, Erik K. Nesson  
**Assistant Professors** Aeimit Lakdawala, Leah K. Lakdawala, Brian Marein, Andre Mouton, Andreea Rotarescu, Chu (Alex) Yu  
**Associate Teaching Professors** John MacDonald, Todd McFall  
**Assistant Teaching Professor** Megan Regan  
**Visiting Assistant Professor** Estonia Black, Tabitha Knott

Economics, B.A.

Requirements

Prior to declaring the major, students must have minimum grade C or AP credit in ECN 150. The major in economics consists of 30 hours in economics\* including:

Code	Title	Hours
<b>Required Major Courses</b>		
ECN 150	Introduction to Economics **	3
ECN 205	Intermediate Microeconomics ***	3
or ECN 210	Intermediate Mathematical Microeconomics	
ECN 207	Intermediate Macroeconomics ***	3
or ECN 211	Intermediate Mathematical Macroeconomics	
ECN 209	Applied Econometrics ***	3
300-level courses		9
<b>Co-Requirements</b>		
The student must make a minimum grade of C- in the following:		
MTH 111	Calculus with Analytic Geometry I	4
STA 111	Elementary Probability and Statistics ****	4

\*  
Co-requisite hours are not counted towards these 30 hours in economics.

\*\*  
Students must receive a grade of C or higher in ECN 150 to enroll in ECN 205 or ECN 210, ECN 207 or ECN 211 and/or ECN 209.

\*\*\*  
A minimum grade of C- is required in ECN 205 or ECN 210, ECN 207 or ECN 211, and ECN 209. Additionally, only one of ECN 205 or ECN 210, and one of ECN 207 or ECN 211 can be counted towards the major.

\*\*\*\*  
Or similar course, including ANT 380, BIO 380, BEM 201, HES 262, SOC 271, or STA 311.

In addition, students must achieve an overall 2.0 average in economics courses.

Economics majors are encouraged to take complementary courses in mathematics, the humanities, or other social sciences to sharpen their analytical skills and to acquire a broader understanding of important issues. The faculty adviser will assist each student in determining the particular combination of courses that satisfies his or her needs.

Honors

Students who have a GPA of at least 3.0 overall and 3.3 in economics, and who complete the research course, ECN 399, will be considered by the department faculty for the graduation distinction “Honors in Economics.”

Mathematical Economics, B.S.

Requirements

The Department of Economics and the Department of Mathematics offer a joint major leading to a bachelor of science degree in mathematical economics. This interdisciplinary program offers the student an opportunity to apply mathematical methods to the development of economic theory, models, and quantitative analysis. The major has the following course requirements:

Code	Title	Hours
<b>Required Major Courses</b>		
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 121	Linear Algebra I	3
MTH 254	Optimization Theory	3
ECN 150	Introduction to Economics	3
ECN 210	Intermediate Mathematical Microeconomics	3
ECN 211	Intermediate Mathematical Macroeconomics	3
ECN 215	Econometric Theory and Methods	3
ECN 318	Advanced Topics in Mathematical Economics	3
Select one of the following:		3
MTH 354	Discrete Dynamical Systems	
ECN 316	Game Theory	
ECN 317	Market Design	
Select one of the following:		3
ECN 322	Money, Banking, & Financial Markets	

ECN 352	International Finance	
ECN 374	Topics in Macroeconomics	
ECN 375	Macroeconomic Models	
Two additional (3h) courses chosen with the approval of the program advisers		6

Students selecting the joint major must receive permission from both the Department of Mathematics and the Department of Economics.

Prior to declaring the major, students must have a minimum grade of B- or AP credit in ECN 150 and MTH 112 or else have permission from both the Department of Economics and Department of Mathematics. Graduation requirements include a grade of at least a C- in MTH 113, MTH 121, ECN 210 and ECN 211.

## Honors

Students who have a GPA of at least 3.0 overall and 3.3 in courses for the mathematical economics major and who complete the research course, ECN 399 or MTH 391 and MTH 392 with a minimum grade of B- will be considered by the faculty for the graduation distinction, "Honors in Mathematical Economics."

## Economics, Minor Requirements

Prior to declaring the minor, students must have minimum grade C or AP credit in ECN 150. Consists of 18 hours, including:

Code	Title	Hours
ECN 150	Introduction to Economics	3
ECN 205	Intermediate Microeconomics *	3
or ECN 210	Intermediate Mathematical Microeconomics	
ECN 207	Intermediate Macroeconomics *	3
or ECN 211	Intermediate Mathematical Macroeconomics	

\*

Only one of ECN 205 or ECN 210, and one of ECN 207 or ECN 211 can be counted towards the minor.

At least 9 hours must be taken at Wake Forest.

The mathematics and minimum grade requirements for the minor are the same as for the major.

## Certificate in Actuarial Science

Code	Title	Hours
ACC 111	Introductory Financial Accounting	3
ECN 150	Introduction to Economics	3
ECN 205	Intermediate Microeconomics	3
or ECN 210	Intermediate Mathematical Microeconomics	
ECN 207	Intermediate Macroeconomics	3
or ECN 211	Intermediate Mathematical Macroeconomics	
FIN 231	Principles of Finance	3
STA 310	Probability	3
STA 311	Statistical Inference	3

To declare the certificate in actuarial science, a student must receive at least a C or AP credit in each of ACC 111, ECN 150, and MTH 112. Upon

declaration, students will gain access to the pre-registration procedures in the relevant departments and in the School of Business.

Students are strongly encouraged to take Society of Actuaries (SOA) Exam P shortly after completing STA 310, and SOA Exam FM shortly after completing FIN 231. For more information on these exams, consult the SOA. Students are also strongly encouraged to seek an actuarial internship in the summer after their junior year.

Students can apply for Validation by Education Experience (VEE) credit with the SOA after passing at least two actuarial exams.

## Education (EDU)

Wake Forest University's Department of Education seeks to prepare future teachers, school leaders, and educational policy makers while informing students across disciplines for caring and effective service in classroom, school, community, nonprofit, and public policy positions. The Department of Education offers a major in Elementary Education and minors in Secondary Education and Schools, Education, and Society. The Department of Education also houses the university's College-to-Career Course Series, which provides students with an opportunity to explore personal attributes that influence future academic and professional decisions and to consider the factors that create a meaningful, fulfilling life after Wake Forest.

Wake Forest University believes that the teaching profession is important to society and that its welfare is significantly affected by the quality of educational leadership. One of the important objectives of the University has been and continues to be the preparation of teachers. The University's commitment to quality in teacher education is demonstrated by selective admission to the program, a wide range of professional courses, and closely supervised internships appropriate to the professional development of students. Wake Forest's teacher education program is proud to meet rigorous state and national standards for educator preparation, is fully accredited by the North Carolina Department of Public Instruction (NCDPI), and is a member in good standing of the Association for Advancing Quality in Educator Preparation.

Prospective elementary teachers earn a major in education. Prospective secondary teachers of English, mathematics, biology, chemistry, and physics major in that discipline and minor in education. Prospective secondary social studies teachers major in a social studies-related discipline (such as history, political science, economics, sociology, or anthropology), complete content requirements, and minor in education. In addition to the professional program, the department provides elective courses open to all students.

## Teacher Licensure

The state of North Carolina issues the Initial Class A Teacher's License to graduates who have completed an approved program including the specified courses in their teaching fields and the prescribed courses in education, who meet licensure requirements, and who receive recommendations from the designated officials in their teaching areas and from the licensure officer.

## Teacher Education Admission Requirements

Admission involves filing an official application with the department's licensure officer, being interviewed, and being officially approved by the

department. In addition, the state of North Carolina requires Teacher Education Program applicants to submit qualifying SAT, ACT, or Praxis core scores before being formally admitted.

All students are required to have a 2.7 or better GPA before being formally accepted to the Teacher Education Program. Formal acceptance into the program should take place by April 1 of the junior year for secondary students and by January 1 of the junior year for elementary students.

## Teacher Education Program Area Goals

The goals and objectives for each licensure area are available on the department website (<https://education.wfu.edu/>).

## Teacher Education Course Requirements

The approved program of teacher education requires candidates to complete successfully a series of professional education courses. The exact sequence of professional and academic courses varies with a student's particular program and is determined by the adviser in conference with the candidate.

## Student Teaching

Prerequisites for registering for student teaching include:

1. senior, graduate, or special student classification
2. completion of prerequisite courses
3. formal admission to the Teacher Education Program

Students are assigned to student-teaching opportunities by public school officials on the basis of available positions and the professional needs of the student and the public school system. One semester of the senior year is reserved for the student-teaching experience. Students may not take courses outside the education department during this semester without the approval of the department chair.

## College to Career Courses

EDU 120, EDU 220, EDU 320, EDU 360, and EDU 370 compose the five-course "College-to-Career" strand of courses.

Code	Title	Hours
EDU 120	Personal Framework for Career Exploration (recommended for first-year students in their second semester and sophomores)	1.5
EDU 220	Options in the World of Work (recommended for first-year students in their second semester and sophomores)	1.5
EDU 320	Strategic Job Search Processes (recommended for juniors and seniors)	1.5
EDU 360	Professional and Life Skills (open only to seniors)	1.5
EDU 370	Professional Experience in the Engaged Liberal Arts	3
EDU 299	Career Planning *	1.5

\*

EDU 299 is a survey course containing elements of EDU 120, EDU 220, and EDU 320. It is reserved for juniors and seniors who have not had an opportunity to take the recommended four-course strand.

## Contact Information

Department of Education (<https://education.wfu.edu/>)  
Tribble Hall B201, Box 7266  
Phone 336-758-5341

## Programs

### Major

- Elementary Education, B.A.

### Minors

- Schools, Education, and Society, Minor
- Secondary Education, Minor

## Courses

### Education (EDU)

#### EDU 101. Issues and Trends in Education. (3 h)

Educational issues and trends with a focus on K-12 schools and teachers. Focus will vary by instructor. Course can be repeated if topic differs. (D)

#### EDU 102L. Exploring School Communities. (2 h)

Field experience and seminar with a focus on K-12 schools in surrounding communities. Pass/Fail only.

#### EDU 103A. Preparing for Community Engagement. (1.5 h)

Prepares students to extend their education beyond the classroom setting. Includes a focus on community-engaged service, mentoring, tutoring, teaching, and learning. Pass/Fail only.

#### EDU 103B. Participating in Community Engagement. (1.5 h)

Allows students to learn more about and participate in community-engaged service as part of a tutoring/mentoring practicum experience. Course can be repeated if topic differs. Pass/Fail only. P-POI.

#### EDU 111. Special Topics. (1.5 h)

A survey of topics in education. Focus will vary by instructor.

#### EDU 120. Personal Framework for Career Exploration. (1.5 h)

First course in the College to Career series. Focuses on student self-assessment including personal attributes such as values, interests, personality/temperament, strengths, and beliefs. Begins the process of connecting student attributes with the exploration of options in the world of work. Open to all students, but designed especially for first- and second-year students. Students may not enroll in EDU 120 and EDU 299 in the same semester. Half semester.

#### EDU 201. Educational Policy and Practice. (3 h)

Philosophical, historical and sociological foundations of education, including analysis of contemporary accountability systems. (CD, D)

#### EDU 202. Field Experience One. (2 h)

Practical experiences in classrooms. Weekly public school experience and seminar. Pass/Fail only.

#### EDU 203. Methodology and Management Lab. (2 h)

Elementary education students observe classroom pedagogy and gain teaching experience in a diverse elementary school classroom through weekly observations and WFU seminars. Service Learning. Pass/Fail only. P - EDU 102L, or POI.

**EDU 204. Integrating Literacy, Technology and the Arts across the Elementary Curriculum. (2 h)**

Practical strategies for integrating literacy, technology and the arts in all areas of the elementary curriculum, including math, science, social studies and health. C-EDU 250.

**EDU 205A. Developing Literacy and Communication Skills in Elementary Schools, K-2. (2 h)**

Implementing research-based strategies for teaching and assessing reading, writing, listening and speaking in grades K-2. P-POI.

**EDU 205B. Developing Literacy and Communication Skills in Elementary Schools, Grades 3-6. (2 h)**

Implementing research-based strategies for teaching and assessing reading, writing, listening and speaking in grades 3-6. P-POI.

**EDU 206. Assessment for Positive Student Outcomes. (2 h)**

An exploration of K – 6 assessment models and strategies to support positive student outcomes. C-EDU 250.

**EDU 220. Options in the World of Work. (1.5 h)**

Second course in the College to Career series. Explores structure of the world of work, job functions and roles. Focus on nature and expectations of the world of work, including exploration of opportunities aligned with interests of students, and correlation between careers and education, career trajectories, graduate school, employment trends and the unique role work plays in creating meaning in the life of the individual. Open to all students, but designed for first and second year students. Students may not enroll in EDU 220 and EDU 299 in the same semester. Half semester.

**EDU 221. Children's Literature. (2 h)**

A survey of the types and uses of literature appropriate for elementary grades, including multicultural literature.

**EDU 222. Integrating the Arts and Movement into the Elementary Curriculum. (2 h)**

A survey of the materials, methods, and techniques of integrating the arts and physical development into the elementary curriculum. P-POI.

**EDU 223. Theatre in Education. (3 h)**

Practical experience for theatre and education students to work together with children in the classroom using theatre to teach core curriculum. Emphasis on methods and techniques as well as the development and implementation of creative lesson plans. Weekly public school teaching experience and seminar. Also listed as THE 270.

**EDU 231. Adolescent Literature. (3 h)**

A survey of literature that centers on the lives of adolescents and young adults. Attention is given to the reading and interpretation of classic and contemporary literature across genres.

**EDU 236. Creativity, Innovation, and Entrepreneurial Thinking in 21st Century Education. (2 h)**

Helps students recognize economic, business, and education changes brought about by increased globalization, the opportunities and challenges associated with globalization, and the need to develop human capacity for success in a global economy that values innovators and entrepreneurs. Designed for any student who is interested in exploring the intersections among the following major course topics: Creativity, Innovation, Entrepreneurial Spirit, Education and Globalization.

**EDU 250. Student Teaching: Elementary. (10 h)**

Supervised teaching experience in grades K-6. Full-time. Includes a weekly reflective seminar. Service Learning. Pass/Fail only. P- POI.

**EDU 271. Geography: The Human Environment. (3 h)**

A survey of the geography of human activity as it occurs throughout the world. Emphasis is placed on current problems related to population, resources, regional development, and urbanization. Credit not allowed for both EDU 271 and 274.

**EDU 272. Geography Study Tour. (3 h)**

A guided tour of selected areas to study physical, economic, and cultural environments and their influence on man. Background references for reading are suggested prior to the tour. Offered in the summer. (CD)

**EDU 273. Geography: The Natural Environment. (3 h)**

A systematic study of the major components of physical geography with special emphasis on climate and topography.

**EDU 274. Environmental Geography. (3 h)**

A systematic study of major environmental issues on a global scale with an exploration of implications and possible solutions. Credit not allowed for both EDU 274 and 271.

**EDU 281. Public Life and the Liberal Arts. (3 h)**

Devoted to topics of abiding significance. Fundamental dilemmas and resolutions associated with each topic will be examined through a consideration of their treatment in the liberal arts tradition. Politics and the Arts, and Theory and Practice in Public Life are representative topics.

**EDU 293. Professional Development Seminar: Elementary. (3 h)**

Seminar in which student teachers reflect on all aspects of the elementary school curriculum, including meeting the needs of diverse learners, lesson planning, best practices, classroom management and leadership. P-POI.

**EDU 294. Teaching Elementary Language Arts. (3 h)**

Methods and materials for teaching language arts, including adaptations for diverse and exceptional learners. P-POI.

**EDU 295. Teaching Elementary Social Studies. (3 h)**

Methods and materials for teaching social studies, including adaptations for diverse and exceptional learners. P-POI.

**EDU 296. Elementary Mathematics Methods: Inquiry Teaching and Learning. (3 h)**

Methods and materials for teaching elementary mathematics content, including adaptations for diverse and exceptional learners. P-POI.

**EDU 298. Elementary Science Methods: Inquiry Teaching and Learning. (3 h)**

Methods and materials for teaching elementary science content, including adaptations for diverse and exceptional learners. P-POI.

**EDU 299. Career Planning. (1.5 h)**

Covers personal assessment of work-related values, interests and skills; exploration of career options; and resume writing, interviewing, and job-search skills. Junior or senior standing only. Students may not enroll in EDU 299 in the same semester as EDU 120, EDU 220, or EDU 320. Half-semester course.

**EDU 300. School Leadership. (1 h)**

Development of leadership skills within the context of school and professional learning communities. P-EDU 250.

**EDU 303. History of Western Education. (3 h)**

Educational theory and practice from ancient times through the modern period, including American education.



**EDU 304. Social Justice Issues in Education. (3 h)**

This course facilitates exploration of issues of social justice and schooling from both theoretical and practical perspectives. It includes a focus on multi-cultural education, global awareness, issues of equity in school funding, urban and rural education, poverty, and marginalized populations. (CD)

**EDU 305. The Sociology of Education. (3 h)**

A study of contemporary educational institutions. This course examines such issues as school desegregation, schooling and social mobility, gender equity, and multiculturalism.

**EDU 307. Instructional Design, Assessment, and Technology. (3 h)**

Introduction to contemporary technologies and their applications for supporting instruction, assessment, and professional practice. P - EDU 311.

**EDU 308. School and Society. (3 h)**

A study of continuity and change in educational institutions, including analysis of teachers, students, curriculum, evaluation, contemporary problems, and reform movements.

**EDU 309L. Introduction to Secondary Education. (2 h)**

Practical experiences in classrooms with focus on secondary classrooms and students. Public school experience and seminar. Pass/Fail only. P-EDU 102L, or POI.

**EDU 310. Race, Class, and Gender in a Color-blind Society. (3 h)**

An examination of issues surrounding race, class, and gender in the United States. Topics include income and wealth, theories of discrimination, public education, gender bias, and patterns of occupational and industrial segregation. Also listed as AES 310.

**EDU 311. Learning and Cognitive Science. (3 h)**

Theories and principles of cognition applied to teaching and learning. (CD, D)

**EDU 312. Teaching Exceptional Children. (3 h)**

Examines the various types of learning differences in K-12 schools. Emphasis is on instructional planning, identification of interventions, and assessment techniques to support diverse learners.

**EDU 313. Human Growth and Development. (3 h)**

A study of the intellectual, emotional, and physical components of growth from birth to adolescence, with special concern for the educational implications of this process.

**EDU 315. Literacy Interventions. (3 h)**

Strategies for assessing the literacy skills of students who struggle with reading and writing and providing them with appropriate interventions. Students attend seminars focused on diagnosis and remediation, provide remedial instruction for one student, and complete a research case study on that student. Service Learning.

**EDU 316L. Elementary Literacy Interventions. (2 h)**

A field experience for elementary education candidates focused on early literacy, including diagnosis and remediation of reading and writing skills. Public school experience and seminar. Pass/Fail only. P-POI.

**EDU 320. Strategic Job Search Processes. (1.5 h)**

Third course in the College to Career series. Provides students with the fundamental knowledge and skills for an effective job search, including interviewing, communicating, networking, branding, marketing, evaluating offers, and negotiating. Half-semester course.

**EDU 330. Fathers and Daughters. (3 h)**

Explores father-daughter relationships in contemporary American society through an interdisciplinary lens of film, literature, music, theater, media, and social science research. P-sophomore standing.

**EDU 337. TESOL Linguistics. (3 h)**

An introduction to the theoretical and practical linguistics resources and skills for teaching English to speakers of other languages (TESOL) within the U.S. or abroad. Also listed as LIN 337. P-LIN/ANT 150 or ENG 304; knowledge of a second language is recommended.

**EDU 351. Adolescent Psychology. (3 h)**

An introduction to theories of adolescent psychology as related to teaching and counseling in various settings. The readings emphasize researchers' suggestions for parenting, teaching, and counseling adolescents between the ages of thirteen and nineteen.

**EDU 353. Language in Education. (3 h)**

This seminar explores the role of language in education contexts. Topics include the study of bilingual and bicultural education, second language education, cross-cultural education, and communication in the classroom. Service-learning component. Also listed as ANT 353. (CD)

**EDU 354. Content Pedagogy. (3 h)**

Methods, materials, and techniques used in teaching particular secondary subjects (English, mathematics, science, second languages, social studies). P-POI.

**EDU 354A. Teaching Secondary English. (3 h)**

Methods and materials used in teaching secondary English. P-POI.

**EDU 354B. Teaching Secondary Mathematics. (3 h)**

Methods and materials used in teaching secondary mathematics. P-POI.

**EDU 354C. Teaching Secondary Social Studies. (3 h)**

Methods and materials used in teaching secondary social studies. P-POI.

**EDU 354D. Teaching Secondary Science. (3 h)**

Methods and materials used in teaching secondary science. P-POI.

**EDU 354E. Teaching World Languages. (3 h)**

Methods and materials used in teaching world languages. P-POI.

**EDU 354L. Field Lab III. (2 h)**

Practical experiences in classrooms with focus on pedagogy and content. Weekly public school experience and seminar. Service Learning. Pass/Fail only. C-EDU 354.

**EDU 358. Studies in Contemporary Leadership. (3 h)**

An examination of contemporary leadership theory and its various applications in society. Students engage in practical leadership exercises, read on a variety of leadership topics, and develop their own philosophy of leadership. A twenty-five contact hour internship is required.

**EDU 360. Professional and Life Skills. (1.5 h)**

Fourth course in the College to Career series. Transition to life and work after college. Discusses work ethics and etiquette, work relationships, and ongoing career management. Also covers personal life skills such as budgeting and financial management, stress management, and avocations. Course applies liberal arts education to successful, meaningful life after college, including creation of an e-portfolio demonstrating professional competencies gained through the course of their Wake Forest experience. Senior standing only. Half semester.

**EDU 364L. Field Lab IV. (9 h)**

Supervised teaching internship in grades 9-12 (K-12 for foreign language). Full-time, 15-week field experience. Service Learning. Pass/Fail only. P-POI. C-EDU 365.

**EDU 365. Professional Development Seminars. (3 h)**

Analysis and discussion of problems and issues in secondary school teaching. Examination of research and practice-based strategies. Pass/Fail only. C-EDU 364L.



**EDU 368. Professional Experiences in Education. (3 h)**

This course offers students a placement in an educational setting under the supervision of a professional mentor. During this internship, student examine a critical topic in a local school, a community agency, a non-profit organization, or other educational setting. P-minimum gpa of 2.7 and POI.

**EDU 370. Professional Experience in the Engaged Liberal Arts. (3 h)**

This course offers students an opportunity to develop professional experience while exploring the value of their liberal arts education. Students will develop a professional plan and capture evidence of their own impact using the tools of the engaged liberal arts. During this internship, students will examine a critical topic related to leadership or professional development. P-POI.

**EDU 373. Comparative and International Education. (3 h)**

A study of various historical, political, economic, cultural, and social issues shaping education in selected countries throughout the world. The course aims to expand student understanding of differing educational and pedagogical structures and comparatively investigate educational issues around the globe. (CD)

**EDU 374. Student Teaching Seminar. (1.5 h)**

Analysis and discussion of problems and issues in the teaching of particular secondary subjects (English, mathematics, science, second languages, social studies). Emphasis on the application of effective instructional methods and materials.

**EDU 377. Literacy in the 21st Century. (3 h)**

This course examines the impact of emerging literacy trends on 21st century students in a digital, global world.

**EDU 381. Special Needs Seminar. (1 h)**

Analysis and discussion of practical problems and issues in the teaching of special needs students in the secondary classroom. Topics include reading and writing in the content area, inclusion, and evaluation. Pass/Fail only.

**EDU 382. Teaching Elementary Reading. (3 h)**

Methods and materials for teaching reading, including adaptations for diverse and exceptional learners. P-POI.

**EDU 383. Classroom Management Seminar. (1 h)**

Examination of research and practice based strategies for secondary school classroom management and discipline. Pass/Fail Only.

**EDU 385. Diversity Seminar. (1 h)**

Exploration of multi-cultural issues and relevant Spanish language and cultural teaching practices essential for classroom communication. Pass/Fail only.

**EDU 387. Tutoring Writing. (1.5 h)**

Introduction to composition theory and rhetoric with a special emphasis on one-to-one tutoring techniques. Students will analyze their own writing process and experiences, study modern composition theory, and practice tutoring techniques in keeping with these theories. Strongly recommended for those interested in working in the Writing Center as peer tutors. A student may not receive credit for both EDU 387 and WRI 341.

**EDU 388. Writing Pedagogy. (3 h)**

This course blends theory and practice, providing students from all content areas with a foundational understanding of writing-pedagogy methods and approaches. Topics of study will include writing across the curriculum, writing research, and assessment of writing.

**EDU 390. Methods and Materials for Teaching Foreign Languages (K-6). (3 h)**

A survey of the basic materials, methods, and techniques of teaching foreign languages in the elementary and middle grades. Emphasis is placed on issues and problems involved in planning and implementing effective second language programs in grades K-6.

**EDU 391. Teaching the Gifted. (3 h)**

An investigation of theory and practice pertinent to teachers of the gifted.

**EDU 392. The Psychology of the Gifted Child. (3 h)**

A discussion of giftedness and creativity in children and the relationship of those characteristics to adult superior performance. Topics to be covered include a history of the study of precocity, methods and problems of identification, the relationship of giftedness and creativity, personality characteristics and social-emotional problems of gifted children, and the social implications of studying giftedness.

**EDU 393. Individual Study. (1-3 h)**

A project in an area of study not otherwise available in the Department of Education. Permitted upon departmental approval of petition presented by a qualified student.

**EDU 394. Internship in Education of the Gifted. (3 h)**

An intensive period of observation and instruction of gifted students. Readings and directed reflection upon the classroom experience will be used to develop a richer understanding of such a special school setting.

**EDU 395. Teaching Diverse Learners. (3 h)**

This course addresses diversity in the classroom, particularly the needs of English Learners (EL) and exceptional children (EC). Examines differentiated instruction with appropriate instructional and behavioral strategies to meet the needs of all students.

## Faculty

**Chair** Alan Brown

**Francis P. Gaines Professor** Patricia M. Cunningham

**Professors** Adam M. Friedman, Leah P. McCoy, Linda N. Nielsen

**Associate Professors** R. Scott Baker, Alan Brown, Dónal Mulcahy

**Assistant Professors** Debbie French, Danielle Parker-Moore, Michele Myers

**Associate Professors of the Practice** Brian Calhoun, Heidi Robinson

**Associate Teaching Professor** Ali Sakkal

**Visiting Assistant Professor** Joan F. Mitchell

**Visiting Clinical Professor** Eleni F. Caldwell

**Adjunct Professors** Jeffrey Faullin, Robert Kennedy, Andrew Kraft, Molly Lineberger, Kathryn Pegram, Sharon Ralston, Alexander Tabori, Cristofer C. Wiley

## Elementary Education, B.A.

### Requirements

The elementary education major offers two pathways to the major: a Non-licensure Pathway and a Professional Licensure Pathway. All majors must complete the following core education courses:

Code	Title	Hours
<b>Education Core Courses</b>		
EDU 102L	Exploring School Communities	2
EDU 201	Educational Policy and Practice	3
EDU 203	Methodology and Management Lab	2
EDU 205A	Developing Literacy and Communication Skills in Elementary Schools, K-2	2

EDU 205B	Developing Literacy and Communication Skills in Elementary Schools, Grades 3-6	2
EDU 295	Teaching Elementary Social Studies	3
EDU 296	Elementary Mathematics Methods: Inquiry Teaching and Learning	3
EDU 298	Elementary Science Methods: Inquiry Teaching and Learning	3
EDU 307	Instructional Design, Assessment, and Technology	3
EDU 311	Learning and Cognitive Science	3
EDU 395	Teaching Diverse Learners	3

## Non-Licensure Pathway

The elementary education major non-licensure pathway requires 35 hours in the following courses:

Code	Title	Hours
Education Core		29
Elective Major Courses *		6

\*

Courses may be chosen from among the list of approved courses. Additional elective courses may have been approved since publication of this bulletin. The major advisor maintains a complete list of all approved elective courses. For course descriptions, see the course listings in this bulletin.

## Professional Licensure Pathway

The elementary education major professional licensure pathway requires 47 hours in the following courses:

Code	Title	Hours
Education Core		29
EDU 250	Student Teaching: Elementary	10
EDU 293	Professional Development Seminar: Elementary	3
EDU 312	Teaching Exceptional Children	3
EDU 316L	Elementary Literacy Interventions	2

## Exit Requirements

A maximum of 50 hours in the major is allowed within the 120 hours required for graduation. Graduation requirements for professional licensure candidates include: (1) have a minimum grade of C in each course attempted in education, (2) maintain at least a 2.7 GPA while enrolled in the Teacher Education Program, and (3) submit qualifying scores on the appropriate edTPA performance-based, subject-specific assessment. Additional requirements for candidates to be recommended for professional licensure include passing all appropriate state-required standardized tests.

## Schools, Education, and Society, Minor

### Requirements

The minor in Schools, Education, and Society requires 17 hours:

Code	Title	Hours
EDU 102L	Exploring School Communities	2
EDU 201	Educational Policy and Practice	3
EDU 311	Learning and Cognitive Science	3
EDU 368	Professional Experiences in Education	3
Select two of the following:		6
EDU 223	Theatre in Education	
EDU 231	Adolescent Literature	
EDU 304	Social Justice Issues in Education	
EDU 305	The Sociology of Education	
EDU 307	Instructional Design, Assessment, and Technology	
EDU 308	School and Society	
EDU 310	Race, Class, and Gender in a Color-blind Society	
EDU 312	Teaching Exceptional Children	
EDU 330	Fathers and Daughters	
EDU 337	TESOL Linguistics	
EDU 354	Content Pedagogy	
EDU 373	Comparative and International Education	
EDU 377	Literacy in the 21st Century	
EDU 388	Writing Pedagogy	
EDU 395	Teaching Diverse Learners	

This minor is intended for students who have an interest in education but who are not pursuing a teaching license. However, any student who wishes to major in elementary education or pursue the licensure minor in secondary education and also undertake the minor in Schools, Education, and Society must complete at least nine additional, unique hours of coursework, including EDU 368 and two designated education electives. Some courses are not offered every semester; students should plan ahead in order to fulfill all requirements.

## Secondary Education, Minor Requirements

The Licensure minor in secondary professional education requires 31 hours:

Code	Title	Hours
EDU 102L	Exploring School Communities	2
EDU 201	Educational Policy and Practice	3
EDU 307	Instructional Design, Assessment, and Technology	3
EDU 311	Learning and Cognitive Science	3
EDU 309L	Introduction to Secondary Education	2
One content pedagogy course:		3
EDU 354A	Teaching Secondary English	
EDU 354B	Teaching Secondary Mathematics	
EDU 354C	Teaching Secondary Social Studies	
EDU 354D	Teaching Secondary Science	
EDU 364L	Field Lab IV	9
EDU 365	Professional Development Seminars	3
EDU 395	Teaching Diverse Learners	3

Select a major in one of the following secondary license areas:

English  
Mathematics  
Science  
Social Studies

## Exit Requirements

Graduation requirements for professional licensure candidates include: (1) have a minimum grade of C in each course attempted in education, (2) maintain at least a 2.7 GPA while enrolled in the Teacher Education Program, and (3) submit qualifying scores on the appropriate edTPA performance-based, subject-specific assessment. Additional requirements for candidates to be recommended for professional licensure include passing all appropriate state-required standardized tests.

## English Content Requirements

33 hours, including:

Code	Title	Hours
ENG 265	British Literature before 1800	3
ENG 266 or ENG 275	British Literature 1800 to the Present American Literature	3
ENG 290	Foundations in Literary Criticism	3

Select at least one 200-300 level writing or creative writing course

Select at least one 200-300 level course matching the following criteria:

Pre-1800 Literature  
American Literature  
Shakespeare  
Multicultural or World Literature  
Linguistics or Grammar  
Poetry, Theatre/Drama, or Film

## Mathematics Content Requirements

33 hours, including:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	3
MTH 321	Modern Algebra I	3
MTH 331	Geometry	3
MTH 357 or STA 310	Probability Probability	3

Select three other courses beyond MTH 113

## Science Content Requirements

Licensure in the individual fields of science: biology (34 hours), chemistry (34.5-35.5 hours for BA), and physics (25 hours). All courses must be from the same courses required for majors in those fields.

## Social Studies Content Requirements

30 hours, including:

Code	Title	Hours
<b>History</b>		
Select six hours from European or World History		6
Select six hours from U.S. History		6
Select six hours from Nonwestern History		6
<b>Social Sciences</b>		
Select one course from Economics		3
Select one course from Geography		3
Select one course from Political Science		3
Select one course from Anthropology or Sociology		3

## Engineering (EGR)

The mission of the engineering major is to educate students in an engineering curriculum that embraces and supports the unique culture of Wake Forest by combining the liberal arts core, innovative entrepreneurship, and engineering. The program provides an undergraduate engineering education that embodies the teacher-scholar ideal, emphasizing the close faculty-student engagement that is the hallmark of the Wake Forest community. Our goal is to attract enthusiastic students from around the US and the world who will make important contributions to solving society's most pressing problems, fulfilling the *Pro Humanitate* motto of Wake Forest University.

## Declaring a Major

In declaring Engineering as a major, we recommend students declare as soon as they complete 40 credit hours at WFU. All students majoring in Engineering will be assigned an Engineering Faculty Major Advisor to support progress towards degree completion. We encourage students to first declare the major before declaring an Engineering Concentration.

Students choosing to double major in Engineering and another major may count any class *required* by both majors as fulfilling the requirements of both majors. The courses required for the Bachelor of Science in Engineering degree that fall into this category are: EGR 111, EGR 112, EGR 211, EGR 212, EGR 311, EGR 312, EGR 313, EGR 314, EGR 315, CHM 111/CHM 111L, PHY 113/PHY 113L, MTH 111, MTH 112, MTH 113, and MTH 205. Any courses not on this list are considered electives. Electives towards the required 47 credits of engineering may be counted for only one major. However, electives towards the required 30 credits of Math/Basic Science may count towards other majors as well, whether required or not.

Note that when a student declares a major or minor, the requirements for the major or minor that are in effect *at the time* of declaration will apply. See the Requirements for Degrees section for further details.

## Study Abroad

Students considering study abroad should consult with the Engineering Academic Advisor. The second year or fall of the third year are the most flexible semesters for Engineering students to study abroad. Students are recommended to go to the Study Abroad office to discuss potential programs during their first year. Students cannot take courses abroad to count towards any core Engineering courses (EGR 111, EGR 112, EGR 211, EGR 212, EGR 311, EGR 312, EGR 313, EGR 314, or EGR 315), however, they can take courses to count towards any other major or

minor requirements. Courses taken to count towards EGR technical elective requirements are not pre-approved by the Engineering Department. To seek approval, the student must submit the course syllabus to the Engineering Academic Advisor for pre-screening and then submit all course work after course completion to be considered.

## Undergraduate Research

At the start of each semester, we source research projects that our students can pursue via EGR 281s or EGR 381s. Students are encouraged to talk with Engineering Faculty if they are interested in pursuing research.

## Internships

Unpaid internships may be eligible for course credit and the possibility of engineering technical elective credit. Students should consult with their Engineering major advisor about course-credit options for internship opportunities.

**Special Note.** Students enrolled at Wake Forest may not take courses in engineering at other institutions to satisfy the divisional requirement.

## Contact Information

Department of Engineering (<http://college.wfu.edu/engineering/>)  
Wake Downtown  
455 Vine Street  
Bldg 60 South, Rm 460X  
Phone 336-702-1926

## Programs

### Major

- Engineering, B.S.

### Minor

- Engineering, Minor

## Courses

### Engineering Courses for Divisional Credit

**EGR 110. Introduction to Human-Centered Engineering Design. (4 h)**  
Introduction to the study and practice of engineering, systems thinking, human-centered design, research, creative and analytical problem-solving practices, and engineering for humanity. With laboratory. This course is targeted at students who are not interested in majoring nor minoring in Engineering. Credit for both EGR 110 and EGR 111 is not allowed. (D)

**EGR 111. Introduction to Engineering Design. (4 h)**  
Introduction to the study and practice of engineering, systems thinking, design, research, creative and analytical problem-solving practices, and engineering for humanity. With laboratory. This course is targeted at students who are interested in majoring or minoring in Engineering. Credit for both EGR 110 and EGR 111 is not allowed. (D).

## Required Engineering Courses for the Bachelor of Science in Engineering Degree

**EGR 111. Introduction to Engineering Design. (4 h)**  
Introduction to the study and practice of engineering, systems thinking, design, research, creative and analytical problem-solving practices, and engineering for humanity. With laboratory. This course is targeted at students who are interested in majoring or minoring in Engineering. Credit for both EGR 110 and EGR 111 is not allowed. (D).

**EGR 112. Introduction to Engineering Experimentation. (4 h)**  
Exploration of tools, processes, and quantitative and qualitative analysis for modern engineering practice. With laboratory.

**EGR 211. Materials and Mechanics. (4 h)**  
Fundamentals of materials and mechanics (statics and dynamics) for engineering applications. With laboratory. P-CHM 111/111L, EGR 111, 112, MTH 111, PHY 113. P or C-MTH 112.

**EGR 212. Transport Phenomena. (4 h)**  
An integrated course in the fundamentals of thermodynamics, fluid mechanics, and heat transfer with emphasis on principles of conservation and transport of mass, energy, and momentum. With laboratory. P-CHM 111/111L, EGR 111, 112, MTH 111, 112, PHY 113. P or C-MTH 113.

**EGR 311. Control Systems and Instrumentation. (4 h)**  
Fundamentals of circuits and semiconductor electronics as applied to the analysis and design of engineering instrumentation and control systems. With laboratory. P-EGR 211, MTH 112 P or C - MTH 205 (or MTH 121 and MTH 251). Credit not allowed for EGR 311 and PHY 230. Engineering majors MUST take EGR 311.

**EGR 312. Computational Modeling in Engineering. (4 h)**  
Fundamentals of computational problem solving tools (programming, systems modeling, numerical methods) for diverse engineering applications, with consideration of the economic and ethical outcomes of decisions that are made using such techniques. With laboratory. P-EGR 211, 212, MTH 113, 205 (or MTH 121 and MTH 251). (STA 111 highly encouraged but not required).

**EGR 313. Capstone Design I. (1 h)**  
The first course of the capstone design experience. P or C-EGR 311 P or C-EGR 312.

**EGR 314. Capstone Design II. (4 h)**  
The second course of the capstone design experience. With laboratory. P-EGR 311, 312, and EGR 313.

**EGR 315. Capstone Design III. (4 h)**  
The third course of the capstone design experience. With laboratory. P-EGR 314.

## General Elective Courses in Engineering

**EGR 113. Integrated Sciences. (4 h)**  
An integrated basic science course covering topics in the biological, chemical, and physical sciences. With laboratory.

**EGR 280. Projects with Engineering for Non-Majors. (1-4 h)**  
Specialized and focused learning via experiential projects. With laboratory. May be repeated for credit.

**EGR 281. Introductory Projects with Engineering for Majors. (1-4 h)**  
Specialized and focused learning via experiential projects. Does not count towards engineering technical elective credit. With laboratory. May be repeated for credit.



**EGR 301. Special Topics in Engineering. (1-4 h)**

Seminar and/or lecture and/or project-based and/or laboratory courses in selected topics. Does not count towards engineering technical elective credit unless a designation of "Technical Elective" is noted. May be repeated if the course title changes.

**EGR 302. Engineering Internship. (0 h)**

Independent study in Engineering under faculty mentorship. May be repeated. P-POI.

**EGR 310. Capstone Design for Non-Majors. (1-4 h)**

This course is designed for Engineering Minors or other students interested in participating in the engineering capstone design experience. May be repeated for credit. POI.

**EGR 380. Fundamentals of Engineering Exam Prep. (1 h)**

Review of engineering fundamentals in preparation for Fundamentals of Engineering exam. May be repeated for credit. P or C -EGR 311, EGR 312.

**EGR 381. Engineering Research. (1-4 h)**

Engineering research project conducted under the guidance of a research mentor. Does not count towards engineering technical elective credit unless a designation of "Technical Elective" is in the course title. Upon completion and review of project deliverables, engineering technical elective credit may be granted. May be repeated for credit. A total of two or more hours of approved EGR 381 technical elective credit can be used to count as one course toward a concentration.

## Engineering Technical Elective Courses

**EGR 213. Mechanical Computer Aided Design I. (2 h)**

Introduction to Computer Aided Design (CAD) for mechanical assemblies and civil applications using a variety of CAD software tools. The course covers design planning of additive and subtractive techniques. Counts for ME and CEE Concentration. P-EGR 111.

**EGR 214. Embedded Microcontroller Systems. (2 h)**

Examination of the structure of digital electronic systems with specific focus on microcontroller architectures for embedded system applications, as well as interfacing with analog and digital peripherals. With laboratory. Counts for ECE Concentration. P- EGR 112 and CSC 111 (or POI)

**EGR 215. Digital Electronics. (2 h)**

Design and hardware implementation of digital electronic systems using basic boolean logic gates and other common digital logic tools such as multiplexers, decoders, flip-flops, shift registers, and counters. With laboratory. Counts for ECE Concentration. P-EGR 112.

**EGR 316. Mechanical Computer Aided Design II. (2 h)**

Advanced Computer Aided Design (CAD) for mechanical systems with consideration of material properties, stress analysis, and manufacturability. Counts for ME Concentration. P-EGR 211, EGR 213.

**EGR 317. Renewable Energy Systems. (2 h)**

Fundamentals of renewable energy systems, including wind, solar, biomass, and hydroelectric with economic evaluation and understanding technological innovations. With laboratory. Counts for ME Concentration. P-EGR 212.

**EGR 318. Biomimetic Engineering. (2 h)**

Fundamentals of bioinspired design, functional modeling, and reverse engineering principles towards innovative solutions. Counts for ME Concentration. P-EGR 211 or EGR 212.

**EGR 319. Environmental Engineering. (2 h)**

Fundamentals of environmental systems, including water supply, water quality, water treatment, air pollution, soil remediation, environmental risk assessment, and climate variation. Explore how engineers both leverage and sustain these systems and inform environmental and public health policies. With laboratory. Counts for CEE Concentration. P-EGR 211, EGR 212.

**EGR 320. Biomedical Engineering Applications. (2 h)**

An overview of biomedical engineering applications such as cardiovascular fluid mechanics, biomechanics, biomaterials, tissue engineering, signal processing and instrumentation, and biomedical ethics. With laboratory. Counts for BME Concentration. P-EGR 211, EGR 212, and MTH 205 (or MTH 121 and MTH 251).

**EGR 321. Chemical Engineering Separations. (2 h)**

Theory and design of chemical separation processes, and related flow diagrams, by applying material and energy balances and chemical equilibria fundamentals. Includes distillation, liquid-liquid extraction, ion exchange, and gas absorption. With laboratory. Counts for MCE Concentration. P-EGR 212, MTH 205 (or MTH 121 and MTH 251), CHM 122 (or CHM 123), CHM 280.

**EGR 322. Materials Engineering and Characterization. (2 h)**

Relationships between atomic structure, microstructure, and observable properties of metallic, ceramic, and polymeric materials. Measurement and modification of material properties. With laboratory. Counts for MCE Concentration. P-EGR 211, MTH 112.

**EGR 323. Chemical Reaction Engineering. (2 h)**

Rates of homogeneous, catalytic, and biological reactions; reactor design and analysis, and related flow diagrams. With laboratory. Counts for MCE Concentration. P-EGR 212, MTH 205 (or MTH 121 and MTH 251), CHM 122 (or CHM 123), CHM 280.

**EGR 324. Hydrologic and Hydraulic Engineering. (2 h)**

Fundamentals of hydrologic processes, estimating hydrologic fluxes, watershed-scale modelling, and open channel hydraulics. With laboratory. Counts for CEE and ME Concentration. P-EGR 211, 212.

**EGR 325. Medical Product Design. (2 h)**

Fundamentals of innovative and user-centered product design processes. Use of clinical observations and client interviews to derive new medical device designs and analysis for improving system performance. With Laboratory. Counts for BME Concentration. P-EGR 211, EGR 212.

**EGR 326. Human Factors Engineering. (2 h)**

A systems approach to understanding human-machine interfaces, psychology of design, ergonomics, human error and system reliability. With laboratory. P-EGR 211 and 212.

**EGR 327. Microengineering. (2 h)**

An overview of microengineering systems and an exploration of how size affects critical scaling law parameters, material properties, fabrication techniques, design and use. With laboratory. P-EGR 211 and 212.

**EGR 328. Inverse Problems in Engineering. (2 h)**

Fundamental approaches and techniques in solving inverse problems using mathematical, numerical, and statistical formulations. Applications include satellite remote sensing of the earth and environment, medical imaging, image and signal processing, and machine learning. With laboratory. Counts for CEE Concentration. P-EGR 211, MTH 205 (or MTH 121 and MTH 251), MTH 113. (STA 111 highly encouraged but not required).



**EGR 329. Functional Advanced Materials Characterization. (2 h)**

Relationships between atomic structure, microstructure, and observable properties of functional and advanced materials. Measurement and modification of material properties. With laboratory. Counts for MCE Concentration. P-EGR 211, MTH 113.

**EGR 330. Infrastructure Systems Design. (2 h)**

Explore principles of infrastructure systems through experiential learning and application of concepts to design or redesign a local system with consideration of technical, social, environmental, and economic factors. With laboratory. Counts for CEE Concentration. P-EGR 211, EGR 212.

**EGR 331. Thermal Fluid Systems. (2 h)**

Applying fundamentals of fluid mechanics, heat transfer, and thermodynamics across diverse engineering applications in the analysis and design of thermal fluid systems. With laboratory. Counts for ME Concentration. P-EGR 212, MTH 205 (or MTH 121 and MTH 251)

**EGR 332. Structural Engineering I. (2 h)**

An introduction to structural engineering systems and materials such as steel, wood, and concrete. Emphasis on understanding the load path within real structures and how that impacts their design. With laboratory. Counts for CEE Concentration. P-EGR 211.

**EGR 333. Tissue Engineering. (2 h)**

Fundamentals of biomaterials, stem cells, and imaging technologies to analyze novel tissue engineering applications. With laboratory. Counts for BME Concentration. P-EGR 211, EGR 212, BIO 111 or BIO 150 or HES 365 (or POI)

**EGR 334. Mobile Robotics. (2 h)**

Introduction to mobile robotics, from hardware (energy, locomotion, sensors) and software (signal processing, control, localization, trajectory planning, high-level control). With laboratory. Counts for ECE Concentration. P-EGR 311.

**EGR 335. Field Programmable Gate Array (FPGA) Design and Implementation. (2 h)**

An introduction to field programmable gate array (FPGA) design and system implementation. With laboratory. Counts for ECE Concentration. P-EGR 215 or CSC 250.

**EGR 336. Healthcare Engineering. (2 h)**

Beyond biomedical engineering, engineers play a critical role in bettering healthcare systems via big data analytics, next generation technologies, translational science and engineering, precision medicine, and diagnostic AI. With laboratory. Counts for BME Concentration. P – EGR 312.

**EGR 337. Biofluid Mechanics. (2 h)**

Introduction to Bioengineering principles applied to the cardiovascular system. Specifically, this course will apply relevant theories in Fluid Mechanics and Solid Mechanics to the cardiovascular system. With laboratory. Counts for BME and ME Concentration. P – EGR 211, EGR 212.

**EGR 338. Bioprinting and Biofabrication. (2 h)**

Engineering principles applied to bioprinting and biofabrication with fundamentals of biomaterials, tissue engineering, and tissue construct design principles. Counts for BME and MCE Concentration. P-EGR 211.

**EGR 339. Engineering Reynolda. (2 h)**

A historical engineering perspective with the historic Reynolda House as a case study. Fundamentals of reverse engineering and research in the context historical structures and systems. Introduction to design as it relates to existing structures. With laboratory. Counts for CEE Concentration. P-EGR 211, EGR 212.

**EGR 340. Acoustics. (2 h)**

Fundamentals in acoustics involving concepts of wave phenomena and sound perception, governing principles and mathematical modeling of acoustics applications. Counts for ME Concentration. P-EGR 212.

**EGR 341. 3D Modeling and Additive Manufacturing. (2 h)**

Fundamentals of a variety of 3D printing techniques for rapid prototyping, 3D modeling of standard machine elements, creation of engineering drawings and animations. Counts for ME Concentration. P-EGR 211.

**EGR 342. Design of Machine Elements. (2 h)**

Application of design theories to practical machine elements and selection of machine components for diverse applications. Counts for ME Concentration. P-EGR 211.

**EGR 343. Biomaterials. (2 h)**

Fundamentals of different types of biomaterials and their application across a diverse set of biomedical scenarios. Counts for BME and MCE Concentration. P-EGR 211.

**EGR 344. Mechanics of Intelligent Material Systems. (2 h)**

Fundamentals of material systems as actuator, sensors, and energy harvesters across diverse applications, including artificial muscle electroactive polymer technologies, with an emphasis on materials science and engineering design. Counts for MCE and BME Concentration. P-EGR 211.

**EGR 345. System Engineering and Control Theory. (2 h)**

Fundamentals of system engineering and control theory across diverse applications, including mechanical, electrical, environmental, biological, and socio-economic systems. With laboratory. P-EGR 311 and 312.

**EGR 346. Engineering Analysis of Vibrations. (2 h)**

Modeling and solution of free and forced vibrating dynamic systems, including single and multiple degree of freedom systems, as well as continuous systems. Applications includes earthquake modeling, beam and membrane vibrations, etc. Counts for ME and CEE Concentration. P-EGR 211.

**EGR 347. Finite Element Analysis of Engineering Systems. (2 h)**

Fundamentals of finite element methods and commercial finite element codes for solid mechanics, heat transfer, and fluid mechanics applications in one, two, and three dimensions. Counts for ME Concentration. P-EGR 312.

**EGR 348. Advanced Fluid Mechanics. (2 h)**

Advanced fluid kinematics, finite control volume analysis, and differential analysis of fluid flows. Includes applications of inviscid and viscous flows, similitude, dimensional analysis, open channel flows, compressible flows and flow in turbomachines. Counts for ME Concentration. P-EGR 212.

**EGR 349. Human Biomechanics. (2 h)**

Fundamentals of human movement and modeling of skeletal, muscular, and neurological motion. Kinematic analysis of human movement, and kinetics (forces) required to generate movement. Counts for BME and ME Concentration. P-EGR 211.

**EGR 350. Advanced Electronics. (2 h)**

Exploration and applications of operational amplifiers and other analog linear integrated circuits. With laboratory. Counts for ECE Concentration. P-EGR 311.

**EGR 351. Biomechanics of Animal Locomotion. (2 h)**

Biological and mechanical principles of animal movement on both solid ground and through fluids, including flight, swimming, running, jumping, climbing, etc. Considers force production and patterns of movement including muscular action and vortex behavior. Counts for BME and ME Concentration. P-EGR 211, EGR 212.

**EGR 352. Natural Hazards Engineering. (2 h)**

An introduction to how natural hazards, such as earthquakes, hurricanes, tsunamis, and others, affect the built environment and communities and how engineers can design for natural hazards considering life safety and resilience. Counts for CEE Concentration. P-EGR 211.

**EGR 353. Green Energy Technologies. (2 h)**

Fundamentals of energy conversion technologies and how “green” they are. Counts for CEE and MCE Concentration. P-EGR 211 and EGR 212.

**EGR 354. Resilient Building Systems. (2 h)**

This course will focus on how building codes and other industry standards impact building system design. We will look at how buildings are built (and have been built) to be resilient in the face of fires, hurricanes, earthquakes, and even the mundane day-to-day challenges. Counts for CEE Concentration. P-EGR 211 and 212.

**EGR 355. Engineering Economics. (2 h)**

Modeling and evaluation of economic benefits and costs of projects involving engineering design and analysis. Methods include cash flow analysis, time value of money, cost benefit analysis, forecasting, financial management of technologies over their lifecycle, evaluation of new ventures, etc. For EGR Majors or POI.

**EGR 356. Financial Engineering. (2 h)**

Modeling and evaluation of financial applications with engineering projects. Topics include accounting basics, financial optimization, quantitative risk management, asset management, operations research, data mining, etc. For EGR Majors or POI.

**EGR 357. Engineering Management. (2 h)**

Consulting basics in support of managing engineering projects, marketing basics, developing strategy and business planning, project management, financial reporting, production and distribution principles, etc. For EGR Majors or POI.

## Faculty

**Chair** Michael Gross

**Professors** Michael Gross, Olga Pierrakos

**Associate Professors** Patricia Clayton, Saami Yazdani

**Assistant Professors** Hussein Abdeltawab, Courtney Di Vittorio, Erin Henslee, Lauren Lowman, Kyle Luthy, Kyana Young

**Assistant Teaching Professors** William Crowe, Melissa Kenny

## Engineering, B.S.

### Requirements

The program for each student majoring in engineering is developed individually through consultation with the student's major advisor and leads to a Bachelor of Science in Engineering. The Bachelor of Science in Engineering degree is ABET accredited by the Engineering Accreditation Commission and envisioned as an interdisciplinary and integrated engineering degree to help students lay a strong foundation toward diverse engineering pathways and diverse areas of engineering professional practice. The Bachelor of Science in Engineering degree offers a versatility that lays the foundation for a lifetime of careers. Over 75% of our graduates pursue minors or second majors beyond

Engineering. In their pursuit of knowledge and expertise, our hope is for students to explore within and beyond Engineering.

A minimum of 30 hours of basic science and mathematics credits are required for the Bachelor of Science in Engineering degree. Students must complete the following:

Code	Title	Hours
<b>Basic Science and Mathematics</b>		
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 205	Introduction to Linear Algebra and Differential Equations	4
PHY 113 & 113L	General Physics I and General Physics Lab	4
or PHY 123 & 123L	General Physics I - Studio Format and General Physics I - Studio Format Lab	

Basic sciences consist of disciplines focused on knowledge or understanding of the fundamental aspects of natural phenomena such as chemistry, physics, and the life, earth, and space sciences. For the remainder of the minimum 30 credit hours of basic science and mathematics topics, students have the flexibility to select mathematics and basic science elective credits that promote the student's progress toward the completion of a minor or other relevant interests. Students must consult with an Engineering Faculty or their Engineering Academic Advisor to ensure that the elective mathematics and basic science credits of interest will count toward this requirement.

A minimum of 47 hours of engineering topics are required for the Bachelor of Science in Engineering degree. Students must complete the following:

Code	Title	Hours
EGR 111	Introduction to Engineering Design	4
EGR 112	Introduction to Engineering Experimentation	4
EGR 211	Materials and Mechanics	4
EGR 212	Transport Phenomena	4
EGR 311	Control Systems and Instrumentation	4
EGR 312	Computational Modeling in Engineering	4
EGR 313	Capstone Design I	1
EGR 314	Capstone Design II	4
EGR 315	Capstone Design III	4

A minimum of 14 additional credit hours in engineering topics must be satisfied through engineering technical electives and courses designated as engineering topics. Computer Science (CSC) topics may count as part of the minimum of 47 semester credit hours of engineering topics. The pre-approved Computer Science courses that may count are CSC 102, 111, 112, 201, 250, 251, 301, 311, 331, 371, 373, 374, 375. A maximum of 4 credit hours may come from either CSC 111 or CSC 112 towards the minimum of 47 credit hours of engineering topics. If a student would like to petition for a different Computer Science course to count towards engineering topics, they must request this in writing from the Engineering Academic Advisor and include a copy of the course syllabus.

To be well-positioned for junior-level EGR coursework and to complete the degree in four years, students should complete the following courses during the first two years and should earn a minimum overall GPA of 2.0 in the following courses:

Code	Title	Hours
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
EGR 111	Introduction to Engineering Design	4
EGR 112	Introduction to Engineering Experimentation	4
EGR 211	Materials and Mechanics	4
EGR 212	Transport Phenomena	4
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 205	Introduction to Linear Algebra and Differential Equations **	4
PHY 113 & 113L or PHY 123 & 123L	General Physics I and General Physics Lab *** General Physics I - Studio Format and General Physics I - Studio Format Lab	4

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Students may substitute MTH 121 and MTH 251 in place of MTH 205. This might be of particular interest to those who are thinking of a Mathematics minor and/or graduate school in an engineering field.

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Students may substitute PHY 123 in place of PHY 113. Please also note that if a student received AP/IB credit for PHY 111, they cannot receive credit for both PHY 113 and PHY 111 according to the bulletin for the Department of Physics. In this scenario, students should meet with the Engineering Academic Advisor (Dr. Melissa Kenny) to discuss their two potential options: (1) to take PHY 114 in place of PHY 113 to meet this requirement, or (2) to decline to accept their PHY 111 AP/IB credits and take PHY 113 to meet this requirement.

Note that EGR 111 is not a pre-requisite for EGR 112, so either EGR 111 or EGR 112 can be taken first. Similarly, EGR 211 is not a pre-requisite for EGR 212 and EGR 311 not a pre-requisite for EGR 312, so either EGR 211 or EGR 212 can be taken first and either EGR 311 or EGR 312 can be taken first.

## Engineering Concentrations

Pursuit of an Engineering Concentration does not change the degree which is a Bachelor of Science in Engineering. Pursuit of an Engineering Concentration allows students to show focus in their selection of engineering technical elective courses.

## Four-Year Planning

A typical, yet customizable, schedule for the BS Engineering major is:

Code	Title	Hours
First Year		
EGR 111	Introduction to Engineering Design	4
EGR 112	Introduction to Engineering Experimentation	4
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
MTH 111	Calculus with Analytic Geometry I	4
MTH 112	Calculus with Analytic Geometry II	4
PHY 113 or PHY 123	General Physics I General Physics I - Studio Format	4
Second Year		
EGR 211	Materials and Mechanics	4
EGR 212	Transport Phenomena	4
MTH 113	Multivariable Calculus	4
MTH 205	Introduction to Linear Algebra and Differential Equations	4
Third Year		
EGR 311	Control Systems and Instrumentation	4
EGR 312	Computational Modeling in Engineering	4
EGR 313	Capstone Design I	1
EGR technical electives		
Math and/or Basic Science course		
Fourth Year		
EGR 314	Capstone Design II	4
EGR 315	Capstone Design III	4
EGR technical electives		
Math and/or Basic Science course		

Current lists covering all categories of approved courses are available in the Engineering Department and on its website. Additional courses and course updates may have been approved since the publication of this bulletin. The majority of engineering courses integrate theory and practice (e.g., labs, projects, studio) as well as personal and professional development skills.

## Concentrations

### Engineering Concentrations

The Engineering curriculum is designed to promote the interdisciplinary nature of engineering and taking courses across a range of engineering sub-disciplines is encouraged. Students who wish to focus their technical elective coursework in a specific field of engineering can pursue an Engineering Concentration. Pursuit of an Engineering Concentration does not change the degree, which is a Bachelor of Science in Engineering. A concentration requires at least 4 technical elective courses with a focus in the concentration area, as well as the completion of a basic

math and science elective from a shortlist specific to the concentration. Each completed technical elective course can only be counted toward one concentration, however, a math and science elective can count towards more than one concentration. AP credits cannot count towards any of the courses. A minimum overall GPA of 2.0 must be earned on all Wake Forest courses taken to complete the concentration. The requirements for the concentration are those that are in effect at the time of the declaration of the concentration, as the curriculum and the departmental requirements may change slightly during the student's period of residence. Students interested in a concentration should contact an Engineering Faculty.

### Biomedical Engineering Concentration (BME)

Code	Title	Hours
Select 4 courses in engineering technical electives with biomedical focus from:		
EGR 320	Biomedical Engineering Applications	2
EGR 325	Medical Product Design	2
EGR 333	Tissue Engineering	2
EGR 344	Mechanics of Intelligent Material Systems	2
EGR 336	Healthcare Engineering	2
EGR 337	Biofluid Mechanics	2
EGR 338	Bioprinting and Biofabrication	2
EGR 343	Biomaterials	2
EGR 349	Human Biomechanics	2
EGR 351	Biomechanics of Animal Locomotion	2
EGR 381	Engineering Research *	2
At least one from the following to satisfy basic math and science electives in the concentration:		
BIO 150 & 150L	Biology I and Biology I Lab	4
HES 365	Anatomy and Physiology	3

### Civil and Environmental Concentration (CEE)

Code	Title	Hours
Select 4 courses in engineering technical electives with a civil/environmental focus from:		
EGR 319	Environmental Engineering	2
EGR 324	Hydrologic and Hydraulic Engineering	2
EGR 328	Inverse Problems in Engineering	2
EGR 330	Infrastructure Systems Design	2
EGR 332	Structural Engineering I	2
EGR 339	Engineering Reynolda	2
EGR 346	Engineering Analysis of Vibrations	2
EGR 352	Natural Hazards Engineering	2
EGR 353	Green Energy Technologies	2
EGR 354	Resilient Building Systems	2
EGR 381	Engineering Research *	2
At least one from the following to satisfy basic math and science electives in the concentration:		
BIO/ENV 220	Introduction to Earth Science	3
CHM 120 & 120L	Physics and Chemistry of the Environment and Physics and Chemistry of the Environment Lab	4
STA 111	Elementary Probability and Statistics	4

STA 112	Introduction to Regression and Data Science (formerly STA 212)	3
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### Electrical and Computer Engineering Concentration (ECE)

Code	Title	Hours
Select 4 courses in engineering technical electives (at least 1 course must be an EGR course) with an electrical focus from:		
EGR 214	Embedded Microcontroller Systems	2
EGR 215	Digital Electronics	2
EGR 216	Intro to Program for Engineers	2
EGR 334	Mobile Robotics	2
EGR 335	Field Programmable Gate Array (FPGA) Design and Implementation	2
EGR 350	Advanced Electronics	2
EGR 358	Underwater System Design	2
EGR 381	Engineering Research *	2
CSC 112	Fundamentals of Computer Science	4
CSC 201	Data Structures and Algorithms	3
CSC 250	Computer Systems I	4
CSC 251	Computer Systems II	3
CSC 311	Computer Architecture	3
CSC 331	Software Engineering	3
CSC 332	Mobile and Pervasive Computing	3
CSC 341	Operating Systems	3
At least one from the following to satisfy basic math and science electives in the concentration:		
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
MTH 117	Discrete Mathematics	4

### Materials and Chemical Engineering Concentration (MCE)

Code	Title	Hours
Select 4 courses in engineering technical electives with a materials/chemical focus from:		
EGR 321	Chemical Engineering Separations	2
EGR 322	Materials Engineering and Characterization	2
EGR 323	Chemical Reaction Engineering	2
EGR 329	Functional Advanced Materials Characterization	2
EGR 344	Mechanics of Intelligent Material Systems	2
EGR 353	Green Energy Technologies	2
EGR 381	Engineering Research *	2
At least one from the following to satisfy basic math and science electives in the concentration:		
CHM 122 & 122L	Organic Chemistry I and Organic Chemistry I Lab	4
or CHM 123 & 123L	Organic Chemistry I Honors and Organic Chemistry I Honors Lab	
CHM 280	College Chemistry II	3
CHM 364 & 364L	Materials Chemistry and Materials Chemistry Lab	4

## Mechanical Engineering Concentration (ME)

Code	Title	Hours
Select 4 courses in engineering technical electives with a mechanical focus from:		
EGR 213	Mechanical Computer Aided Design I	2
EGR 316	Mechanical Computer Aided Design II	2
EGR 317	Renewable Energy Systems	2
EGR 318	Biomimetic Engineering	2
EGR 324	Hydrologic and Hydraulic Engineering	2
EGR 331	Thermal Fluid Systems	2
EGR 334	Mobile Robotics	2
EGR 337	Biofluid Mechanics	2
EGR 340	Acoustics	2
EGR 341	3D Modeling and Additive Manufacturing	2
EGR 342	Design of Machine Elements	2
EGR 346	Engineering Analysis of Vibrations	2
EGR 347	Finite Element Analysis of Engineering Systems	2
EGR 348	Advanced Fluid Mechanics	2
EGR 349	Human Biomechanics	2
EGR 351	Biomechanics of Animal Locomotion	2
EGR 358	Underwater System Design	2
EGR 381	Engineering Research *	2
At least one from the following to satisfy basic math and science electives in the concentration:		
MTH 254	Optimization Theory	3
MTH 352	Partial Differential Equations	3
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
PHY 262	Mechanics	3

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Only 2 credits of EGR 381 can be counted towards the concentrations.

## Honors

Qualified majors are considered for honors in engineering. Students should consult with Engineering Department faculty or the major advisor for additional details.

## Engineering, Minor

### Requirements

Code	Title	Hours
<b>Required Courses</b>		
EGR 111	Introduction to Engineering Design	4
or EGR 110	Introduction to Human-Centered Engineering Design	
EGR 112	Introduction to Engineering Experimentation	4
PHY 113 & 113L	General Physics I and General Physics Lab	4
or PHY 123 & 123L	General Physics I - Studio Format and General Physics I - Studio Format Lab	
MTH 111	Calculus with Analytic Geometry I	4
or MTH 112	Calculus with Analytic Geometry II	

or MTH 113	Multivariable Calculus
or MTH 205	Introduction to Linear Algebra and Differential Equations

<i>EGR courses 200-level or higher *</i>	<b>8</b>
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<b>Total Hours</b>	<b>24</b>
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Either PHY 230 or PHY 262 can be substituted for an EGR course.

A minimum overall GPA of 2.0 must be earned on all Wake Forest courses taken to complete the minor. The requirements for the minor are those that are in effect at the time of the declaration of the minor, as the curriculum and the departmental requirements may change slightly during the student's period of residence. Students interested in the minor should contact an Engineering Faculty or Engineering Academic Advisor.

## English (ENG)

**The English department offers courses in three programs:** Creative Writing (CRW), English Literature and Language (ENG), and Writing (WRI).

**Journalism courses are offered** by the journalism program as related subjects but do not count toward an English major or minor; they may be taken as electives regardless of the field of study in which a student majors. (See section on Journalism.)

## Contact Information

English Department (<http://college.wfu.edu/english/>)

Tribble Hall C201, Box 7387  
336-758-5383

## Programs Major

- English, B.A.

## Minors

- Creative Writing, Minor
- English, Minor
- Writing, Minor

## Courses

### Creative Writing Courses (CRW)

*WRI 110 or WRI 111 or exemption therefrom is a prerequisite for any creative writing course.*

#### CRW 100. Introduction to Creative Writing. (3 h)

This workshop explores the fundamentals of writing poetry, fiction, and creative nonfiction. Students analyze the forms of each genre with an eye toward creating literary texts of their own. Through workshops and class discussions, students also learn how to revise their own writing and offer feedback on the work of classmates.

#### CRW 285. Poetry Workshop. (1.5, 3 h)

Craft course in the writing of poetry with an emphasis on developing, reading, and discussing student poems in a supportive classroom community. Study of poetic techniques, forms, and revision as well as the works of historical and/or contemporary poets.



**CRW 286. Short Story Workshop. (1.5, 3 h)**

Study of fundamental principles of short fiction writing; practice in writing; extensive study of short story form.

**CRW 287. Literary Nonfiction Workshop. (3 h)**

Study of the fundamental principles of literary nonfiction, with a focus on subgenres, techniques, and the works of important literary nonfiction writers.

**CRW 300. Topics in Creative Writing. (3 h)**

Workshop centering on theme instead of genre. Students study creative writing through the lens of ideas such as hybridity, ecology, and the visual. Through analyzing important texts, workshops, and class discussions, students hone their skills in fiction, poetry, and/or literary nonfiction, as well as improve their abilities to revise and offer feedback on classmates' work. May be repeated with permission. P-a 200-level CRW course or POI.

**CRW 384. Playwriting. (3 h)**

Examines the elements of dramatic structure and their representations in a variety of dramatic writings. Explores the fundamentals of playwriting through a series of writing exercises. Also listed as THE 360.

**CRW 385. Advanced Poetry Workshop. (3 h)**

Emphasis on reading and discussing student poems in terms of craftsmanship and general principles. May be repeated once. P-a 200-level CRW course or POI.

**CRW 386. Advanced Fiction Writing. (3 h)**

Primarily a short-story workshop, with class discussion on issues of craft, revision, and selected published stories. May be repeated once. P-a 200-level CRW course or POI.

**CRW 387. Advanced Literary Nonfiction Workshop. (3 h)**

Emphasis on the theory and craft of creative nonfiction as well as on contemporary writers of creative nonfiction. May be repeated once. P-a 200-level CRW course or POI.

## English Courses (ENG)

*WRI 110 or WRI 111 or exemption therefrom is a prerequisite or a co-requisite for any English course 150 or above. Any 3-credit ENG course numbered ENG 150-ENG 190, ENG 265, ENG 266, ENG 275, or ENG 301-ENG 396, except, ENG 386, ENG 388, and ENG 390 satisfies the Division II literature requirement. Students enrolled at Wake Forest may not take literature courses in English at other institutions to satisfy Division II requirements. This includes courses taken within non-WFU study abroad programs by continuing students.*

**ENG 101. The Discipline of English Studies. (1 h)**

An opportunity to experience and reflect analytically in writing on the diverse cultural and intellectual life at Wake Forest, with an emphasis on literary studies, rhetorical studies, and creative writing events and topics. Pass/fail only. May not be repeated.

**ENG 150. Literature Interprets the World. (3 h)**

Introduction to ways literary artists shape experience, focusing on one topic or selected topics; primarily discussion; writing intensive. P or C-WRI 110, WRI 111, or exemption therefrom. (D)

**ENG 165. Studies in British Literature. (3 h)**

Emphasis on important writers representing different periods and genres; primarily discussion; writing intensive. P or C-WRI 110, WRI 111, or exemption therefrom. (D)

**ENG 175. Studies in American Literature. (3 h)**

Emphasis on important writers representing different periods and genres; primarily discussion; writing intensive. P or C-WRI 110, WRI 111, or exemption therefrom. (D)

**ENG 185. Studies in Global Literature. (3 h)**

Emphasis on important writers representing different periods and genres; primarily discussion; writing intensive. P or C-WRI 110, WRI 111, or exemption therefrom. (D)

**ENG 190. Literary Genres. (3 h)**

Emphasis on poetry, fiction, or drama; primarily discussion; writing intensive. P or C-WRI 110, WRI 111, or exemption therefrom. (D)

**ENG 265. British Literature before 1800. (3 h)**

Gateway course for the major. Significant works from the British literary tradition before 1800 and introduction to key ideas in literary interpretation. Required for all majors. (D)

**ENG 266. British Literature 1800 to the Present. (3 h)**

Gateway course for the major. Significant works from the British and postcolonial literary traditions since 1800. Either ENG 266 or ENG 275 required for all majors. (D)

**ENG 275. American Literature. (3 h)**

Gateway course for the major. Significant works from the American literary tradition. Either ENG 275 or ENG 266 required for all majors. (D)

**ENG 290. Foundations in Literary Criticism. (3 h)**

Considers figures and schools of thought significant in the history of literary criticism. Required for all majors. (D)

**ENG 298. WFU Press Internship. (1.5-3 h)**

Semester-length practical experience in literary publishing while working at WFU Press, the premier publisher of Irish poetry in North America. Interns learn aspects of editorial review, production, proofreading, marketing, and promotion. Students must submit a formal application through WFU Press before registering ([wfupress.wfu.edu](http://wfupress.wfu.edu)). Pass/Fail. Does not count toward the English Major or Minor. May be repeated once for credit.

**ENG 299. Individual Study. (1.5-3 h)**

Independent study with faculty guidance. Granted upon departmental approval of petition presented by a qualified student. May be repeated once for credit.

**ENG 301. Individual Authors. (3 h)**

Study of selected work from an important American or British author. May be repeated once for credit. (D)

**ENG 302. Ideas in Literature. (3 h)**

Study of a significant literary theme in selected works. May be repeated when the course is taught by a different professor on a different topic. (D)

**ENG 304. History of the English Language. (3 h)**

A survey of the development of English syntax, morphology, and phonology from Old English to the present, with attention to vocabulary growth.

**ENG 305. Old English Language and Literature. (3 h)**

An introduction to the Old English language and a study of the historical and cultural background of Old English literature, including Anglo-Saxon and Viking art, runes, and Scandinavian mythology. Readings from Beowulf and selected poems and prose. Fulfills pre-1800 British literature requirement. (D)

**ENG 308. Beowulf. (3 h)**

Intensive study of the poem; emphasis on language, translation skills and critical context. Fulfills pre-1800 British literature requirement. P-ENG 305 or POI. (D)

**ENG 309. Modern English Grammar. (3 h)**

A linguistics approach to grammar study. Includes a critical exploration of issues such as grammatical change and variation, the origins and effects of grammar prescriptions/proscriptions, the place of grammar instruction in education, and the politics of language authority. Also listed as LIN 309.

**ENG 310. The Medieval World. (3 h)**

Examines theological, philosophical, and cultural assumptions of the Middle Ages through the reading of primary texts. Topics may include Christian providential history, drama, devotional literature, the Franciscan controversy, domestic life, and Arthurian romance. Fulfills pre-1800 British literature requirement. (CD - Depending on topic covered.) (D)

**ENG 311. The Legend of Arthur. (3 h)**

The origin and development of the Arthurian legend in France and England, with emphasis on the works of Chretien de Troyes and Sir Thomas Malory. Fulfills pre-1800 British literature requirement. (D)

**ENG 312. Medieval Poetry. (3 h)**

The origin and development of poetic genres and lyric forms of medieval vernacular poetry. Fulfills pre-1800 British literature requirement. (D)

**ENG 313. Roots of Song. (3 h)**

Interdisciplinary investigation of poetry and song in the Middle Ages and early Renaissance. Study of the evolution of poetic and musical genres and styles, both sacred and secular. Students must complete a project or projects on the technical or theoretical aspects of early song. Fulfills pre-1800 British literature requirement. Also listed as MUS 283. (D)

**ENG 315. Chaucer. (3 h)**

Emphasis on *The Canterbury Tales* and *Troilus and Criseyde*, with some attention to minor poems. Consideration of literary, social, religious, and philosophical background. Fulfills pre-1800 British literature requirement. (D)

**ENG 320. British Drama to 1642. (3 h)**

British drama from its beginning to 1642, exclusive of Shakespeare. Representative cycle plays, moralities, Elizabethan and Jacobean tragedies, comedies, and tragicomedies. Fulfills pre-1800 British literature requirement. Also listed as THE 320. (D)

**ENG 323. Shakespeare. (3 h)**

Thirteen representative plays illustrating Shakespeare's development as a poet and dramatist. Fulfills pre-1800 British literature requirement. Also listed as THE 323. (D)

**ENG 325. 16th-Century British Literature. (3 h)**

Concentration on the poetry of Spenser, Sidney, Shakespeare, Wyatt, and Drayton, with particular attention to sonnets and *The Faerie Queene*. Fulfills pre-1800 British literature requirement. (D)

**ENG 326. Studies in English Renaissance Literature. (3 h)**

Selected topics in Renaissance literature. Consideration of texts and their cultural background. Fulfills pre-1800 British literature requirement. May be repeated once for credit pending approval of instructor. (D)

**ENG 327. Milton. (3 h)**

The poetry and selected prose of John Milton, with emphasis on *Paradise Lost*. Fulfills pre-1800 British literature requirement. (D)

**ENG 328. 17th-Century British Literature. (3 h)**

Poetry of Donne, Herbert, Vaughan, Marvel, Crashaw; prose of Bacon, Burton, Browne, Walton. Consideration of religious, political, and scientific backgrounds.

**ENG 330. Restoration and 18th-Century British Literature. (3 h)**

Representative poetry and prose, exclusive of the novel, 1660-1800, drawn from Dryden, Behn, Swift, Pope, Johnson, and Wollstonecraft. Consideration of cultural backgrounds and significant literary trends. Fulfills pre-1800 British literature requirement. (D)

**ENG 333. Jane Austen. (3 h)**

An intensive study of the works of British novelist Jane Austen, and her cultural contexts.

**ENG 335. 18th-Century British Fiction. (3 h)**

Primarily the fiction of Defoe, Richardson, Fielding, Smollett, Sterne, and Austen. Fulfills pre-1800 British literature requirement. (D)

**ENG 336. Restoration and 18th-Century British Drama. (3 h)**

British drama from 1660 to 1780, including representative plays by Dryden, Etherege, Wycherley, Congreve, Goldsmith, and Sheridan. Fulfills pre-1800 British literature requirement. Also listed as THE 336. (D)

**ENG 337. Studies in 18th-Century British Literature. (3 h)**

Selected topics in 18th-century literature. Consideration of texts and their cultural background. Fulfills pre-1800 British literature requirement. (D)

**ENG 338. Studies in Gender and Literature. (3 h)**

Thematic and/or theoretical approaches to the study of gender in literature. (D)

**ENG 339. Studies in Sexuality and Literature. (3 h)**

Thematic and/or theoretical approaches to the study of sexuality in literature. (D)

**ENG 340. Studies in Women and Literature. (3 h)**

Women writers in society. May be repeated when the course is taught by a different professor on a different topic. (D)

**ENG 341. Literature and the Environment. (3 h)**

Studies of the relationship between environmental experience and literary representation. (D)

**ENG 344. Studies in Poetry. (3 h)**

Selected topics in poetry. May be repeated when the course is taught by a different professor on a different topic. (D)

**ENG 345. Studies in Fiction. (3 h)**

Selected topics in fiction. May be repeated when the course is taught by a different professor on a different topic. (D)

**ENG 346. Studies in Theatre. (3 h)**

Selected topics in drama. May be repeated when the course is taught by a different professor on a different topic. (D)

**ENG 347. Modern English and Continental Drama and the London Stage. (3 h)**

Explores the works of major playwrights of England and Europe from 1875 to the present. May also include contemporary production of classic plays. Emphasizes plays currently being presented in London theatres. Also listed as THE 266. Offered in London. (D)

**ENG 350. British Romantic Poets. (3 h)**

A review of the beginnings of Romanticism in British literature, followed by study of Wordsworth, Coleridge, Byron, Keats, and Shelley; collateral reading in the prose of the period. (D)

**ENG 351. Studies in Romanticism. (3 h)**

Selected topics in European and/or American Romanticism with a focus on comparative, interdisciplinary, and theoretical approaches to literature. (D)

**ENG 353. 19th-Century British Fiction. (3 h)**

Representative major works by Dickens, Eliot, Thackeray, Hardy, the Brontës, and others. (D)

**ENG 354. Victorian Poetry. (3 h)**

A study of Tennyson, Browning, Hopkins, and Arnold or another Victorian poet. (D)

**ENG 356. Literature of the Caribbean. (3 h)**

Readings include significant works by authors from the Caribbean and authors writing about the Caribbean. Critical, historical, and cultural approaches are emphasized. All texts are in English. (CD, D)

**ENG 357. Studies in Chicano/a Literature. (3 h)**

Writings by Americans of Mexican descent in relation to politics and history. Readings in literature, literary criticism, and socio-cultural analysis. Fulfills the American literature requirement. Also listed as AES 357. (CD, D)

**ENG 358. Postcolonial Literature. (3 h)**

A survey of representative examples of postcolonial literature from geographically diverse writers, emphasizing issues of politics, nationalism, gender and class. (CD, D)

**ENG 359. Studies in Postcolonial Literature. (3 h)**

Examination of themes and issues in post-colonial literature, such as: globalization, postcolonialism and hybridity, feminism, nationalism, ethnic and religious conflict, the impact of the Cold War, and race and class. (CD, D)

**ENG 360. Studies in Victorian Literature. (3 h)**

Selected topics, such as development of genres, major authors and texts, and cultural influences. Readings in poetry, fiction, autobiography, and other prose. (D)

**ENG 361. Literature and Science. (3 h)**

Literature of and about science. Topics will vary and may include literature and medicine, the two culture debate, poetry and science, nature in literature, the body in literature. (D)

**ENG 362. Irish Literature in the Twentieth Century. (3 h)**

A study of modern Irish literature from the writers of the Irish Literary Renaissance to contemporary writers. Course consists of overviews of the period as well as specific considerations of genre and of individual writers. (D)

**ENG 363. Studies in Modernism. (3 h)**

Selected issues in Modernism. Interdisciplinary, comparative, and theoretical approaches to works and authors. (D)

**ENG 364. Advanced Studies in Literary Criticism. (3 h)**

Consideration of certain figures and schools of thought significant in the history of literary criticism. Builds on ENG 290 Foundations in Literary Criticism. (D)

**ENG 365. 20th-Century British Fiction. (3 h)**

A study of Conrad, Lawrence, Joyce, Forster, Woolf, and later British writers, with attention to their social and intellectual backgrounds. (D)

**ENG 366. James Joyce. (3 h)**

The major works by James Joyce, with an emphasis on *Ulysses*. (D)

**ENG 367. 20th-Century English Poetry. (3 h)**

A study of 20th-century poets of the English language, exclusive of the United States poets, are read in relation to the literary and social history of the period. (D)

**ENG 368. Studies in Irish Literature. (3 h)**

The development of Irish literature from the 18th century through the early 20th century in historical perspective, with attention to issues of linguistic and national identity. (D)

**ENG 369. Modern Drama. (3 h)**

Main currents in modern drama from 19th-century realism and naturalism through symbolism and expressionism. After an introduction to European precursors, focus is on representative plays by Wilde, Shaw, Synge, Yeats, O'Neill, Eliot, Hellman, Wilder, Williams, Hansberry, and Miller. (D)

**ENG 370. American Literature to 1820. (3 h)**

Origins and development of American literature and thought in representative writings of the Colonial, Revolutionary, and Federal periods. Fulfills the American literature requirement. (D)

**ENG 371. American Ethnic Literature. (3 h)**

Introduction to the diverse field of literature about race and racial formation as experienced by African Americans, Asian Americans, Jewish Americans, Chicana/o, Latinx, and Native American writers. The course introduces key genealogies of thought in critical race theory, intersectionality, diaspora, identity, alienation, assimilation, multiculturalism, stereotyping, systemic racism, and social justice. Fulfills the American literature requirement. (CD, D)

**ENG 372. American Romanticism. (3 h)**

Writers of the mid-19th century, including Emerson, Thoreau, Hawthorne, and Melville. Fulfills the American literature requirement. (D)

**ENG 373. Literature and Film. (3 h)**

Selected topics in the relationship between literature and film, such as film adaptations of literary works, the study of narrative, and the development of literary and cinematic genres. (D)

**ENG 374. American Fiction before 1865. (3 h)**

Novels and short fiction by such writers as Brown, Cooper, Irving, Poe, Hawthorne, Melville, Stowe, and Davis. Fulfills the American literature requirement. (D)

**ENG 375. American Drama. (3 h)**

A historical overview of drama in America, covering such playwrights as Boucicault, O'Neill, Hellman, Wilder, Williams, Inge, Miller, Hansberry, Albee, Shepard, Norman, Mamet, and Wilson. Fulfills the American literature requirement. Also listed as THE 375. (D)

**ENG 376. American Poetry before 1900. (3 h)**

Readings and critical analysis of American poetry from its beginnings to the end of the 19th century, including Bradstreet, Emerson, Longfellow, Melville, and Poe, with particular emphasis on Whitman and Dickinson. Fulfills the American literature requirement. (D)

**ENG 377. American Jewish Literature. (3 h)**

Survey of writings on Jewish topics or experiences by American Jewish writers. Explores cultural and generational conflicts, responses to social change, the impact of the Shoah (Holocaust) on American Jews, and the challenges of language and form posed by Jewish and non-Jewish artistic traditions. Fulfills the American literature requirement. (CD, D)

**ENG 378. Literature of the American South. (3 h)**

Study of Southern literature from its beginnings to the present, with emphasis upon such major writers as Tate, Warren, Faulkner, O'Connor, Welty, and Styron. Fulfills the American literature requirement. (D)

**ENG 379. Literary Forms of the American Personal Narrative. (3 h)**

Reading and critical analysis of autobiographical texts in which the ideas, style, and point of view of the writer are examined to demonstrate how these works contribute to an understanding of pluralism in American culture. Representative authors may include Hurston, Wright, Kingston, Angelou, Wideman, Sarton, Chuang Hua, Crews, and Dillard. Fulfills the American literature requirement. (D)

**ENG 380. American Fiction 1865 to 1915. (3 h)**

Study of such writers as Twain, James, Howells, Crane, Dreiser, Wharton, and Cather. Fulfills the American literature requirement. (D)

**ENG 381. Studies in African-American Literature. (3 h)**

Reading and critical analysis of selected fiction, poetry, drama, and other writings by American authors of African descent. Fulfills the American literature requirement. (CD, D)

**ENG 382. Modern American Fiction, 1915 to 1965. (3 h)**

Includes such writers as Stein, Lewis, Anderson, Hemingway, Fitzgerald, Faulkner, Dos Passos, Wolfe, Wright, Ellison, Agee, Flannery O'Connor, and Pynchon. Fulfills the American literature requirement. (D)

**ENG 385. 20th-Century American Poetry. (3 h)**

Readings of modern American poetry in relation to the literary and social history of the period. Fulfills the American literature requirement. (D)

**ENG 386. Directed Reading. (1.5-3 h)**

A tutorial in an area of study not otherwise provided by the department; granted upon departmental approval of petition presented by a qualified student. May be repeated once for credit.

**ENG 387. African-American Fiction. (3 h)**

Selected topics in the development of fiction by American writers of African descent. Fulfills the American literature requirement. Also listed as AES 387. (CD, D)

**ENG 388. Honors in English. (3 h)**

A conference course centering upon a special reading requirement and a thesis requirement. For senior students wishing to graduate with "Honors in English."

**ENG 389. African-American Poetry. (3 h)**

Readings of works by American poets of African descent in theoretical, critical, and historical contexts. Fulfills the American literature requirement. Also listed as AES 389. (CD, D)

**ENG 390. The Structure of English. (3 h)**

An introduction to the principles and techniques of modern linguistics applied to contemporary American English. Also listed as LIN 390.

**ENG 391. Studies in Postmodernism. (3 h)**

Interdisciplinary, comparative, and theoretical approaches to works and authors.

**ENG 393. Multicultural American Drama. (3 h)**

Examines the dramatic works of playwrights from various racial and ethnic communities such as Asian American, Native American, African American, and Latino. The course includes consideration of issues, themes, style, and form. Fulfills the American literature requirement. Also listed as THE 376. (CD, D)

**ENG 394. Contemporary Drama. (3 h)**

Considers experiments in form and substance in plays from Waiting for Godot to the present. Readings will cover such playwrights as Beckett, Osborne, Pinter, Stoppard, Churchill, Wertenbaker, Albee, Shepard, Mamet, Wilson, Soyinka, and Fugard. Also listed as THE 372. (D)

**ENG 395. Contemporary American Literature. (3 h)**

A study of post-World War II American poetry and fiction by such writers as Bellow, Gass, Barth, Pynchon, Lowell, Ashbery, Ammons, Bishop, and Rich. Fulfills the American literature requirement. (D)

**ENG 396. Contemporary British Fiction. (3 h)**

Study of the British novel and short story, including works by Rushdie, Amis, Winterson and Ishiguro. (D)

**ENG 397. Internship in the Major. (1.5 h)**

Internship that involves both hands-on experience and academic study. Students will partner with a literature faculty member to integrate work in the community and engagement with his or her academic plan of study. P-POI.

**ENG 398. English Studies and the Professions. (1.5 h)**

A practicum course focused on career design and career planning, specific to career options in humanities fields. The course will broaden awareness of career opportunities available to English majors and minors. Pass-Fail Only. Cannot be repeated.

## Writing Seminars (WRI)

*WRI 110 or WRI 111 is a prerequisite for any Writing course above 111. To fulfill the College's Writing Requirement, students must take 4 Writing credits: either WRI 109 (2 h) and WRI 110 (2 h), or WRI 111 (4 h). Should be taken in the first year. WRI 110 or WRI 111 will satisfy the Basic Writing Requirement. WRI 109 is a prerequisite for WRI 110. Enrollment limited.*

**WRI 109. Writing Seminar, Part I. (2 h)**

First course of a two-semester sequence in which students explore writing as a recursive process. Students practice engaging with others' views and texts; developing and reflecting on their own claims, evidence, and reasoning; connecting writing choices with rhetorical purposes and effects; and composing in various genres. Enrollment limited.

**WRI 110. Writing Seminar, Part II. (2 h)**

Second course in a two-semester sequence in which students explore writing as a recursive process. Students practice engaging with others' views and texts; developing and reflecting on their own claims, evidence, and reasoning; connecting writing choices with rhetorical purposes and effects; and composing in various genres. Enrollment limited. P-WRI 109.

**WRI 111. Writing Seminar. (4 h)**

Foundational course in which students explore writing as a recursive process. Students practice engaging with others' views and texts; developing and reflecting on their own claims, evidence, and reasoning; connecting writing choices with rhetorical purposes and effects; and composing in various genres. Enrollment limited.

**WRI 210. Advanced Academic Writing. (3 h)**

An advanced composition course focused on the study of academic writing. Students consider the rhetorical and linguistic features of research-based writing, examine methods of research and evidence-gathering, and analyze argumentation across disciplines. Enrollment limited. P - WRI 110 or WRI 111.

**WRI 212. Literary Nonfiction: Art of the Essay. (3 h)**

Reading, writing, and analysis of the essay. Consideration of the rise and evolution of various forms of the essay; inclusive of essayists from a variety of disciplines. Enrollment limited. P - WRI 110 or WRI 111.

**WRI 306. Special Topics in Rhetoric and Writing. (1.5, 3 h)**

Study of significant rhetorical or writing theories and practices focused on one area of study. May be repeated once for credit. P - WRI 110 or WRI 111.

**WRI 307. Contemporary Theory of Rhetoric and Writing. (1.5, 3 h)**

Study of key historical developments and theories in the current field of rhetoric and writing studies since its 20th-century inception. May be repeated once for credit. P - WRI 110 or WRI 111.



**WRI 310. Interaction in Language: Introduction to Written Discourse Studies. (3 h)**

Analysis of theoretical traditions in discourse studies, including Pragmatics, Analysis of Institutional Talk, Genre Analysis, and Corpus Linguistics, designed to provide students with new approaches and tools with which to question, investigate, and critique how language works in discourses that are meaningful to them. P - WRI 110 or WRI 111.

**WRI 320. Writing in and about Science: Scientists as Writers and Writers as Scientists. (3 h)**

Reading, writing, and analysis of scholarly and popular science writing. Consideration of scientists as writers and rhetoricians, namely, the varied purposes and audiences for which scientists and science writers compose. Enrollment limited. P - WRI 110 or WRI 111.

**WRI 322. Investigating Innocence at the Intersection of Journalism, Narrative, and the Law. (3 h)**

Learn to write like a journalist and think like a lawyer by investigating and writing about an ongoing case of a wrongful conviction under review by the law school's Innocence & Justice Clinic. Law students and undergraduates work together with instruction by professors in law and journalism. POI Required. Also listed as JOURNALISM 322.

**WRI 340. Practice in Rhetoric and Composition. (3 h)**

Training and practice in rhetorical analysis and composition. Students work on developing effective composing processes and strategies, then put them into practice toward a variety of purposes. Course topics vary across semesters. May be repeated once for credit. P - WRI 110 or WRI 111.

**WRI 341. Writing Center Pedagogy. (3 h)**

Introduction to composition pedagogy and writing center theory and practices, with special emphasis on one-to-one and small group peer tutoring techniques. The course includes classroom-based work - reading, writing, and exploring instruction and consultation processes - and field experiences. Students spend a total of 20 hours observing in writing classrooms, the WFU Writing Center and/or community sites, and tutoring. Students reflect on these experiences to prepare a final researched writing project. Required for undergraduates interested in working in the Writing Center as peer tutors. P - WRI 110 or WRI 111.

**WRI 342. Writing Practicum. (1-3 h)**

Practical or professional experience in writing, rhetoric, and composition. Students must be supervised and mentored by a faculty adviser. Cannot be repeated. P - WRI 110 or WRI 111.

**WRI 343. Independent Study. (1-3 h)**

Independent study with faculty guidance. By prearrangement.

**WRI 344. Magazine Writing. (3 h)**

Learn and practice the skills needed to produce magazine stories for publication. Focusing on a single topic of their own choosing, students learn advanced principles of interviewing, document research, story structure, character development, and explanatory journalism as they read and analyze some of the best magazine stories written over the past thirty years. Also listed as JOURNALISM 344. P - JOURNALISM 270 or POI.

**WRI 350. Writing Minor Capstone. (3 h)**

Seminar course in which students read widely in writing studies, compose new and revise previous essays, and create an e-portfolio. Required of all students wishing to graduate with an interdisciplinary writing minor. P - WRI 110 or WRI 111.

## Faculty

**Chair** Jefferson Holdridge  
**Associate Chair** Gale Sigal

**Director of Writing Program** Erin Branch

**Director of English Undergraduate Studies** Omaar Hena

**Director of English Core Curriculum** Rian Bowie

**Director of Creative Writing Program** Eric Wilson

**Director of Journalism** Phoebe Zerwick

**Director of Writing Center** Ryan Shirey

**Reynolds Professor of English** Herman Rapaport

**Thomas H. Pritchard Professor of English** Eric G. Wilson

**Wake Forest Professor of Humanities** Corey D.B. Walker

**William R. Kenan Jr. Chair in the Humanities** Laura Mullen

**Winifred W. Palmer Professor in Literature** Dean J. Franco

**Ollen R. Nally Faculty Fellow** Sarah Hogan

**Susan & Gene Goodson Faculty Fellow** Zak Lancaster

**Z. Smith Reynolds Foundation Faculty Fellow** Rian Bowie

**Z. Smith Reynolds Foundation Faculty Fellow** Erin Branch

**Professors** Jennifer Greiman, Jefferson Holdridge, Scott Klein, Barry G.

Maine, Gale Sigal, Corey D.B. Walker

**Research Professor** Gillian R. Overing

**Associate Professors** Chris Brown, Amy Catanzano, Susan Harlan, Omaar

Hena, Sarah Hogan, Melissa Jenkins, Zak Lancaster, Judith Irwin Madera,

Jessica Richard, Joanna Ruocco, Erica Still, Olga Valbuena-Hanson

**Assistant Professors** Lucy Alford, Amy Clark, Juan Moisés García

Renteria, Derek Lee, Alisa Russell

**Professor of the Practice** Justin J. Catanoso, Phoebe Zerwick

**Teaching Professor** Erin Branch, Ryan Shirey

**Associate Teaching Professors** Rian Bowie, Eric Ekstrand, Meredith

Farmer, Laura Giovannelli, Danielle Koupf, Jennifer Pyke, Randi Saloman,

Jonathan Smart, Carter Smith, Eric Stottlemeyer, Elisabeth Whitehead

**Assistant Teaching Professors** Kendra Andrews, Keri Epps, Marianne

Erhardt, Matt Garite, Hannah Harrison, Siddharth Srikanth, Guy Witzel

**Visiting Assistant Professors** Jack Bell, Brenna Casey, Lisa Klarr, Matt

Fiander

**Adjunct Professor** Paul Garber, Adrian Greene, Carrie Johnston

**Part-time Instructor in Journalism** Maria Henson, Barry Yeoman

## English, B.A.

### Requirements

Requires a minimum of 33 hours in courses ENG 150 and above. (WRI 110 and WRI 111, basic writing requirements, do not count toward the major or minor nor do they count as a divisional requirement.) The courses for the major must include:

Code	Title	Hours
<b>Gateway Courses</b>		<b>9</b>
ENG 265	British Literature before 1800	
ENG 266	British Literature 1800 to the Present	
or ENG 275	American Literature	
ENG 290	Foundations in Literary Criticism	
<b>Overlay Requirements</b>		<b>12</b>
Two 300-level pre-1800 literature courses		
One 300-level American Literature course		
One 300-level Race and Racialization course		

Certain 300-level courses may satisfy more than one overlay requirement at the same time. Students may count one course toward multiple overlays, but will still be required to complete 33 hours overall (at least 21 at the 300 level) for the major.



Electives	12
Select nine hours of electives at 300-level (may include up to two 300-level Creative Writing or Writing courses)	
Select any three-hour ENG course numbered 150 or above, or a three-hour 200-level course in either Creative Writing or Writing	

All students must take two 300-level ENG courses that fulfill the pre-1800 literature requirement, one 300-level ENG course that fulfills the American literature requirement, and one 300-level course that fulfills the Race and Racialization requirement. These are “overlay” requirements, which means that one course may be designated as fulfilling more than one of these requirements. Students who count one course towards multiple overlays will still be required to complete 33 hours overall for the major, of which at least 21 hours must be at the 300 level.

Majors and their advisers plan individual programs to meet these requirements; majors are urged to take their gateway requirements as early as possible in their college careers. No more than two courses (six hours) taken elsewhere may be counted toward the major. This limitation applies to courses taught in approved non-Wake Forest programs, not to courses in programs offered or sponsored by Wake Forest.

Honors

Highly qualified majors recommended by the English faculty are invited to apply to the honors program in English during the second semester of their junior year. To graduate with “Honors in English,” students must have a minimum GPA of 3.5 in the major and 3.2 in all course work. Students must also fulfill the 10-page writing requirement in the fall semester that allows them to enroll in ENG 388 the spring semester of their senior year. Finally, they must satisfy the requirements of the program by completing and successfully defending their honors thesis as part of ENG 388 Honors in English. Interested students may consult the director of the English honors program for further information.

Creative Writing, Minor Requirements

Creative writing courses are open to minors and non-minors. Students who declare a Creative Writing Minor receive first preference in enrolling in creative writing courses in the English department during pre-registration periods.

The Creative Writing minor requires five course (15 hours), including one 300-level literature course offered by the English department. The remaining four courses will consist of Creative Writing workshops offered by the English department (poetry, fiction, literary nonfiction, and the 100-level multi-genre course) or cross-listed with the minor (playwriting and screenwriting); at least two of these must be at the 300-level. While CRW 100 counts towards the minor for students who wish to take this course, it is not required. To enroll in a 300-level workshop, students must have taken a 200-level workshop.

English majors may earn a Creative Writing minor by taking four creative writing courses (at least two at the 300-level) exclusive of courses used to complete their major.

Code	Title	Hours
Creative Writing (CRW) courses that fulfill the minor		
CRW 100	Introduction to Creative Writing	3
CRW 285	Poetry Workshop	3

CRW 286	Short Story Workshop	3
CRW 287	Literary Nonfiction Workshop	3
CRW 300	Topics in Creative Writing	3
CRW 384	Playwriting	3
CRW 385	Advanced Poetry Workshop	3
CRW 386	Advanced Fiction Writing	3
CRW 387	Advanced Literary Nonfiction Workshop	3

Electives that fulfill the minor		
COM 316	Screenwriting	3

English, Minor Requirements

The minor in English requires 18 hours in courses ENG 150 and above, at least 15 of which must be at the 300-level. No more than two advanced Creative Writing or Writing courses may be counted toward the minor. Each minor will be assigned an adviser in the English department who will plan a program of study with the student. No more than one course (three hours) taken elsewhere may be counted toward the minor. This limitation applies to courses taught in approved non-Wake Forest programs, not to courses in programs offered or sponsored by Wake Forest.

Writing, Minor Requirements

Students in the Writing minor will develop their academic, critical, and rhetorical writing skills in ways that enhance their major courses of study. By moving beyond the competencies introduced in the first-year writing seminar, the Writing minor will provide students with opportunities to practice, refine, and extend their skills as academic, professional, and creative writers. The curriculum, composed of new and existing courses in rhetoric and writing, as well as writing-enhanced courses across the disciplines, prepares students to participate in various writing situations both inside and outside the academy.

At least 18 credits of coursework, including:

Code	Title	Hours
Select one 3-credit gateway course		3
Select one 3-credit capstone course		3
Select an additional six credits from upper level writing courses		6
Select six credits from elective or upper-level writing courses		6

Gateway Courses: Introduction to the Minor

Code	Title	Hours
WRI 210	Advanced Academic Writing *	3
or WRI 212	Literary Nonfiction: Art of the Essay	

\*  
The course not taken as the introduction to the minor may be taken in the second category.

Upper Level Writing Courses

Minimum of 6 credits:

Code	Title	Hours
WRI 210	Advanced Academic Writing	3
WRI 212	Literary Nonfiction: Art of the Essay	3
WRI 306	Special Topics in Rhetoric and Writing	1.5,3
WRI 307	Contemporary Theory of Rhetoric and Writing	1.5,3
WRI 310	Interaction in Language: Introduction to Written Discourse Studies	3
WRI 320	Writing in and about Science: Scientists as Writers and Writers as Scientists	3
WRI 340	Practice in Rhetoric and Composition *	3
WRI 341	Writing Center Pedagogy	3
WRI 344	Magazine Writing	3
ENG 309	Modern English Grammar	3
ENG 390	The Structure of English	3

\*

May be repeated once for credit towards the minor.

## Writing Electives

Any upper level writing course or writing-enriched courses across the disciplines that do not satisfy the gateway course or the 6 credits toward the minor may be used as electives. (A list of writing enhanced courses will be found on the Writing Program's webpage.)

## Writing Minor Capstone

Code	Title	Hours
WRI 350	Writing Minor Capstone	3

The Writing Minor is intended to complement a student's major, and "double dipping" is discouraged. No more than one course may count toward another program of study.

## Entrepreneurship (ENT)

### Overview

Interdisciplinary Minor

The Wake Forest Center for Entrepreneurship offers an interdisciplinary minor in entrepreneurship. Through a modern evidence-based entrepreneurship curriculum, emphasis on deliberate practice, and strong teaching and mentorship, the Center seeks to ignite passion for entrepreneurial action, to develop entrepreneurial self-efficacy, and to cultivate a growth mindset for entrepreneurship. The entrepreneurship minor can be coupled with any liberal arts major and gives students valuable skills for their future careers, including risk and uncertainty management, interpersonal and networking management, innovation and product development, and opportunity recognition.

### Contact Information

Center for Entrepreneurship (<http://entrepreneurship.wfu.edu/>)  
Reynolda Hall 230  
Phone 336-758-3153

### Programs

## Minor

- Entrepreneurship, Minor

## Courses

### ENT 105. The Entrepreneurial Experience: From Mindset to Entrepreneurial Identity. (1 h)

An exploration and analysis of the entrepreneurial lifecycle from ideation, concept development, launching and building a company, and eventually exiting, with specific focus on developing an entrepreneurial mindset and forming an entrepreneurial identity. The course features guest speakers who have founded companies in various industries.

### ENT 200. Foundations of Entrepreneurship: Identifying and Cultivating Valuable Ideas. (3 h)

Examines and cultivates the notion of creativity from the perspective of value creation, inquiry, opportunity recognition, and idea generation. Topics examined through writing and design assignments, group projects, and discussions include awareness, empathy, risk, ethics, self-agency, and social engagement with the express objective of identifying and creating valuable ideas. Provides an introduction to the practice of entrepreneurship and design thinking, along with the development of an entrepreneurial mindset.

### ENT 201. Evidence-Based Entrepreneurship: Developing Validated Concepts. (3 h)

Examines how individuals use entrepreneurial skills to craft innovative responses to societal and market needs. Using customer discovery and other evidence-based entrepreneurial methods, students participate in the progression of ideas into validated concepts. P-ENT 200.

### ENT 203. Writing for a Social Purpose. (3 h)

Combines writing, service learning, and entrepreneurship approaches in communication by partnering students with a local nonprofit organization to provide a range of writing solutions in print and online. Also listed as JOU 325. P- JOU 270 or POI.

### ENT 205. Scaling the Entrepreneurial Venture: From Concept to Harvest. (3 h)

Explores the stage in the entrepreneurial lifecycle where validated concepts transition to established ventures. The course is designed to provide exposure to topics critical to success, such as how to scale the venture past early adopters to meet the needs of more mainstream customers. It covers key functional domains including entrepreneurial marketing, finance, fundraising, leadership, and strategy. P - ENT 201.

### ENT 250. Communicating for an Entrepreneurial Mindset. (3 h)

Exploration of communication in teams and workplaces with specific emphasis on fast-paced communication, creative thinking, diversity and inclusion, and collaboration with various stakeholders. Also listed as COM 250.

### ENT 301. Topics in Entrepreneurship. (1.5, 3 h)

Seminar and/or lecture courses in select topics related to entrepreneurship. May be repeated if course title differs.

### ENT 302. Topics in Entrepreneurship. (1.5, 3 h)

Seminar and/or lecture courses in select topics related to entrepreneurship. May be repeated if course title differs.

### ENT 303. Topics in Entrepreneurship. (1.5, 3 h)

Seminar and/or lecture courses in select topics related to entrepreneurship. May be repeated if course title differs.

### ENT 304. Topics in Entrepreneurship. (1.5, 3 h)

Seminar and/or lecture courses in select topics related to entrepreneurship. May be repeated if course title differs.

**ENT 305. Topics in Entrepreneurship. (1.5, 3 h)**

Seminar and/or lecture courses in select topics related to entrepreneurship. May be repeated if course title differs.

**ENT 306. Topics in Entrepreneurship. (1.5, 3 h)**

Seminar and/or lecture courses in select topics related to entrepreneurship. May be repeated if course title differs.

**ENT 310. Arts Entrepreneurship. (3 h)**

Introduces entrepreneurial processes and practices in the visual arts, theater, dance, music, and creative writing. Seminar format includes encounters with arts entrepreneurs, investigation of case studies, and research in new and evolving models for creative application of entrepreneurial practices in the arts.

**ENT 312. Management in the Visual Arts. (3 h)**

Provides art students with the skills, experiences, and frameworks for understanding the role that the visual arts play within the national and international economy. Also listed as ART 297. P-Junior or senior standing and POI.

**ENT 313. Whole Person Creativity. (3 h)**

Interactive studio/seminar that introduces students to the concepts and practices of creativity, innovation, design, and sustainability. Through whole-person engagement, architectural design processes, and place-making studies, students explore the impact of human behaviors on all areas of life and society along a continuum of local to global.

**ENT 315. Nonprofit Arts and Education Entrepreneurship: Promotion of Latin-American and Latino Visual Culture. (3 h)**

Explores entrepreneurship in promoting Latin-American and U.S. Latino cultures through educational and artistic events and fundraisers on campuses and in the community. Students gain hands-on experience by assisting in the production of Wake Forest exhibitions, events promoting Latin-American and U.S. Latino heritage and culture, related community fundraisers, and nonprofit organizations.

**ENT 320. Social Entrepreneurship. (3 h)**

Interdisciplinary seminar that introduces the concepts of entrepreneurship with a focus on entrepreneurial activities that further the public good through the integration of core concepts of social and cultural values and ecological sustainability.

**ENT 321. Social Entrepreneurship and the Humanities: Innovation, Public Engagement, and Social Change. (3 h)**

Introduction to the role played by humanities in social entrepreneurship, exploring the premise that norms can be developed for the application of the humanities, and that the knowledge derived in this process can empower and be a tool in community-based engagement and social change. Course includes a social entrepreneurial project in the local community. Also listed as HMN 295.

**ENT 322. Religion, Poverty, and Social Entrepreneurship. (3 h)**

Interdisciplinary study of major themes in religion, poverty reduction, and social entrepreneurship. Focus and community emphasis may vary with instructor. Also listed as REL 344.

**ENT 323. Social Entrepreneurship Summer Program. (3 h)**

This trans-disciplinary, 4-week program explores the role of social entrepreneurship in society today and challenges students, through a rigorous and integrated curriculum to master the entrepreneurial process involved in furthering the public good through community-based engagement and social change. P-POI.

**ENT 326. Telling Women's Lives: Writing about Entrepreneurs, Activists, and Community Leaders. (3 h)**

This course will use an interdisciplinary approach to address fundamental issues of female leadership by examining recent developments in long- and short-form narratives about women (biography, essays, profiles) and employing journalistic tools to interview and write profiles of women entrepreneurs, activists, and community leaders. Also listed as WGS 326.

**ENT 330. Entrepreneurship for Scientists. (3 h)**

Introduces students to the routes by which scientific discoveries and new technologies find their way to the market place. Covers ideation, determining market potential, business planning, intellectual property, entrepreneurship ethics, venture capital, and venture incubation.

**ENT 334. Narrative Approaches to Entrepreneurship. (3 h)**

This course uses narrative theory to examine how myths, stories, and other tropes form the basis on which we understand entrepreneurs and entrepreneurship. Attention is given to diverse and alternative stories and practices. Students will collect and analyze entrepreneur narratives. Also listed as COM 334.

**ENT 335. Renewable Energy Entrepreneurship: Science, Policy, and Economics. (4 h)**

This team-taught course provides overviews of the most important renewable energy sources. Explores the science, policy and economic issues related to renewable energy and investigates the potential for new markets, new products, and new entrepreneurial opportunities in the marketplace. P - Junior standing and Div V requirements, or POI.

**ENT 350. Internships in Entrepreneurial Studies. (1.5, 3 h)**

Offers the opportunity to apply knowledge in an entrepreneurial for-profit or not-for-profit environment. Requirements include a course journal and a comprehensive report that showcase the student's specific achievements and analyze the quality of his or her experience. P - POI.

**ENT 351. Green Technologies: Science and Entrepreneurship. (2, 3 h)**

Introduces the science and entrepreneurship opportunities of select green technologies. Students learn in the fundamental science associated with energy use and renewable energy and selected green technologies. Students also learn the basics of starting a new business and develop a business plan to bring a "green product" to the market. P-CHM 341 or ENT 201 or POI.

**ENT 380. America at Work. (3 h)**

Examines the American entrepreneurial spirit within the broader context of industrial, social, and economic change from the colonial period to the present and explores the social and cultural meanings attached to work and workers, owner and innovators, businesses and technologies, management and leadership. Also listed as HST 380. (CD)

**ENT 384. Design-Thinking and High Performance Teams. (3 h)**

In this experiential class, we study the evolution of high-performance teams in design-thinking environments. At its core, design thinking is an approach to innovative problem solving that balances art, science, and business perspectives in realistic and highly impactful ways. In this course we develop the ability to participate in and lead high-performance teams within a design-thinking environment. The course involves an action-learning project that applies the perspectives of anthropology, history, political science, communication, and psychology, among others, in solving a real-world problem. Also listed as BEM 384.

**ENT 391. Independent Study in Entrepreneurship. (1.5, 3 h)**

An independent project involving entrepreneurship or social enterprise carried out under the supervision of the faculty member. P - POI.

**ENT 392. Independent Study in Entrepreneurship. (1.5, 3 h)**

An independent project involving entrepreneurship or social enterprise carried out under the supervision of a faculty member. P - POI.

**ENT 394A. Student Entrepreneurship in Action. (1.5, 3 h)**

This course is built around the real-time challenges and learning that occur as the students in the class launch, run, build, and sell or transition their venture. Promotes intense rigorous intellectual exchange in a seminar setting in which all will not only participate in critical thinking and analysis, but also in problem solving and leadership. Course may be repeated for credit. P - POI.

**ENT 394B. Student Entrepreneurship in Action. (1.5, 3 h)**

This course is built around the real-time challenges and learning that occur as the students in the class launch, run, build, and sell or transition their venture. Promotes intense rigorous intellectual exchange in a seminar setting in which all will not only participate in critical thinking and analysis, but also in problem solving and leadership. Course may be repeated for credit. P - POI.

**ENT 399. Startup Lab. (3 h)**

Startup Lab is designed to help students take high potential ideas and, after learning best practices on evidence-based entrepreneurship, apply lean startup methodology to their own startup. Students will learn key aspects of building an early stage company such as how to make crucial early stage sales, how to build brand loyalty with early stage customers, key aspects of accounting, finance, and human resources that apply to startups, and how to lead a team. This is a practicum and much of the learning is application-oriented and focuses directly on the startup or the startup team. P-POI.

## Faculty

**John C. Whitaker Jr. Executive Director Center for Entrepreneurship, Professor of Practice** Daniel Cohen

**David and Leila Farr Professor and Faculty Director** Michael Gross  
**Merlo Presidential Chair and Associate Professor in Communication and Entrepreneurship** Rebecca Gill

**Katherine and Dickerson Wright Presidential Chair in Computer Science and Entrepreneurship** Ron Doyle

**Associate Professor of the Practice** Gregory Pool

**Assistant Professor of the Practice** Louis Foreman

**Assistant Teaching Professors** Fatima Hamdulay, Ariel Smith

**Adjunct Professor** Drew Hancock, Steven Nedvidek

## Entrepreneurship, Minor Requirements

The minor requires a minimum of 19 hours in core and elective courses.

Code	Title	Hours
ENT 105	The Entrepreneurial Experience: From Mindset to Entrepreneurial Identity	1
ENT 200	Foundations of Entrepreneurship: Identifying and Cultivating Valuable Ideas	3
ENT 201	Evidence-Based Entrepreneurship: Developing Validated Concepts	3
ENT 205	Scaling the Entrepreneurial Venture: From Concept to Harvest	3

Select nine hours from the following electives: \*

ENT Electives for the Minor

General Electives for the Minor

\*

All students may fulfill three of their elective hours by taking the Summer Management Program (BUS 295). No more than six of the elective hours may be counted from a student's major. No more than six hours can be taken under the pass/fail option and used to meet the minor requirements. No more than six hours can be taken abroad.

Course plans will be made in consultation with the director of the minor. It is strongly suggested that interested students take ENT 105 by their sophomore year and note the prerequisites for ENT 201 and ENT 205.

## ENT Electives for the Minor

Code	Title	Hours
ENT 203	Writing for a Social Purpose	3
ENT 250	Communicating for an Entrepreneurial Mindset	3
ENT 301	Topics in Entrepreneurship	1.5,3
ENT 302	Topics in Entrepreneurship	1.5,3
ENT 303	Topics in Entrepreneurship	1.5,3
ENT 304	Topics in Entrepreneurship	1.5,3
ENT 305	Topics in Entrepreneurship	1.5,3
ENT 306	Topics in Entrepreneurship	1.5,3
ENT 310	Arts Entrepreneurship	3
ENT 312	Management in the Visual Arts	3
ENT 313	Whole Person Creativity	3
ENT 315	Nonprofit Arts and Education Entrepreneurship: Promotion of Latin-American and Latino Visual Culture	3
ENT 320	Social Entrepreneurship	3
ENT 321	Social Entrepreneurship and the Humanities: Innovation, Public Engagement, and Social Change	3
ENT 322	Religion, Poverty, and Social Entrepreneurship	3
ENT 323	Social Entrepreneurship Summer Program	3
ENT 326	Telling Women's Lives: Writing about Entrepreneurs, Activists, and Community Leaders	3
ENT 330	Entrepreneurship for Scientists	3
ENT 334	Narrative Approaches to Entrepreneurship	3
ENT 335	Renewable Energy Entrepreneurship: Science, Policy, and Economics	4
ENT 350	Internships in Entrepreneurial Studies	1.5,3
ENT 351	Green Technologies: Science and Entrepreneurship	2,3
ENT 380	America at Work	3
ENT 384	Design-Thinking and High Performance Teams	3
ENT 391	Independent Study in Entrepreneurship	1.5,3
ENT 392	Independent Study in Entrepreneurship	1.5,3
ENT 394A	Student Entrepreneurship in Action	1.5,3
ENT 394B	Student Entrepreneurship in Action	1.5,3
ENT 399	Startup Lab	3



## General Electives for the Minor

Code	Title	Hours
ACC 111	Introductory Financial Accounting	3
ANT 305	Museum Anthropology	3
ANT 342	Applied Anthropology	3
ART 121	Design Studio: Ethics and Aesthetics	3
ART 122	Design Studio: Visualization of Ideas	3
ART 215	Public Art	4
ART 297	Management in the Visual Arts	3
BEM 211	Organizational Behavior	3
BEM 221	Principles of Marketing	3
BEM 261	Legal Environment of Business	3
BEM 316	Leading in Nonprofit Sector	3
BEM 371	Strategic Management	3
BEM 372	Strategic Management in Entrepreneurial Firms	3
BEM 377	Entrepreneurship	3
BEM 382	Management in the Visual Arts	3
BEM 383	Seminar in Negotiations	3
BEM 384	Design-Thinking and High-Performance Teams	3
BUS 295	Summer Management Program	8
COM 250	Communicating for an Entrepreneurial Mindset	3
COM 262	Writing for Public Relations and Advertising	3
COM 315	Communication and Technology	3
COM 334	Entrepreneurial Communities and Winston-Salem	3
COM 353	Persuasion	3
COM 370	Special Topics (when topic is Storytelling and the Entrepreneur )	1-3
CSC 111	Introduction to Computer Science	4
CSC 331	Software Engineering	3
CSC 332	Mobile and Pervasive Computing	3
CSC 361	Digital Media	3
CSC 385	Bioinformatics	3
ECN 205	Intermediate Microeconomics	3
EGR 111	Introduction to Engineering Design	4
EGR 313	Capstone Design I	1
EGR 314	Capstone Design II	4
EGR 315	Capstone Design III	4
ENV 201	Environmental Issues	3
FRH 329	French for Business Communication	3
GER 330	German for Professional Purposes II	3
HMN 295	Social Entrepreneurship and the Humanities: Innovation, Public Engagement, and Social Change	3
HST 350	World Economic History: Globalization, Wealth and Poverty, 1500-Present	3
HST 380	America at Work	3
CGS 154	Community Based Global Learning	0-3
CGS 260	Seminar in Global Trade and Commerce Studies	3

JOU 350	Writing for Public Relations and Advertising	3
LIB 235	Research Methods for Entrepreneurs	1.5
PHI 161	Introduction to Bioethics	3
PHI 163	Environmental Ethics	3
PHI 367	Philosophical Theories in Bioethics	3
PHI 368	Concepts of Health & Disease	3
PHY 385	Bioinformatics	3
POL 238	Comparative Economic and Political Development	3
POL 239	State, Economy, and International Competitiveness	3
PSY 260	Social Psychology	3
PSY 268	Industrial/Organization Psychology	3
PSY 357	Cross-Cultural Psychology	3
PSY 374	Research in Judgment and Decision Making	3
REL 332	Religion and Public Engagement	3
REL 344	Religion, Poverty, and Social Entrepreneurship	3
SOC 351	Management and Organizations	3
SOC 362	Work, Conflict, and Change	3
SOC 363	Global Capitalism	3
SOC 365	Technology, Culture, and Change	3
THE 259	Theatre Management	3
WGS 326	Telling Women's Lives: Writing about Entrepreneurs, Activists, and Thought Leaders	3

## Environment and Sustainability Studies Program (ENV)

### Interdisciplinary Program

The goal of the Environment and Sustainability Studies (ENV) Program is to prepare students to create just and sustainable futures. The ENV Program at Wake Forest University is centered on the dynamic, generative space created by combining the natural sciences, humanities, and social sciences to address environmental challenges and to act within communities for environmental justice.

The Environment and Sustainability Studies Program faculty apply biology, English, earth sciences, anthropology, history, geography, art, economics, engineering, communication, philosophy, physics, education, political sciences, business, dance, statistics, religion, public health, journalism, computer sciences, and law to human-environment relationships and are committed to transformative environmental change. The ENV Program at Wake Forest University offers two majors, in 1) Environmental Science and 2) Environment and Sustainability Studies, and two minors, in 1) Environmental Science and 2) Environmental Studies.

## Policies for the Majors and Minors and other Programs of Study

1. The Bachelor of Arts in Environment and Sustainability, regardless of track, cannot be used as a double major with Biology, Biochemistry and Molecular Biology, or Chemistry with a concentration in Biochemistry.



2. A Biology major can elect the minor in Environmental Studies. A Biology major can also elect the minor in Environmental Science, however ENV 220/BIO 220 cannot be counted toward both the Biology major requirements and the Environmental Studies Minor.
3. Because of the number of shared courses, Environment and Sustainability Studies majors and/or Environmental Science majors cannot declare the Biology minor.
4. Students can minor in both Biology and Environmental Science or Environmental Studies.

## Contact Information

Environment and Sustainability Studies Program (<https://env.wfu.edu/>)

## Programs Majors

- Environment and Sustainability Studies, BA
- Environmental Science, BA

## Minors

- Environmental Science, Minor
- Environmental Studies, Minor

## Courses

### Environmental Program (ENV)

#### ENV 163. Environmental Ethics. (3 h)

Examines ethical issues concerning the environment as they arise in individual lives and public policy. Also listed as PHI 163.

#### ENV 201. Environmental Issues. (3 h)

Topics include environmental literature, environmental history, human populations, resource management, pollution, global change, environmental activism and environmental ethics.

#### ENV 202. Environmental Solutions. (3 h)

Learn how to improve our environment by identifying and exploring innovative environmental solutions. Counts towards Environmental Minor requirements.

#### ENV 203. Leadership for Sustainability. (3 h)

Develops knowledge and practice for effective change agency. Students articulate their own emerging leadership perspectives, create fundamental elements of a peer education and/or outreach campaign, and identify a range of locally appropriate solutions to systemic problems contributing to global climate change.

#### ENV 214. Atlantic History from 1800: Science, Empire, Environment. (3 h)

Once the Americas, Africa, and Europe became linked in the fifteenth century, diverse attitudes toward knowledge and nature collided as people struggled to survive disease, warfare, and migrations of people, plants, and animals. This course explores the ways in which science and empire developed in tandem to create the understandings of knowledge and power that continue to shape our world. Also listed as HST 214.

#### ENV 215. Atlantic History from 1800: Science, Empire, Environment. (3 h)

This course explores the linked histories of the Americas, Africa, and Europe to reveal how colonialism and the practices of western science have shaped social, political, and terrestrial landscapes. Students will investigate the evolution of slavery, agriculture, and trade in the nineteenth century; and industrialization, decolonization, development projects, and environmental change in the twentieth century. Also listed as HST 215.

#### ENV 220. Introduction to Earth Science. (3 h)

Oceans, weather, climate, earthquakes, volcanoes, soil, and space all play important roles in our dynamic planet. Students will explore the lithosphere, hydrosphere, atmosphere, and biosphere, and gain a deeper understanding of how the Earth operates as a whole. Also listed as BIO 220. P-requires BIO 150, 150L, 160, and 160L if taken as BIO 220.

#### ENV 250. Methods for Environmental Community Collaboration and Justice. (3 h)

Provides approaches and experiential learning on how to work with communities on socio-environmental issues. Draws from social justice work, participatory action research, citizen science, Indigenous methods, and anticolonial activism to build collaboration with community partners and cultivate a more equitable society.

#### ENV 301. Topics in Environmental Studies. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### ENV 302. Topics in Environmental Studies. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### ENV 303. Topics in Environmental Studies. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### ENV 304. Topics in Environmental Studies. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### ENV 305. Topics in Environmental Studies. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### ENV 306. Topics in Environmental Studies. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### ENV 321. Earth's Dynamic Surface. (3 h)

Investigation into the processes responsible for the formation and subsequent evolution of Earth's landforms. Course activities examine Earth surface features using maps, digital and/or field-based data collection and analysis, and the fundamental geologic constraints on environmental problems. P—ENV 220.

#### ENV 350. Ethnobotany. (3 h)

Surveys the complex interrelationships of people and plants throughout space and time. Uses experiential and embodied approaches to learning about plants in landscapes and labs.

#### ENV 350L. Ethnobotany Lab. (1 h)

C- ENV 350.

#### ENV 379. Introduction to Geographic Information Systems (GIS). (4 h)

Introduces the concepts and use of GIS as a mapping and analytical tool with emphasis on applications environmental modeling, global change, sociodemographic change, and site suitability analyses. Lab included. Also listed as BIO 379.

**ENV 381. Wilderness, the Anthropocene, and Global Sustainability. (3 h)**

Intensive, writing-centered, experiential field course focusing on the relationships between humans and the natural world in the context of sustainability issues. Field components of the course take place in Alaska. Permission of instructor required.

**ENV 391. Individual Study. (1.5 h)**

A field study, internship, project or research investigation carried out under the supervision of a member of the environmental program faculty. Pass/fail or for a grade at the discretion of the instructor. Pass/fail is not an option if used as an elective for the environmental science or environmental studies minor.

**ENV 392. Individual Study. (1.5 h)**

**ENV 394. Environmental Internship. (1-4 h)**

Supervised internships with governmental agencies, nonprofit organizations and businesses.

**ENV 395. Sustainability Lab/Clinic. (4 h)**

Focuses on practical solutions to sustainability problems, and includes the use of makerspace, the fabrication lab, and the visualization lab.

Faculty

**Director:**

Julie Velásquez Runk

**Core Faculty:**

Courtney Di Vittorio (Department of Engineering)

Sheri Flöge (Biology Department)

Melanie Harris (African American Studies Program/Divinity School)

LuLauren Lowman (Department of Engineering)cas Johnston  
(Department for the Study of Religions)

Miles Silman (Biology Department)

Stephen Smith (Environment and Sustainability Studies Program)

Eric Stottlemeyer (English Department/Office of the Dean of the College)

**Affiliate Faculty:**

E. Mark Curtis (Economics Department)

Robert Erhardt (Mathematics and Statistics Department)

Meredith Farmer (English Department)

Andrius Galisanka (Department of Politics and International Affairs)

Frederick Harris (School of Business)

Rowie Kirby-Straker (Communication Department)

Abdou Lachgar (Department of Chemistry)

Jed Macosko (Physics Department)

Judith Madera (English Department)

Stan Meiburg (Sustainability Program)

Monique O'Connell (Department of History)

Paúl Pauca (Computer Science Department)

Scott Schang (Law School)

Paul Thacker (Department of Anthropology)

Alessandra Von Burg (Communication Department)

Ron Von Burg (Communication Department)

Kyana Young (Department of Engineering)

Environment and Sustainability  
Studies, BA

Requirements

Requires 35 hours. These must include:

Code	Title	Hours
Environment and Sustainability Core		
ENV 201	Environmental Issues	3
ENV 203	Leadership for Sustainability	3
ENV 220	Introduction to Earth Science	3
BIO 150 & 150L	Biology I and Biology I Lab	4
BIO 160 & 160L	Biology II and Biology II Lab	4
Co-Required Courses		
CHM/PHY 120	Physics and Chemistry of the Environment	4
Interdisciplinary Area Requirements		
Natural Science Requirement		3-6
Social Science, Humanities, Policy, and Sustainable Design		12
Applied Sustainability		3-6

Natural Science

Code	Title	Hours
BIO 225	Field Biology and Natural History	3
BIO 235	Genetics	3
BIO 245	Comparative Animal Physiology	3
BIO 311	Ecology and Conservation Biology of Coral Reefs	4
BIO 313	Herpetology	4
BIO 315 & 315L	Population Genetics and Population Genetics Lab	3-4
BIO 316	Biology of Birds	4
BIO 317 & 317L	Plant Physiology and Development and Plant Physiology and Development Lab	3-4
BIO 319 & 319L	Biology of Soils and Biology of Soils Lab	3-4
BIO 323 & 323L	Animal Behavior and Animal Behavior Lab	3-4
BIO 327	Mycology: Biology of Fungi	4
BIO 330	Land and Natural Resource Management	3
BIO 332	Microbiology	4
BIO 340	Ecology	4
BIO 342	Oceanography	4
BIO 348 & 348L	Physiological Plant Ecology and Physiological Plant Ecology	3-4
BIO 349	Tropical Biodiversity of the Amazon and Andes	4
BIO 356	Ecology and Resource Management of Southeast Australia	4
BIO 379	Introduction to Geographic Information Systems (GIS)	4
BIO 380	Biostatistics	3
BIO 383 & 383L	Genomics and Genomics Lab	3-4
EGR 112	Introduction to Engineering Experimentation	4
EGR 319	Environmental Engineering	2

EGR 324	Hydrologic and Hydraulic Engineering	2
ENV 321	Earth's Dynamic Surface	3

ENV 394	Environmental Internship	1-4
ENV 395	Sustainability Lab/Clinic	4

## Social Science, Humanities, Policy, and Sustainable Design

Code	Title	Hours
<b>Social Science Electives</b>		
ANT 339	Culture and Nature: Introduction to Environmental Anthropology	3
ANT 372	Environmental Archaeology	3
COM 270	Special Seminar (when topic is Community Narratives of Environmental Justice)	1-3
ECN 241	Environmental and Natural Resource Economics	3
ECN 341	Economics of the Environment	3
POL 210	Topics In United States Politics and Policy (when topic is 'Environmental Policy', 'Disaster, Race, and American Politics', or 'Race, Land, and Power')	3
POL 281	Environmental Political Thought	3
<b>Humanities Electives</b>		
ART 121	Design Studio: Ethics and Aesthetics	3
ART 210	Topics in Studio Art (when topic is Film and Video: Ecological Works )	1-4
ENG 341	Literature and the Environment	3
ENG 356	Literature of the Caribbean	3
ENV 381	Wilderness, the Anthropocene, and Global Sustainability	3
HMN 227	Engaging the Humanities: Social Justice and Equity in Communities	3
HMN 292	Environmentalism, the Humanities, and Gender	3
HMN 365	Humanity and Nature	1.5,3
HST 112	Big History: A History of the Cosmos and Humanity's Place In It	3
HST 311	Special Topics in History (East Asian Environmental History)	1-3
HST 350	World Economic History: Globalization, Wealth and Poverty, 1500-Present	3
HST 368	U.S. Environmental History	3
JOU 321	Environmental Journalism	3
JOU 375	Special Topics in Journalism (when topic is Science Writing for the Public or Environmental Journalism )	1-3
REL 341	Religion and Ecology	3

## Applied Sustainability

Code	Title	Hours
ENT 335	Renewable Energy Entrepreneurship: Science, Policy, and Economics	4
ENT 351	Green Technologies: Science and Entrepreneurship	2,3

## Environmental Science, BA Requirements

Requires 38 hours. These must include:

Code	Title	Hours
<b>Environment and Sustainability Core</b>		
ENV 201	Environmental Issues	3
ENV 203	Leadership for Sustainability	3
ENV 220	Introduction to Earth Science	3
BIO 150 & 150L	Biology I and Biology I Lab	4
BIO 160 & 160L	Biology II and Biology II Lab	4
<b>Co-Required Courses</b>		
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
One additional quantitative methods course *		
<b>Interdisciplinary Area Requirements</b>		
Natural Science		9
Social Science, Humanities, Policy, and Sustainable Design		9
Applied Sustainability		3-6

\* Course(s) of the student's choosing must be approved by the program co-directors.

## Natural Science

Code	Title	Hours
BIO 225	Field Biology and Natural History	3
BIO 235	Genetics	3
BIO 245	Comparative Animal Physiology	3
BIO 311	Ecology and Conservation Biology of Coral Reefs	4
BIO 313	Herpetology	4
BIO 315 & 315L	Population Genetics and Population Genetics Lab	3-4
BIO 316	Biology of Birds	4
BIO 317 & 317L	Plant Physiology and Development and Plant Physiology and Development Lab	3-4
BIO 319 & 319L	Biology of Soils and Biology of Soils Lab	3-4
BIO 323 & 323L	Animal Behavior and Animal Behavior Lab	3-4
BIO 327	Mycology: Biology of Fungi	4
BIO 330	Land and Natural Resource Management	3
BIO 332	Microbiology	4
BIO 340	Ecology	4
BIO 342	Oceanography	4
BIO 348 & 348L	Physiological Plant Ecology and Physiological Plant Ecology	3-4

BIO 349	Tropical Biodiversity of the Amazon and Andes	4
BIO 356	Ecology and Resource Management of Southeast Australia	4
BIO 379	Introduction to Geographic Information Systems (GIS)	4
BIO 380	Biostatistics	3
BIO 383 & 383L	Genomics and Genomics Lab	3-4
EGR 112	Introduction to Engineering Experimentation	4
EGR 319	Environmental Engineering	2
EGR 324	Hydrologic and Hydraulic Engineering	2
ENV 321	Earth's Dynamic Surface	3

## Social Science, Humanities, Policy, and Sustainable Design

Code	Title	Hours
<b>Social Science Electives</b>		
ANT 339	Culture and Nature: Introduction to Environmental Anthropology	3
ANT 372	Environmental Archaeology	3
ECN 241	Environmental and Natural Resource Economics	3
ECN 341	Economics of the Environment	3
POL 210	Topics In United States Politics and Policy (when topic is Environmental Policy)	3
POL 281	Environmental Political Thought	3
<b>Humanities Electives</b>		
ART 121	Design Studio: Ethics and Aesthetics	3
ENG 341	Literature and the Environment	3
ENG 356	Literature of the Caribbean	3
ENV 381	Wilderness, the Anthropocene, and Global Sustainability	3
HMN 292	Environmentalism, the Humanities, and Gender	3
HMN 365	Humanity and Nature	1.5,3
HST 112	Big History: A History of the Cosmos and Humanity's Place In It (East Asian Environmental History)	3
HST 350	World Economic History: Globalization, Wealth and Poverty, 1500-Present	3
HST 368	U.S. Environmental History	3
JOU 321	Environmental Journalism	3
JOU 375	Special Topics in Journalism (when topic is Science Writing for the Public or Environmental Journalism)	1-3
REL 341	Religion and Ecology	3

## Applied Sustainability

Code	Title	Hours
ENT 335	Renewable Energy Entrepreneurship: Science, Policy, and Economics	4

ENT 351	Green Technologies: Science and Entrepreneurship	2,3
ENV 394	Environmental Internship	1-4
ENV 395	Sustainability Lab/Clinic	4

## Environmental Science, Minor Requirements

A total of 18 hours, including 11 hours of elective courses, is required for the minor.

Code	Title	Hours
<b>Required Minor Courses</b>		
ENV 201	Environmental Issues	3
ENV 220	Introduction to Earth Science	3
CHM/PHY 120	Physics and Chemistry of the Environment	4
Select 8 hours of electives		8

Additional elective courses may have been approved since publication of this bulletin. The program director maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this bulletin.

## Electives for Environmental Science Minor

Code	Title	Hours
ART 210	Topics in Studio Art (when topic is Film and Video: Ecological Works)	1-4
BIO 306	Topics in Biology	1-4
BIO 311	Ecology and Conservation Biology of Coral Reefs	4
BIO 316	Biology of Birds	4
BIO 319 & 319L	Biology of Soils and Biology of Soils Lab	3-4
BIO 327	Mycology: Biology of Fungi	4
BIO 332	Microbiology	4
BIO 330	Land and Natural Resource Management	3
BIO 340	Ecology	4
BIO 341 & 341L	Marine Biology and Marine Biology	3-4
BIO 348 & 348L	Physiological Plant Ecology and Physiological Plant Ecology	3-4
BIO 349	Tropical Biodiversity of the Amazon and Andes	4
BIO 356	Ecology and Resource Management of Southeast Australia	4
BIO 379	Introduction to Geographic Information Systems (GIS)	4
BIO 380	Biostatistics	3
BIO 383 & 383L	Genomics and Genomics Lab	3-4
CHM 334	Chemical Analysis	4
CHM 351	Special Topics in Chemistry (Green Technologies: Science and Entrepreneurship)	3
CHM 351	Special Topics in Chemistry (Chemistry of Food)	3

CHM 391	Undergraduate Research	1-3
CHM 392	Undergraduate Research	1-3
COM 270	Special Seminar (when topic is Community Narratives of Environmental Justice)	1-3
ECN 241	Environmental and Natural Resource Economics	3
ECN 341	Economics of the Environment	3
EGR 112	Introduction to Engineering Experimentation	4
EGR 319	Environmental Engineering	2
EGR 324	Hydrologic and Hydraulic Engineering	2
ENV 321	Earth's Dynamic Surface	3
ENT 335	Renewable Energy Entrepreneurship: Science, Policy, and Economics	4
ENT 351	Green Technologies: Science and Entrepreneurship	2,3
ENV 202	Environmental Solutions	3
ENV 203	Leadership for Sustainability	3
HMN 227	Engaging the Humanities: Social Justice and Equity in Communities	3
HMN 365	Humanity and Nature	3
JOU 321	Environmental Journalism	3
POL 210	Topics In United States Politics and Policy (when topic is 'Disaster, Race, and American Politics' or 'Race, Land, and Power')	1-3
STA 112	Introduction to Regression and Data Science	3

## Environmental Studies, Minor Requirements

A total of 18 hours is required for the minor.

Code	Title	Hours
ENV 201	Environmental Issues	3
Select one course from each of the following:		15
I. Social Sciences		
II. Natural and Physical Sciences		
III. Humanities		

### I. Social Sciences

Code	Title	Hours
ANT 339	Culture and Nature: Introduction to Environmental Anthropology	3
ANT 372	Environmental Archaeology	3
COM 270	Special Seminar (when topic is Community Narratives of Environmental Justice)	1-3
ECN 241	Environmental and Natural Resource Economics	3
ECN 341	Economics of the Environment	3
ENV 202	Environmental Solutions	3
ENV 301	Topics in Environmental Studies (Environmental Policy and Law)	1-4

POL 210	Topics In United States Politics and Policy (when topic is 'Disaster, Race, and American Politics' or 'Race, Land, and Power')	1-3
POL 281	Environmental Political Thought	3

## II. Natural and Physical Sciences

Code	Title	Hours
BIO 306	Topics in Biology	3
BIO 311	Ecology and Conservation Biology of Coral Reefs	4
BIO 319 & 319L	Biology of Soils and Biology of Soils Lab	3-4
BIO 327	Mycology: Biology of Fungi	4
BIO 330	Land and Natural Resource Management	3
BIO 340	Ecology	4
BIO 341 & 341L	Marine Biology and Marine Biology	3-4
BIO 348 & 348L	Physiological Plant Ecology and Physiological Plant Ecology	3-4
BIO 349	Tropical Biodiversity of the Amazon and Andes	4
BIO 356	Ecology and Resource Management of Southeast Australia	4
BIO 379	Introduction to Geographic Information Systems (GIS)	4
BIO 380	Biostatistics	3
CHM/PHY 120	Physics and Chemistry of the Environment	4
EGR 112	Introduction to Engineering Experimentation	4
ENV 220	Introduction to Earth Science	3
ENV 321	Earth's Dynamic Surface	3
STA 112	Introduction to Regression and Data Science	3

## III. Humanities

Code	Title	Hours
ART 210	Topics in Studio Art (when topic is Film and Video: Ecological Works)	1-4
CRW 387	Advanced Literary Nonfiction Workshop (Environmental Essay)	3
ENG 341	Literature and the Environment	3
ENG 356	Literature of the Caribbean	3
ENV 381	Wilderness, the Anthropocene, and Global Sustainability	3
HMN 227	Engaging the Humanities: Social Justice and Equity in Communities	3
HMN 292	Environmentalism, the Humanities, and Gender	3
HMN 365	Humanity and Nature	3
HST 112	Big History: A History of the Cosmos and Humanity's Place In It	3
HST 311	Special Topics in History (East Asian Environmental History)	1-3
HST 368	U.S. Environmental History	3



JOU 321	Environmental Journalism	3
REL 341	Religion and Ecology	3

**The following courses can serve as electives for the environmental studies minor.** Additional courses may have been approved since the publication of this bulletin. The program director maintains a complete list of all approved courses. For course descriptions, see the relevant department's listings in this bulletin.

Code	Title	Hours
ANT 339	Culture and Nature: Introduction to Environmental Anthropology	3
ART 121	Design Studio: Ethics and Aesthetics	3
BIO 304	Topics in Biology (Land Use and Policy)	1-4
BIO 306	Topics in Biology (Geographical Information Systems)	3
BIO 330	Land and Natural Resource Management	3
BIO 340	Ecology	4
BIO 341 & 341L	Marine Biology and Marine Biology	3-4
BIO 348 & 348L	Physiological Plant Ecology and Physiological Plant Ecology	3-4
BIO 349	Tropical Biodiversity of the Amazon and Andes	4
BIO 356	Ecology and Resource Management of Southeast Australia	4
BIO 380	Biostatistics	3
CHM 334	Chemical Analysis	4
CHM 351	Special Topics in Chemistry (Green Technologies: Science and Entrepreneurship)	3
CHM 351	Special Topics in Chemistry (Chemistry of Food)	3
PHY/CHM 120	Physics and Chemistry of Environment	4
COM 345	Rhetoric of Science and Technology	3
CRW 387	Advanced Literary Nonfiction Workshop	3
ECN 241	Environmental and Natural Resource Economics	3
ENG 341	Literature and the Environment	3
ENG 356	Literature of the Caribbean	3
ENT 335	Renewable Energy Entrepreneurship: Science, Policy, and Economics	4
ENT 351	Green Technologies: Science and Entrepreneurship	2,3
ENV 203	Leadership for Sustainability	3
ENV 301	Topics in Environmental Studies	1-4
ENV 302	Topics in Environmental Studies	1-4
ENV 303	Topics in Environmental Studies	1-4
ENV 304	Topics in Environmental Studies	1-4
ENV 305	Topics in Environmental Studies	1-4
ENV 306	Topics in Environmental Studies	1-4
ENV 391	Individual Study	1.5
ENV 392	Individual Study	1.5
ENV 394	Environmental Internship	1-4
HMN 365	Humanity and Nature	3

HST 112	Big History: A History of the Cosmos and Humanity's Place In It	3
JOU 321	Environmental Journalism	3
POL 281	Environmental Political Thought	3
REL 341	Religion and Ecology	3

## Film and Media Studies (FLM)

### Interdisciplinary Minor

Film and media studies offers an interdisciplinary approach to the study of film through a body of courses that exposes students to the cultural, political, and social implications of this art form. Courses in the minor provide students with the critical tools necessary for both evaluating and producing film texts, and they prepare qualified students to choose critical and/or creative paths for further study or toward a profession.

## Contact Information

Film and Media Studies (<http://college.wfu.edu/filmstudies/>)

## Programs Minor

- Film and Media Studies, Minor

## Courses

### Film Studies (FLM)

#### FLM 101. Internship in Film and Media Studies I. (1.5-3 h)

Individual internships in film studies, to be approved, supervised, and evaluated by an appropriate member of the film studies faculty. The nature and extent of the internship will determine whether both sections can be taken simultaneously. Pass/fail only. P-POI.

#### FLM 102. Internship in Film and Media Studies II. (1.5-3 h)

Individual internships in film studies, to be approved, supervised, and evaluated by an appropriate member of the film studies faculty. The nature and extent of the internship will determine whether both sections can be taken simultaneously. Pass/fail only. P-POI.

#### FLM 201. Film & Media Studies Practicum. (1.5-3 h)

Practicum in film and media studies, to be approved, supervised, and evaluated by an appropriate member of the film studies faculty. May be repeated for up to six hours. Pass/fail only.

#### FLM 286. Individual Study in Film and Media Studies. (1.5-3 h)

Directed study in an area of interest to be approved and supervised by a faculty adviser. P-POI.

#### FLM 310. International Cinema. (3 h)

This course is an interdisciplinary approach to international film and media studies and cultural studies taught from a variety of perspectives by instructors from different departments. (CD)

#### FLM 320. New Media. (3 h)

Explores new and old trends in storytelling such as (but not limited to) anime/animation, digital storytelling, websites, augmented reality, virtual reality, artificial intelligence, and more.

#### FLM 350. Film Adaptation. (3 h)

A study of various types of film adaptation through topics such as: translation in subtitles, Hollywood remakes, science in film, literature and theater in cinema, and other approaches.

**FLM 390. Special Topics in Film and Media Studies. (1.5-3 h)**

Selected topics in film studies. May be repeated for credit if topic varies.

**Faculty**

**Director, Professor of Communication** Woodrow Hood

**Core Faculty**

Mary M. Dalton  
Anne E. Hardcastle  
Raisur Rahman  
Andy Rodekohr

**Affiliated Faculty**

Saylor Breckenridge  
Cagney Gentry  
Molly Knight  
Anadra Mitra  
Thomas Southerland  
Joel Tauber

**Teaching Staff**

Steve Jarrett

**Film and Media Studies, Minor Requirements**

A minor in film and media studies requires a minimum of 18 hours of approved courses. Candidates for the minor must complete:

Code	Title	Hours
<b>Film &amp; Media Studies Required Courses</b>		
COM 120	Introduction to Critical and Creative Media	3
COM 320	Media Theory and Criticism	3
<b>Film &amp; Media Studies Electives</b>		
Select one Film & Media Studies Electives in International Cinema		3
Select one Film & Media Studies Electives in Production		3
Select two General Film & Media Studies Electives		6

A maximum of three hours of internship credit may be counted towards the minor.

Additional elective courses may have been approved since publication of this bulletin. The program director maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this publication.

**Film & Media Studies Electives in International Cinema**

Code	Title	Hours
ART 261	Topics in Film History (when topic relates to international cinema)	3
ART 396	Art History Seminar (when topic relates to international cinema)	4
COM 312	Film History to 1945	3
COM 313	Film History Since 1945	3
COM 370	Special Topics (when topic relates to international cinema)	3

EAL 252	Chinese Cinemas	3
EAL 253	Japanese Film: Themes and Methods	3
EAL 285	Contemporary East Asian Cinema	3
FLM 310	International Cinema	3
FLM 350	Film Adaptation (when topic relates to international cinema)	3
FRH 360	Cinema and Society	3
FRH 361	Special Topics in French and Francophone Film Studies	3
GES 335	German Film	3
GES 336	Special Topics in German Film	3
HST 385	History through Film: Bollywood and the Making of Modern India	3
IAS 325	Italian Neorealism in Films and Novels	3
ITA 326	Comedy in Italian Cinema	3
ITA 327	Modern Italian Cinema	3
SPA 313	Lights, Camera, ¡Acción!. Cinema and Culture in the Spanish-Speaking World	3
SPA 349	Great Authors and Directors (when topic relates to film studies)	1.5-3
SPA 351	Cinema and Society (May be repeated for credit when focus changes)	3

**Film & Media Studies Electives in Production**

Code	Title	Hours
ART 114	Introduction to Film and Video Art	3
ART 214	Film and Video Art: Site Specific	4
ART 224	Film and Video Art: Cyberspace	4
ART 228	Film and Video Art: Theatre Works	4
COM 247	Media Production I	3
COM 249	Sound Design & Soundtracks	3
COM 310	Media Production II	3
COM 316	Screenwriting	3
COM 325	On Camera Performance	3
COM 326	Advanced Screenwriting	3

**General Film & Media Studies Electives**

Code	Title	Hours
ART 260	Classics of World Cinema	3
ART 261	Topics in Film History	3
ART 396	Art History Seminar (when topic is film related)	4
COM 301	Film Genre	3
COM 312	Film History to 1945	3
COM 313	Film History Since 1945	3
COM 318	Culture and Sitcom	3
COM 370	Special Topics (when topic relates to film studies)	1-3
ENG 373	Literature and Film	3
FLM 101 & FLM 102	Internship in Film and Media Studies I and Internship in Film and Media Studies II	3
FLM 102	Internship in Film and Media Studies II	1.5-3

FLM 201	Film & Media Studies Practicum	1.5-3
FLM 286	Individual Study in Film and Media Studies	1.5-3
FLM 310	International Cinema	3
FLM 320	New Media	3
FLM 350	Film Adaptation	3
FLM 390	Special Topics in Film and Media Studies	1.5-3
HMN 290	The Humanities through Film, Literature and Media	3
MSC 112	Music and Film	3
SOC 366	Sociological Analysis of Film	3

## French Studies (FRH)

The department offers programs leading to a major and a minor in French Studies and a concentration in French for Business. The requirements for completion of each degree program are those in effect in the bulletin year when the declaration of the major, minor, and concentration occurs.

**All majors, minors, and concentration students** are strongly urged to take advantage of the department's study abroad programs.

## Semester in France

The department sponsors a semester in Dijon, France, the site of a well-established French university. Students go as a group in the fall semester, accompanied by a departmental faculty member. Majors in all disciplines are eligible. Juniors are given preference, but well-qualified sophomores are also considered. Applicants should have completed the basic foreign language requirement (FRH 212, FRH 213, FRH 214, or equivalent), or should do so before going to Dijon. They are encouraged—but not required—to take one course or more above the level, preferably FRH 319.

Students are placed in language courses according to their level of ability in French, as ascertained by a test given at the Centre International d'Études Françaises at the Université de Bourgogne in Dijon. Courses are taught by local French professors and by the resident director, who also supervises academic, residential, and extracurricular affairs.

Code	Title	Hours
FRH 350	Studies in French Language and Culture	6
FRH 351	Advanced Oral and Written French	4
FRH 352	Contemporary France	3
FRH 353	Studies in French Art	2

## Summer in France

The department offers a nine-credit, six-week immersion program in Tours, France. Students at the intermediate level can complete Wake Forest's basic language requirement by taking intensive intermediate French (6 credit hours) concurrently with FRH 212 (3 hours). More advanced students can earn credit toward the major or minor in French by completing intensive advanced intermediate conversation and grammar (6 hours) and FRH 216 (3 hours); this program includes weekly lectures by faculty specializing in history, gastronomy, business, political science, or literature. The intensive language courses are taught by professors at the Institut de Touraine; FRH 212 and FRH 216 are taught by the Wake Forest professor, who also serves as the faculty director for the group. The program includes excursions to sites of historical and

cultural interest and the opportunity to participate in sports and cultural activities organized by the Institut de Touraine.

## Contact Information

Department of French Studies (<http://college.wfu.edu/french/>)  
Greene Hall 323, Box 7566  
Phone 336-758-5487

## Programs Major

- French Studies, B.A.

## Minor

- French Studies, Minor

## Concentration

- French for Business, Concentration

## Courses

### French Studies (FRH)

#### FRH 111. Elementary French. (3 h)

The first course in a two-semester sequence designed to help students to understand and speak French and also learn to read and write French at the elementary level.

#### FRH 112. Elementary French. (3 h)

The second course in a two-semester sequence designed to help students to understand and speak French and also learn to read and write French at the elementary level. P-FRH 111.

#### FRH 113. Intensive Elementary French. (4 h)

Review of the material from 111-112 in one semester, intended for students whose preparation for 153 is inadequate. Credit not given for both 113 and 111 or 112. Offered in the fall semester only. By placement or faculty recommendation.

#### FRH 153. Intermediate French. (4 h)

Intermediate-level course covering the structure of the language, developing students' reading, writing, and conversation skills and preparing them for oral and written discussion of readings in French 212 and 213. Credit not given for both 153 and 154. P-FRH 111 and FRH 112, or 113, or placement.

#### FRH 154. Accelerated Intermediate French. (3 h)

Intensive, intermediate-level course intended for students with a stronger background than required of 153 students. It offers the opportunity to develop further their reading, writing, and conversation skills and prepare them for oral and written discussion of readings in French 212 and 213. Offered in the fall semester. P-POI or placement.

#### FRH 196. French Across the Curriculum. (1.5 h)

Coursework in French done as an adjunct to specially designated courses throughout the college curriculum. May be taken for grade or Pass/Fail. P-POI.

#### FRH 198. Internship in French Language. (1.5, 3 h)

A French-language project taken under faculty supervision in conjunction with an off-campus service commitment or internship. Includes, but is not limited to, vocabulary building, keeping a journal, and reading professional material. Pass/Fail only. P-POD.

**FRH 199. Service Learning in French Language. (1.5 h)**

Experiential learning that links classroom instruction and community service done as an adjunct to specially-designated courses throughout the French curriculum. Pass/Fail only. May be repeated for credit. P–POI.

**FRH 212. Exploring the French and Francophone World. (3 h)**

Explores significant cultural expressions from the French and Francophone world. Emphasizes both the development of competence in speaking, reading and writing French, and understanding how particular French-speaking societies have defined themselves. Credit allowed for only one: FRH 212, FRH 213, or FRH 214. P-FRH 153 or equivalent.

**FRH 213. Encounters: French and Francophone Literature and Culture. (3 h)**

Encounters with significant literary expressions from the French-speaking world. Emphasizes the advancement of competence in speaking, reading and writing, and the analysis of literature in its cultural contexts. Credit allowed for only one: FRH 212, FRH 213, or FRH 214. P-FRH 153 or equivalent.

**FRH 214. Encounters: French and Francophone Literature and Culture (Honors). (3 h)**

Encounters with significant literary expressions from the French-speaking world. Emphasizes the advancement of competence in speaking, reading and writing, and the analysis of literature in its cultural contexts. Coursework in the honors sections focuses more intently on written and oral expression and on reading strategies. Intended for students with a strong background in French. Credit allowed for only one: FRH 212, FRH 213, or FRH 214. P-Placement or POI.

**FRH 216. Studies in French and Francophone Literature and Culture. (3 h)**

Study of the ways in which a given theme appears in a selection of literary and other cultural works in French. Emphasis on reading and discussion of selected texts. Specific thematic focus changes every semester. May be repeated once for credit when topics vary. Required for the major and minor. P-FRH 212 or 213 or 214; or POI. (CD)

**FRH 315. Introduction to French and Francophone Studies. (3 h)**

Orientation in French and francophone cultures through their historical development and their various forms. Includes the study of literary, historical, and social texts, and possibly films, art, and music. Required for the major and minor. Offered only once each academic year. (A student taking 350 as part of the Dijon program would receive credit for this course. Please see the description of the Dijon program for details.) P-FRH 200-level course or equivalent. (CD)

**FRH 319. Composition and Review of Grammar. (4 h)**

Systematic review of the fundamental principles of comparative grammar, with practical training in writing idiomatic French. Required for the major and minor. P-FRH 200-level course or equivalent.

**FRH 320. French Conversation. (3 h)**

A language course based on cultural materials. Designed to perfect aural skills and oral proficiency by systematically increasing vocabulary and reinforcing command of specific grammatical points. Short written works are assigned. Exclusively for second-language learners. P-FRH 200-level course or equivalent.

**FRH 321. Introduction to Translation. (3 h)**

Introduction to translation strategies through theory and practice. Emphasis is placed on translation of a broad variety of texts, including different literary and journalistic modes. Attention is given to accuracy in vocabulary, structures, forms, and to cultural concerns. P-FRH 319 or POI.

**FRH 322. French Phonetics. (3 h)**

Study of the principles of standard French pronunciation, with emphasis on their practical application as well as on their theoretical basis. P-POI.

**FRH 323. Advanced Grammar and Stylistics. (3 h)**

Review and application of grammatical structures for the refinement of writing techniques. Emphasis is on the use of French in a variety of discourse types. Attention is given to accuracy and fluency of usage in the written language. P-FRH 319 or POI.

**FRH 329. French for Business Communication. (3 h)**

Introduces the use of French in everyday professional interactions. Emphasizes oral and written practices, reading, and French business culture, as well as the job search and cross-cultural awareness. Exclusively for second-language learners. P - FRH 200 level course or equivalent.

**FRH 330. French for Management. (3 h)**

Explores oral and written French communication and develops intercultural skills in areas such as human resources, entrepreneurship, and marketing through case studies and current events. P-FRH 319, 329, or POI.

**FRH 341. Rise of French. (3 h)**

The development of French from an early Romance dialect to a world language. Study of ongoing changes in the language's sounds, grammar, and vocabulary system within its historical and cultural context. P-FRH 319 or POI.

**FRH 342. Structure of French. (3 h)**

Analysis of linguistic features of French including syntax, phonology, and morphology. P-FRH 319 or POI.

**FRH 343. Modern French. (3 h)**

Study of the features of contemporary French including colloquial French contrasting grammar, vocabulary, and pronunciation with standard forms. P-FRH 319 or POI.

**FRH 345. Language and Society. (3 h)**

Introduction to sociolinguistic issues relating to the French language and its role in societies around the world. P-FRH 319 or POI.

**FRH 350. Studies in French Language and Culture. (6 h)**

Familiarization with the language and culture of France and its people. Study of French civilization, practice in writing, participation in French family life, lectures on selected topics, and excursions to points of historical and cultural significance. Satisfies FRH 315 requirement for major or minor. Offered in Dijon. Grade mode only.

**FRH 351. Advanced Oral and Written French. (4 h)**

Study of grammar, composition, pronunciation, and phonetics, with extensive practice in oral and written French. Offered in Dijon. Grade mode only.

**FRH 352. Contemporary France. (3 h)**

Study of present-day France, including aspects of geography and consideration of social, political, and educational factors in French life today. Offered in Dijon.

**FRH 353. Studies in French Art. (2 h)**

Lectures and field trips in French painting, sculpture, and architecture, concentrating on the 19th and 20th centuries. Offered in Dijon.

**FRH 360. Cinema and Society. (3 h)**

Study of French and Francophone cultures through cinema. Readings and films may include film as artifact, film theory, and film history. P-FRH 216, 315 or POI. (CD)

**FRH 361. Special Topics in French and Francophone Film Studies. (3 h)**

In-depth study of particular aspects of French and/or francophone cinema. Topics may include film adaptations of literary works, cinematographic expressions of social or political issues, selected filmmakers, theories, genres, historical periods, or cinematographic trends. May be repeated for credit when topics vary. P—FRH 216 or FRH 315 or FRH 360 or POI.

**FRH 363. Trends in French and Francophone Poetry. (3 h)**

Study of the development of the poetic genre with analysis and interpretation of works from each period. P—FRH 216, 315 or POI.

**FRH 364. French and Francophone Prose Fiction. (3 h)**

A broad survey of prose fiction in French, with critical study of representative works from a variety of periods. P—FRH 216, 315 or POI.

**FRH 365. French and Francophone Drama. (3 h)**

Study of the chief trends in dramatic art in French, with reading and discussion of representative plays from selected periods. P—FRH 216, 315 or POI.

**FRH 370. Seminar in French and Francophone Studies. (3 h)**

In-depth study of particular aspects of selected literary and cultural works from different genres and/or periods. A capstone course for third- and fourth-year students only. Required for major. May be repeated for credit when topics vary. P—FRH 216, 315 or POI. (CD)

**FRH 374. Topics in French and Francophone Culture. (3 h)**

Study of selected topics in French and/or francophone culture. Works will be drawn from different fields (sociology, politics, art, history, music, cinema) and may include journalistic texts, films, historical and other cultural documents. May be repeated for credit when topics vary. P—FRH 216, 315 or POI.

**FRH 375. Special Topics in French and Francophone Literature. (3 h)**

Selected themes and approaches to French and francophone literature transcending boundaries of time and genre. May be repeated for credit when topics vary. P—FRH 216, 315 or POI.

**FRH 381. French Independent Study. (1.5-3 h)**

P-POD.

**FRH 382. Internship in French Studies. (1.5, 3 h)**

Individual internships in a bilingual business or professional setting, to be approved, supervised, and evaluated by an appropriate faculty adviser. Pass/Fail only. P-POD.

**FRH 390. Directed Reading. (1.5 h)**

Required for departmental honors in French Studies.

**FRH 391. Directed Research. (3 h)**

Extensive reading and/or research to meet individual needs. Required for departmental honors in French Studies. P-POD.

## French in Translation (FRT)

**FRT 210. French-Language Literature in Translation. (3 h)**

Examines selected works from French and Francophone literature in English translation. Literary periods, genres, and authors vary according to instructor. Discussion-based course. May be repeated once for credit when topics vary. (D)

## Faculty

**Chair** Stéphanie Pellet

**Professors** Stephen J. Murphy, Kendall B. Tarte

**Associate Professor** Stéphanie Pellet, Amanda S. Vincent

**Assistant Professors** Guillaume Coly, Ryan Schroth

**Teaching Professor** Elizabeth Mazza Anthony

**Professor of the Practice** Véronique M. McNelly

**Associate Teaching Professor** Corinne D. Mann

## French Studies, B.A.

### Requirements

Requires a minimum of 28 hours of French courses numbered above FRH 214.

Code	Title	Hours
<b>Required Major Courses</b>		
FRH 216	Studies in French and Francophone Literature and Culture	3
FRH 315	Introduction to French and Francophone Studies	3
Or		
FRH 350	Studies in French Language and Culture (Offered in Dijon)	
FRH 319	Composition and Review of Grammar	4
FRH 370	Seminar in French and Francophone Studies	3
Select one of the following genre courses:		
FRH 363	Trends in French and Francophone Poetry	
FRH 364	French and Francophone Prose Fiction	
FRH 365	French and Francophone Drama	
Select four other courses		

Students must achieve at least a C grade in FRH 319 and a GPA of 2.0 in the major. FRH 319 must be taken at Wake Forest.

### Honors

The honors designation in French Studies is a recognition of outstanding scholarship in the field, as evidenced by academic achievement, critical thinking, and intellectual initiative. Highly qualified majors selected by the French Studies faculty are invited to participate in the honors program, which candidates undertake in addition to the requirements for the major.

The honors program requires completion of:

Code	Title	Hours
FRH 390	Directed Reading	1.5
FRH 391	Directed Research	3

Directed Reading, normally taken during the fall semester of the student's final year, includes reading and discussion of a number of texts on the selected topic, and a written exam covering these texts. At the end of fall semester, the student submits an annotated bibliography and an abstract of the honors thesis. Directed Research, taken during the student's final semester, consists of writing the thesis following a schedule established by the director and the student. At the end of this course, the honors student defends the thesis orally before appropriate faculty who collectively may confer honors.

## French Studies, Minor

### Requirements

Requires a minimum of 18 hours of French courses numbered above FRH 214.



Code	Title	Hours
<b>Required Minor Courses</b>		
FRH 216	Studies in French and Francophone Literature and Culture	3
FRH 315	Introduction to French and Francophone Studies	3
Or		
FRH 350	Studies in French Language and Culture (Offered in Dijon)	
FRH 319	Composition and Review of Grammar	4
Select three other courses		

Students must achieve at least a C grade in FRH 319 and a GPA of 2.0 in the minor. FRH 319 must be taken at Wake Forest. Some courses are not offered every semester; students should plan ahead in order to fulfill all requirements.

## French for Business, Concentration Requirements

The concentration requires the following:

Code	Title	Hours
FRH 319	Composition and Review of Grammar	4
FRH 321	Introduction to Translation	3
FRH 329	French for Business Communication	3
FRH 330	French for Management	3
Select one additional course in French above FRH 214		

## German and Russian (GER/RUS)

The Department's aim is to guide students to proficiency in the traditional four skills of language acquisition (speaking, aural comprehension, reading and writing), and to introduce them to the broad arena of culture, including literature, arts, history, and politics. Our strong proficiency based methods of teaching in tandem with the exceptional opportunities for study abroad enable our students to achieve a higher than average level of sophistication in all of these areas.

An integral part of the mission of this department is to encourage as many majors, minors, and other interested students as possible to study abroad. We believe that study abroad in concert with their on-campus exposure to German and Russian studies assists them in thinking more objectively about American culture and language from a distanced perspective and consequently enables them to examine their own attitudes and beliefs more objectively.

In addition, the university's goal of preparing its students for their professional life is certainly enhanced by familiarity with, and close scrutiny of, foreign cultures, attitudes, languages, and economies in light of contemporary emphasis on global understanding and interaction.

## Certification

German majors are required (and German minors are strongly encouraged) to take the Zertifikat Deutsch (ZD) examination in their last semester of their senior year. The Wirtschaftsdeutsch als Fremdsprache (WiDaf) is offered at the end of Business German II, GER 330.

## Study Abroad

German majors and minors are encouraged to study abroad for at least one semester with IES (Institute for the International Education of Students) in Freiburg, Berlin or Vienna; for a summer immersion course in Jena, at the Flow House in Vienna, Austria, or at the Goethe Institute in Germany. Students may also elect to participate in an internship (3h, pass/fail) with any of the three IES study abroad programs.

## Scholarships

The department awards several W.D. Sanders scholarships for study abroad every year. Deadline is the Monday following Thanksgiving break, and students interested in IES or Goethe Institute study are invited to apply.

## GER 100/GES 100. German Pre-Orientation Tour

(Audit/1h) One-week tour for entering freshmen, Vienna Austria. Students and faculty stay at the Wake Forest Flow House. Tour includes concerts, museums, palaces and historic walking tours in the city as well as visits to the surrounding countryside and a day trip to the Abbey at Melk on the Danube. All student participants must sign up for GER 100 either as an audit or for credit. In order to receive the one hour of credit, the student must either

1. register for GER 111, GER 112, GER 113, GER 153, GER 210 or GER 212 subsequent to taking the tour or
2. complete a short paper analyzing one of the cultural events or excursions offered.

The credit will count towards the German (GER) or German Studies (GES) major or minor. Pass/Fail only.

## Study Abroad

Russian majors and minors are encouraged to study abroad for at least one semester. The university is associated with several programs in St. Petersburg and Moscow. Visit the Center for Global Programs and Studies for more information.

## Scholarships

Students may apply for the Lowell and Anne Tillett Scholarship Fund for study abroad. Scholarships are also available from the Center for Global Programs and Studies.

## Semester in Vienna

Code	Title	Hours
GER 110	Intensive Elementary German	4
GER 150	Intermediate German	4
GER 214	Masterpieces of Austrian Literature	3
GES 341	Austrian Literature in Translation	3
GES 350	Fin de Siècle Vienna	3

## Internships (GER 322)

### Winston-Salem, Forsyth County Schools

Under faculty direction, a student mentors local German students at the middle or high school level. The intern may tutor students directly or assist in structuring and coordinating German language activities or

events as the head classroom teacher requests. Course requirements include but are not limited to:

1. a journal including a general description of the student's responsibilities,
2. a supporting portfolio of teaching materials along with summaries of activities and events,
3. regular consultation with Wake Forest faculty adviser in German,
4. a reflective overview composed at the end of the internship, and
5. an evaluation supplied by the head teacher at the end of the internship.

### Old Salem, North Carolina (1.5 h)

Under faculty direction, the student serves in the Old Salem Archive as a German language specialist, translating documents from German into English. Course requirements include but are not limited to:

1. faculty evaluation of work completed,
2. a portfolio of copies of translated work,
3. regular consultation with a Wake Forest faculty mentor in German,
4. an evaluation by an administrator of the Old Salem Archive.

### German Lab Assistant (1.5 h)

Lab assistant for elementary German classes.

## Pass/Fail

German and Russian courses at the 100-level may not be taken pass/fail unless the student has already fulfilled WFU's language requirement.

## Contact Information

Department of German & Russian (<http://college.wfu.edu/germanrussian/>)  
Greene Hall 333, Box 7353  
Phone 336-758-3493

## Programs Majors

- German Studies, B.A.
- German, B.A.
- Russian, B.A.

## Minors

- German Studies, Minor
- German, Minor
- Russian, Minor

## Courses

### German (GER)

#### GER 001. German for Reading Knowledge. (1.5 h)

For graduate students and motivated undergraduate students who will need a reading knowledge of German in their academic fields (Divinity School, Religious Studies, Philosophy, Music, etc.). Introductory training in understanding/translating a variety of texts from German into English, including grammar and vocabulary overview. No prior knowledge of German necessary. Level: Beginner to Intermediate. Taught online. Pass/Fail.

#### GER 002. German for Reading Knowledge. (1.5 h)

For graduate students and motivated undergraduate students who will need a reading knowledge of German in their academic fields (Divinity School, Religious Studies, Philosophy, Music, etc.). Continuation of grammar and vocabulary overview from GER 001, culminating in a personalized translation project. Includes German proficiency test samples. For students who have completed GER 001, or who have received instructor permission. Level: Intermediate to Advanced. Taught online. Pass/Fail.

#### GER 100. German Pre-Orientation Tour. (1 h)

#### GER 110. Intensive Elementary German. (4 h)

One-semester course covering the material of GER 111 and 112. For students whose preparation for GER 153 is inadequate or who have demonstrated proficiency in another language. Not open to students who have had GER 111 or 112. Offered only at the Flow House in Vienna.

#### GER 111. Elementary German. (4 h)

Introduction to German language and culture. First of a two-semester sequence.

#### GER 112. Elementary German. (4 h)

Introduction to German language and culture. Second of a two-semester sequence.

#### GER 113. Intensive Elementary German. (4 h)

A one-semester course covering the material of German 111 and 112. For students whose preparation for German 153 is inadequate or who have demonstrated proficiency in another language. Not open to students who have had German 111 or 112.

#### GER 150. Intermediate German. (4 h)

Review of principles of grammar; reading of selected prose and poetry. Offered only at the Flow House in Vienna. P - GER 110, GER 112, or GER 113.

#### GER 153. Intermediate German. (4 h)

Review of basic grammar; reading of selected prose and poetry. P-GER 110, GER 112 or GER 113.

#### GER 208. Introduction to German Short Fiction. (3 h)

Lecture and discussion in German. Offered only in Jena, Germany. P-GER 150 or 153 or equivalent.

#### GER 210. Encounters with the German-Speaking World. (3 h)

Formative events and figures of German-speaking cultures and the literary and political texts that define their identity. P-GER 150 or 153.

#### GER 212. Introduction to German Short Fiction. (3 h)

Introduction to short works of German literature. P-GER 150 or 153 or equivalent.

#### GER 214. Masterpieces of Austrian Literature. (3 h)

Study of masterpieces of Austrian literature of the 19th, 20th, and 21st centuries. Lecture and discussion in German. Offered only at the Flow House in Vienna P-GER 150 or 153 or equivalent.

#### GER 317. Composition and Grammar Review. (3 h)

Review of the fundamentals of German grammar with intensive practice in translation and composition. Required for majors and minors. Offered in fall. P-200-level course or POI.

#### GER 318. German Conversation. (3 h)

Vocabulary for everyday situations, fluency and pronunciation, discussion of various topics from easy to advanced, listening exercises, free speaking, oral presentations. P-200-level course or POI.

**GER 319. Advanced Writing and Stylistics. (3 h)**

Emphasis on improving and expanding writing skills and vocabulary acquisition. Introduction to writing in different genres and contexts, such as blogs, reports, summaries, opinion pieces, short stories, memoirs, emails, newspaper articles, and fairy tales. Includes a creative writing component, relevant grammar topics, and readings in Young Adult Literature. P-200-level course or POI.

**GER 320. German Culture and Civilization I. (3 h)**

Survey of German culture and civilization from prehistoric times to 1848. Conducted in German. P-200-level course or POI. (CD)

**GER 321. German Culture and Civilization II. (3 h)**

Survey of German culture and civilization from 1848 to the present, with emphasis on contemporary Germany. Conducted in German. P - 200-level course or POI. (CD)

**GER 322. Internship in German Language. (0.5-3 h)**

May be repeated for a total of 6 hours, only 3 of which may count towards the major or minor. Pass/Fail only. P- GER 317 or POI.

**GER 329. German for Professional Purposes I. (3 h)**

Emphasis on social market economy, writing resumes, the European Union, job ads and job interviews, current topics in German business, oral proficiency, business correspondence, grammar review, business etiquette, banking, and financing. P-GER 317 or POI.

**GER 330. German for Professional Purposes II. (3 h)**

Prepares students for the internationally acknowledged exam Wirtschaftsdeutsch als Fremdsprache, which is offered at the end of the semester. Other topics include: writing a business plan, the structure of German companies, current topics in German business, oral proficiency, business correspondence, and business theory. P-GER 329 or POI.

**GER 350. German-Jewish Literature and Culture. (3 h)**

An examination of the German literary representation of Jews and Judaism in the last two centuries. Through text by both Jewish and non-Jewish authors, the course explores the nationalistic, economic, and racial motivations behind anti-Semitism, as well as Jewish self-awareness within the German-speaking culture. topics to be covered include the Enlightenment, 19th-century nationalism, and Holocaust. The course culminates with works by recent German-Jewish authors. P-200-level course or POI.

**GER 370. Individual Study. (1-3 h)**

Readings on selected topics in literature or current events not ordinarily covered in other courses. May be repeated once for major/minor elective credit. P - 200-level course and POI.

**GER 380. German Literature before 1700. (3 h)**

Survey of German literature of the Middle Ages, Reformation, and Baroque eras; emphasizes the chivalric period, Martin Luther, and the Baroque period. Offered in fall. P-200-level course or POI.

**GER 381. German Literature from 1700-1815. (3 h)**

Selected works from the Enlightenment, the Storm and Stress period, the poetry and major dramas of Goethe and Schiller, and German Romanticism. Offered in fall. P - 200-level course or POI.

**GER 383. German Literature from 1815-1900. (3 h)**

Study of selected works from the Realist period and subsequent Naturalist movement, with attention to their historical and social contexts. Offered in fall. P-200-level or POI.

**GER 385. German Literature from 1900 to Present. (3 h)**

Intensive study of representative works of major German, Austrian, and Swiss authors of the 20th and 21st centuries. Offered in fall. P - 200-level course or POI. (CD)

**GER 387. Honors in German. (2.5 h)**

Conference course in German literature or culture. A major research paper is required. Designed for candidates for departmental honors.

**GER 388. Honors in German. (2.5 h)**

Conference course in German literature or culture. A major research paper is required. Designed for candidates for departmental honors.

**GER 399. Seminar in the Major. (3 h)**

Intensive examination of a selected genre or special topic to be determined by the instructor. Intensive practice in critical discourse, including discussion and an oral presentation in German. Introduction to literary scholarship and research methodology leading to a major research paper. Required for all majors. May be repeated. Offered in spring. P-GER 350, 380, 381, 383, 385 or POI.

## German Studies (GES)

### All GES courses are taught in English

In addition to the courses listed under the German major, the German Studies major also offers the following courses. No courses completed elsewhere may satisfy Division II credit.

**GES 100. German Pre-Orientation Tour. (1 h)****GES 331. Weimar Germany. (3 h)**

Art, literature, music, and film of Weimar Germany, 1919-1933, in historical context. Also listed at HST 318.

**GES 335. German Film. (3 h)**

Survey of German cinema from the silent era to the present.

**GES 336. Special Topics in German Film. (3 h)**

Examination of a topic, movement, or director (to be determined by instructor).

**GES 337. Myth and National Identity Formation. (3 h)**

Explores the philosophical, social, religious, and political background of Germany and Austria in the context of the Nibelung cycle. Students read selected works of Tacitus, medieval epics, medieval poetry, Herder, Wagner, Nietzsche, and Adorno. (D)

**GES 340. German Masterworks in Translation. (3 h)**

Examines selected works of German, Austrian, and Swiss fiction in English translation by such writers as Goethe, Schiller, Kafka, Mann, and Schnitzler. Literary periods, genres, and authors vary according to instructor. Can also be offered online in summer. (D)

**GES 341. Austrian Literature in Translation. (3 h)**

Examines the literature of Austria from the decline of the Habsburg Empire to the present day. Intended for current and/or prospective German major or minors. (D)

**GES 345. History of the German Language. (3 h)**

Survey of the development of the German language from prehistoric times to modern day German. Topics include: From Indo-European to Germanic, phonetical and lexical changes of the German language, Old High German, Middle-High German, Early New High German, and Modern Standard German. No prior knowledge of linguistics necessary.

**GES 350. Fin de Siècle Vienna. (3 h)**

Survey of major developments in Viennese art, music, literature, and society from roughly 1889 to 1918. Important figures to be discussed are Mahler, Schoenberg, Klimt, Schiele, Schnitzler, Musil, Freund, and Herzl. Offered only at the Flow House in Vienna. (D)

**GES 351. German-Jewish Literature and Culture. (3 h)**

Explores the history of relations, cross-cultural influences, and prejudices between German Jews and Christians in literature from the Middle Ages to the present. Texts and discussions will also draw attention to pertinent contemporary issues, such as various forms of intolerance and the complexity and malleability of religious identity. (D)

**GES 390. German Women Writers. (3 h)**

Examination of selected works by women authors. Literary periods, genres, and authors vary according to instructor. (D)

**GES 391. Germanic Myths and Monsters. (3 h)**

Examines myths and monsters in medieval and modern discourse of the German-speaking countries. Students read selected works such as the Edda, medieval epics and romances, as well as nineteenth-and twentieth-century authors. P - 200 level course or equivalent. (D)

**GES 393. Luther. (3 h)**

Examines the social political, and religious background of Germany on the eve of the Reformation, traces the formative (sometimes legendary) events of Luther's life, and explores several of his most important tracts, his translation of the Bible, and his more notorious confrontations and opponents. (D)

**GES 394. German Myths, Legends and Fairy Tales. (3 h)**

Study of German myths, legends and fairy tales since the Middle Ages and their role in the formation of German national identity. (D)

**GES 395. Special Topics in German Studies. (3 h)**

Individual topics vary by instructor. (D)

**GES 396. The German Novel. (3 h)**

Introduction to novels by German, Swiss, and Austrian authors. (D)

**GES 397. Intellectual History of Weimar. (3 h)**

Examines the philosophical, political and literary works that gave rise to the mythical status of Weimar as the intellectual heart of Germany. Students read selected works by Luther, Goethe, Schiller, Fichte and the Jena Romantics. (D)

## Russian (RUS)

**RUS 111. Elementary Russian I. (4 h)**

The essentials of Russian grammar, conversation, drill, and reading of elementary texts.

**RUS 112. Elementary Russian II. (4 h)**

The essentials of Russian grammar, conversation, drill, and reading of elementary texts. P-RUS 111 or equivalent.

**RUS 153. Intermediate Russian. (4 h)**

Principles of Russian grammar are reviewed and expanded upon; reading of short prose pieces and materials from the Russian press. P-RUS 112 or equivalent.

**RUS 210. Russians and Their World. (3 h)**

Introduction to Russian culture and society, with topics ranging from history, religion, art and literature to contemporary Russian popular music, TV and film. Taught in Russian. P-RUS 153 or equivalent.

**RUS 212. Introduction to Russian Literature. (3 h)**

Reading of selected short stories and excerpts from longer works by Russian authors from the 19th century to the present. P-RUS 153 or equivalent.

**RUS 317. Seminar in Russian Literature. (3 h)**

In-depth reading and discussion of shorter works of poetry and prose by the foremost Russian authors from the 19th century to the present. P-RUS 212 or 210.

**RUS 321. Conversation and Composition. (3 h)**

Intensive practice in composition and conversation based on contemporary Russian materials. P - RUS 210 or 212.

**RUS 328. Advanced Grammar. (3 h)**

Mastery of Russian declension and conjugation, with special attention to the correct use of reference materials. Syntax of complex and problematic sentences. P-RUS 321.

**RUS 330. Structure of Russian. (3 h)**

The linguistic tools of phonetics, phonemics, and morphophonemics are explained and applied to modern Russian. Emphasis on the study of roots and word formation. P-POI.

**RUS 332. The History of Russian Language. (3 h)**

The evolution of Russian from Common Slavic to the modern language; theory of linguistic reconstruction and the Indo-European family; readings from selected Old East Slavic texts. P-RUS 321 and POI.

**RUS 335. Russian Culture and Civilization. (3 h)**

Survey of Russian culture and civilization with emphasis on contemporary events, politics, and music and art. Conducted in Russian. Offered spring. P-RUS 321 or POI.

**RUS 340. Seminar in Translation. (3 h)**

Advanced work in English-to-Russian and Russian-to-English translation. P-RUS 321 and POI.

**RUS 341. Russian Literature in Translation. (3 h)**

Reading and discussion of selected works from Russian literature in English translation by such writers as Gogol, Dostoevsky, Tolstoy, Bulgakov, and Solzhenitsyn. (D)

**RUS 345. Special Topics in Russian. (3 h)**

P-RUS 321, and Permission of Instructor.

**RUS 354. Language of the Russian Press and Mass Media. (3 h)**

Readings from Russian newspapers, magazines and the Internet, as well as exposure to Russian television and radio broadcasts. Emphasis is on improving reading and listening skills and vocabulary acquisition. P-RUS 212 or 210 or POI.

**RUS 370. Individual Study. (1.5-3 h)**

Study in language or literature beyond the RUS 210-212 level. May be repeated for credit. P-RUS 212 or 210.

**RUS 387. Honors in Russian. (2.5 h)**

Conference course in Russian literature or culture. A major research paper is required. Designed for candidates for departmental honors.

**RUS 388. Honors in Russian. (2.5 h)**

Conference course in Russian literature or culture. A major research paper is required. Designed for candidates for departmental honors.

## Faculty

**Chair** Tina M. Boyer

**Professors** Rebecca S. Thomas (German, Flow House Vienna, Austria)

**Associate Professors** Alyssa Howards (German, Post-Graduate Fellowships), Grant P. McAllister (German, Study Abroad), Tina M. Boyer (German, Medieval Studies, Self-Instructional Languages)

**Assistant Professor** Elena Pedigo Clark (Russian Language and Literature), Kit Pribble (Russian Language and Literature)

**Research Professor** Heiko Wiggers (Business German Relations and Internships)

**Associate Teaching Professor** Mary (Molly) Knight (German, Contemporary German Literature)

**Instructors** Günter Haika (Resident German Language Instructor and House Manager for Flow House Vienna, Austria), Martina Kritinar



(Resident German Language Instructor for Flow House Vienna, Austria), Ulrike Anton (Resident Music Instructor of Flow House Vienna, Austria), Martin Schwarz (Resident Economics Instructor for Flow House Vienna, Austria), Stefan Wedrac (Resident History Language Instructor for Flow House Vienna, Austria)

**Visiting Assistant Professor** Christoph Schmitz (Business German)

## German Studies, B.A.

### Requirements

Requires 27 hours beyond GER 153 to include:

Code	Title	Hours
Select at least one of the following:		3
GER 208	Introduction to German Short Fiction (offered only in Jena)	
GER 210	Encounters with the German-Speaking World	
GER 212	Introduction to German Short Fiction	
GER 214	Masterpieces of Austrian Literature (Vienna)	
Select one of the following:		6
GES 331	Weimar Germany	
GES 335	German Film	
GES 336	Special Topics in German Film	
GES 337	Myth and National Identity Formation	
GES 345	History of the German Language	
Select two of the following: *		3
GES 340	German Masterworks in Translation	
GES 341	Austrian Literature in Translation	
GES 351	German-Jewish Literature and Culture	
GES 390	German Women Writers	
GES 393	Luther	
GES 394	German Myths, Legends and Fairy Tales	
GES 395	Special Topics in German Studies	
GES 396	The German Novel	
GES 397	Intellectual History of Weimar	
Select five electives **		15

\*

*Students may take more than one course from the GES 390-GES 397 sequence for elective credit.*

\*\*

*Two and only two of which must be from external departments (art, music, history, religion, political science, philosophy). See here (<http://germanrussian.wfu.edu/>) for approved courses.*

## German, B.A.

### Requirements

Requires 27 hours beyond GER 153 to include:

Code	Title	Hours
GER 317	Composition and Grammar Review	3
Select at least one of the following:		3

GER 208	Introduction to German Short Fiction (offered only in Jena)	
GER 210	Encounters with the German-Speaking World	
GER 212	Introduction to German Short Fiction	
GER 214	Masterpieces of Austrian Literature (offered only in Vienna)	
Select at least one of the following:		3
GER 380	German Literature before 1700	
GER 381	German Literature from 1700-1815	
GER 383	German Literature from 1815-1900	
GER 385	German Literature from 1900 to Present	
GER 399	Seminar in the Major	3

No more than two GES courses may count in the major

## Honors

Highly qualified majors will be invited by the department to participate in the honors program in German. To be graduated with the designation "Honors in German," students must complete a senior research project and maintain a grade point average of at least 3.0 overall and 3.3 in German. For additional information, members of the departmental faculty should be consulted.

## Russian, B.A.

### Requirements

Requires 24 hours beyond RUS 153 and must include:

Code	Title	Hours
RUS 210	Russians and Their World	3
or RUS 212	Introduction to Russian Literature	
RUS 317	Seminar in Russian Literature	3
RUS 321	Conversation and Composition	3
RUS 328	Advanced Grammar	3

## German Studies, Minor

### Requirements

Requires 15 hours beyond GER 153 to include:

Code	Title	Hours
Select at least one of the following:		3
GER 208	Introduction to German Short Fiction (offered only in Jena)	
GER 210	Encounters with the German-Speaking World	
GER 212	Introduction to German Short Fiction	
GER 214	Masterpieces of Austrian Literature (Vienna)	
Select one of the following:		3
GES 331	Weimar Germany	
GES 335	German Film	
GES 336	Special Topics in German Film	
GES 337	Myth and National Identity Formation	
GES 345	History of the German Language	



Select one of the following:		3
GES 340	German Masterworks in Translation	
GES 341	Austrian Literature in Translation	
GES 351	German-Jewish Literature and Culture	
GES 390	German Women Writers	
GES 393	Luther	
GES 394	German Myths, Legends and Fairy Tales	
GES 395	Special Topics in German Studies	
GES 396	The German Novel	
GES 397	Intellectual History of Weimar	
Select two Electives *		

\*

*One and only one of which must be from external departments (art, music, history, religion, political science, philosophy).*

## German, Minor

### Requirements

Requires 15 hours beyond GER 153, to include:

Code	Title	Hours
GER 317	Composition and Grammar Review	3
Select at least one of the following:		3
GER 208	Introduction to German Short Fiction (offered only in Jena)	
GER 210	Encounters with the German-Speaking World	
GER 212	Introduction to German Short Fiction	
GER 214	Masterpieces of Austrian Literature (offered only in Vienna)	
Select at least one of the following:		3
GER 380	German Literature before 1700	
GER 381	German Literature from 1700-1815	
GER 383	German Literature from 1815-1900	
GER 385	German Literature from 1900 to Present	
May count only one GES course towards the minor		

## Russian, Minor

### Requirements

Requires 15 hours beyond RUS 153 and must include:

Code	Title	Hours
RUS 210	Russians and Their World	3
or RUS 212	Introduction to Russian Literature	
RUS 321	Conversation and Composition	3

## Global Trade and Commerce Studies (GTCS)

Interdisciplinary Minor

Globalization has proliferated in the 21<sup>st</sup> century due to advances in transportation and communication technology. As a result, interaction between people and companies has increased on a worldwide scale.

Therefore, an understanding of the global nature of transactions among corporate and social enterprises can impact one's career success.

The Global Trade and Commerce minor seeks to provide such understanding by offering students in the College and in the School of Business an opportunity to complement their major field of study with coursework having both a global focus and a significant business or economics component. This coursework spans business, the humanities, literatures, and social sciences. Furthermore, students are required to participate in a study abroad experience for academic credit. As a capstone, seniors pursuing the minor must take a course designed to synthesize their individual and collective learning from previous courses taken towards Global Trade and Commerce.

For students in the College, the minor provides an opportunity to delve into aspects of history, economics, policy, and cultures related to global enterprises. For students in the Business School, the minor fulfills the concentration in international business for Business and Enterprise Management (BEM) majors.

## Contact Information

Global Trade and Commerce Studies (<https://global.wfu.edu/global-campus/international-minors/global-trade-commerce-studies/>)

## Programs

### Minor

- Global Trade and Commerce Studies, Minor

## Faculty

**Coordinator, Associate Provost for Global Affairs** J. Kline Harrison  
**Professor** Ian Taplin

## Global Trade and Commerce Studies, Minor

### Requirements

Consists of a total of 15 hours. Candidates for the minor will be required to take:

Code	Title	Hours
CGS 260	Seminar in Global Trade and Commerce Studies	3
Select 12 additional hours in GTCS *		12

\*

*Must include a study abroad experience for credit. (International students residing in the US in a non-immigrant visa status are exempt from the study abroad requirement.)*

No more than 6 of the 15 hours for the minor may be taken in a single discipline or within the School of Business.

The following list contains courses within Wake Forest University that qualify as a GTCS course. Courses taken during the study abroad experience which may qualify as a GTCS course also will be reviewed and approved by the coordinator of the minor.

## Elective Courses for Global Trade and Commerce Studies

Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this publication.

Code	Title	Hours
ANT 337	Economic Anthropology	3
BEM 315	Managing in a Global Context	3
BEM 322	Global Marketing Strategy	3
BEM 375	Contemporary Issues in Business and Foundations of Capitalism	3
BEM 391	Global Business Studies (abroad credit only)	3
CHI 255	Business Chinese	3
COM 350	Intercultural Communication	3
COM 351A	Comparative Communication: Japan	1.5,3
or COM 351B	Comparative Communication: Russia	
or COM 351C	Comparative Communication: Great Britain	
or COM 351D	Comparative Communications: Multiple Countries	
or COM 351E	Comparative Communication: China	
COM 354	International Communication	3
ECN 351	International Trade	3
ECN 352	International Finance	3
ECN 358	Economic Growth and Development	3
ECN 271	Selected Areas in Economics (Salamanca, Cambridge, or pre-approved only)	3
ECN 372	Selected Areas in Economics (Cambridge, or pre-approved only)	3
ENT 200	Foundations of Entrepreneurship: Identifying and Cultivating Valuable Ideas (Barcelona only)	3
ENT 322	Religion, Poverty, and Social Entrepreneurship	3
FIN 234	International Finance	3
FRH 329	French for Business Communication	3
FRH 330	French for Management	3
GER 329	German for Professional Purposes I	3
GER 330	German for Professional Purposes II	3
HST 105	Africa in World History	3
HST 108	Americas and the World	3
HST 109	Asia and the World	3
HST 224	Great Britain since 1750	3
HST 231	Russia and Soviet Union: 1865 to Present	3
HST 243	Middle East since 1500	3
HST 245	Modern China since 1850	3
HST 247	Japan since 1600	3
HST 251	Modern South Asia	3
HST 257	The U.S and the World since 1914	3
HST 275	Modern Latin America	3
HST 310	20th Century Eastern Europe	3
HST 347	The Rise of Asian Economic Power since WWII	3

HST 350	World Economic History: Globalization, Wealth and Poverty, 1500-Present	3
CGS 229	Internship in International Studies	1-3
ITA 280	Business Italian	3
POL 232	Politics in Russia and Eastern Europe	3
POL 235	European Integration	3
POL 238	Comparative Economic and Political Development	3
POL 239	State, Economy, and International Competitiveness	3
POL 242	Topics in Comparative Politics (Cambridge, or pre-approved only)	3
POL 253	International Political Economy	3
POL 256	International Security	3
POL 257	Politics of International Development	3
POL 260	United States and East Asia	3
POL 262	International Organizations	3
PSY 357	Cross-Cultural Psychology	3
REL 344	Religion, Poverty, and Social Entrepreneurship	3
SOC 363	Global Capitalism	3
SOC 365	Technology, Culture, and Change	3
SPA 195	Spanish Language and Culture	1-3
SPA 325	Spanish for Business I	3
SPA 326	International Business: Spain/Latin America (abroad credit only)	3
SPA 327	Spanish for Business II	3
SPA 380	Spanish for the Professions	3
SPA 390	International Business: Spain and Latin America	3
SPA 391	Internship in Spanish for Business and the Professions	1.5-3

## Health and Exercise Science (HES)

The purpose of the Health and Exercise Science Department is to advance knowledge through research and to disseminate the knowledge in this field of study through education of and service to humanity. The primary focus of the department is promoting health and preventing and treating disease through healthful behaviors, emphasizing physical activity and nutrition.

All students must complete:

Code	Title	Hours
HES 100	Lifestyles and Health	1

This requirement must be met before enrollment in additional health and exercise science 100 level HES courses, and in any case by the end of the second year.

## Contact Information

Health and Exercise Science (<http://college.wfu.edu/hes/>)  
 Worrell Professional Center 2164B, Box 7868  
 Phone 336-758-5391

## Programs

### Major

- Health and Exercise Science, B.S.

## Courses

### Health and Exercise Science (HES)

#### HES 100. Lifestyles and Health. (1 h)

A lecture course that deals with the effect of lifestyle behaviors on various health outcomes, including cardiovascular disease, cancer, and sexually-transmitted diseases.

#### HES 101. Exercise for Health. (1 h)

A laboratory course on physical fitness that covers weight control, cardiovascular endurance, muscular strength, and flexibility.

#### HES 112. Sports Proficiency. (1 h)

#### HES 120. Fitness Activities. (1 h)

This course is designed to promote health and well-being through a variety of exercise and skill based activities. The course focuses on providing the knowledge and skills needed for lifetime participation in these activities. Pass/fail only. May be repeated for up to 4 hours of credit if activities differ.

#### HES 150. Introduction to Health and Exercise Science. (3 h)

A survey course that introduces the interdisciplinary field of health and exercise science. This includes an examination of the scientific basis underlying the core content areas of biomechanics; exercise physiology; epidemiology; health psychology; and nutrition; The role of lifestyle behaviors in the prevention/treatment of chronic disease and physical disability will also be addressed.

#### HES 232. Emergency Medical Responder. (3 h)

Emergency Medical Response (EMS) is a dynamic 56-hour course featuring lecture, video, simulated emergency situations, discussion and hands-on skill practice based on the national EMS curriculum requirements and educational standards. This course does not provide state licensure or EMT certification but will provide necessary education for service on the campus emergency response team. Clinical hours and Saturday classes are required. Pass/fail only.

#### HES 262. Statistics in the Health Sciences. (3 h)

Basic statistics with an emphasis on application to research in the health sciences. Students are introduced to graphics and statistical software for statistical analysis. (QR)

#### HES 265. Medical Terminology. (3 h)

An online course that examines medical terminology and vocabulary used by a variety of professionals in the healthcare field. The focus of this course is on medical and clinical terminology broadly relating to human anatomy and physiology and the basic systems of the human body with added emphasis placed on those terms pertaining to diagnosis and pathophysiology. The bases of medical terms will be examined – such as prefixes, suffixes, roots, combined forms. Pertinent acronyms and abbreviations will also be included.

#### HES 310. Clinical Research Internship. (1, 2 h)

A semester experience in a campus-based clinical research program. Work includes active participation with individuals and groups with clinical conditions, such as heart disease, pulmonary disease, osteoarthritis, cancer, and obesity. Focus is on multiple lifestyle intervention strategies, in conjunction with participation in physiologic monitoring of patients during therapeutic sessions. Open only to majors. P-POI.

#### HES 312. Exercise and Health Psychology. (3 h)

A survey of the psychological antecedents of exercise and selected topics in health psychology with particular attention to wellness, stress, the biobehavioral basis of coronary heart disease, and the psychodynamics of rehabilitative medicine. P-HES 262 or POI.

#### HES 320. Mindfulness Meditation in Behavioral Medicine. (2 h)

Study of contemplative science and in the realm of behavioral medicine. Content includes recent evidence from neuroscience and outcome research on both mindfulness-based stress reduction and mindfulness-based cognitive therapy. Taught in a seminar format with laboratory experience. Pass/Fail only. P-POI.

#### HES 350. Human Physiology. (3 h)

A lecture course which presents the basic principles and concepts of the function of selected systems of the human body, with emphasis on the muscular, cardiovascular, pulmonary, and nervous systems.

#### HES 350L. Human Physiology Lab. (1 h)

A laboratory course that coincides with HES 350 human physiology lecture course. P or C-HES 350.

#### HES 351. Nutrition in Health and Disease. (3 h)

Lecture course which presents the principles of healthy nutrition including an understanding of nutrients and their metabolism as well as the impact of nutrition on weight management and chronic diseases. P-HES 350 or POI.

#### HES 352. Human Gross Anatomy. (4 h)

Lecture/laboratory course in which the structure and function of the musculoskeletal, neuromuscular, pulmonary, and cardiovascular systems are studied using dissected human cadavers.

#### HES 353. Physiology of Exercise. (3 h)

A lecture course which presents the concepts and applications of the physiological response of the human body to physical activity. Acute and chronic responses of the muscular and cardiorespiratory systems to exercise are examined. P-HES 350 or POI.

#### HES 354. Assessment Techniques in Health and Exercise Science. (3 h)

A lecture/laboratory course to develop clinical skills and knowledge in the assessment of health in areas of exercise physiology, nutrition/metabolism, biomechanics/neuromuscular function, and health psychology. The laboratory will emphasize use of instrumentation and analysis/interpretation of data collected on human subjects. P-HES 262, HES 350 and 352; or POI. (QR)

#### HES 355. Exercise Programming. (1.5 h)

Lecture/laboratory course which presents the scientific principles of safe and effective exercise prescription for fitness programs. P-HES 350 or POI.

#### HES 360. Epidemiology. (3 h)

Introduction to basic epidemiologic principles and methods used to assess disease occurrence and association between risk factors and health outcomes in human populations. Emphasis is placed on modifiable exposures (e.g. diet and physical activity) and chronic disease outcomes. P - An applied statistical methods course, such as ANT 380, BIO 380, BEM 202, HES 262, PSY 311, SOC 271, or STA 111; or POI. (QR)

**HES 362. Experimental Design for Clinical and Translational Health Science Research. (3 h)**

Examination of scientific methods as applied to Clinical and Translational Health Science Research. Emphasis is placed on understanding the strengths and weaknesses for a broad range of study designs that can be found in the health sciences. Special emphasis is placed on randomized controlled trials, bioethics, the interpretation of data within the context of internal and external validity, as well as skills in reviewing the scientific literature. P - An applied statistics course such as ANT 380, BIO 380, BEM 201, HES 262, PSY 311, SOC 271, or STA 111; or POI.

**HES 365. Anatomy and Physiology. (3 h)**

A lecture course which presents the basic principles and concepts of the anatomical structures and physiologic functions of selected systems of the human body, with emphasis on the muscular, cardiovascular, pulmonary, and nervous systems. Open only to non-HES majors and does not count toward HES major. POI.

**HES 370. Biomechanics of Human Movement. (3 h)**

Study of the mechanical principles which influence human movement, sport technique, and equipment design. P-HES 352 or POI.

**HES 372. Anatomy Dissection Laboratory. (2 h)**

A laboratory course that involves human cadaver dissection of the musculoskeletal, neuromuscular, pulmonary, and cardiovascular systems. Open only to majors. P-POI.

**HES 375. Advanced Physiology of Exercise. (3 h)**

A lecture course which provides an in-depth examination of the physiological mechanisms responsible for both the acute and chronic changes which occur with exercise. Included are metabolic and cellular changes in response to exercise, as well as the alterations of the major organ systems from acute and chronic exercise training. P - HES 353 or POI.

**HES 376. Interventions in Behavioral Medicine. (3 h)**

Seminar course providing an overview of the development, implementation, and evaluation of interventions within the context of behavioral medicine. Attention is given to behavior change theories that have served as the framework for physical activity and weight loss interventions. Hands-on experience is included with current interventions through peer counseling and case study analysis.

**HES 382. Individual Study. (1-2 h)**

Independent study directed by a faculty adviser. The student must consult the adviser before registering for this course. Open only to majors. May be repeated for up to 4 hours of credit. P-POI.

**HES 384. Special Topics in Health and Exercise Science. (1-3 h)**

Intensive investigation of a current scientific research topic in health or exercise science with focus on a specific topic.

**HES 386. Honors Research. (2 h)**

Directed study and research in preparation for a major paper on a subject of mutual interest to the student and faculty honors adviser. Taken only by candidates for departmental honors. P-POI, approval of departmental honors committee, and prior completion of a 2-hour Individual Study.

**HES 388. Field Internship in Health Sciences. (3 h)**

An extensive hands-on experience in a discipline of the health sciences related to the student's career goals. This internship occurs outside the Wake Forest University community. Open only to majors. Pass/Fail only. P-POI.

## Faculty

**Chair** Peter H. Brubaker

**Associate Chair** Gary D. Miller

**Professors** Peter H. Brubaker, Jeffrey A. Katula, Anthony P. Marsh, Stephen P. Messier, Shannon L. Mihalko, Gary D. Miller

**Associate Professor** Kristen M. Beavers

**Assistant Professors** Elliot D. Arroyo, Jason T. Fanning, Megan Irby

**Research Professor** W. Jack Rejeski

**Associate Teaching Professors** Edward H. Eaves, Abbie P. Wrights

**Assistant Teaching Professor** Sergi Garcia-Retortillo

**Professor of the Practice** Sharon K. Woodard

**Associate Professor of the Practice** Crystal T. Dixon

**Part-time Assistant Professor of the Practice** Natascha L. Romeo

**Adjunct Assistant Professor** Stephanie C. Bunch

**Adjunct Lecturers** Meghan E. Belanger, Suzanne L. Evans, Dave Lockwood

**Teacher-Scholar Post Doc** Paige E. Rice

**Visiting Assistant Professors** Jason Campbell, Claire Newman, Andrew Wells

## Health and Exercise Science, B.S. Requirements

A major requires 31 hours in health and exercise science and must include:

Code	Title	Hours
<b>Required Major Courses *</b>		
HES 262	Statistics in the Health Sciences	3
HES 312	Exercise and Health Psychology	3
HES 350 & 350L	Human Physiology and Human Physiology Lab	4
HES 351	Nutrition in Health and Disease	3
HES 352	Human Gross Anatomy	4
HES 353	Physiology of Exercise	3
HES 354	Assessment Techniques in Health and Exercise Science	3
HES 360	Epidemiology	3
HES 370	Biomechanics of Human Movement	3
Select two hours of the following:		2
HES 232	Emergency Medical Responder	
HES 310	Clinical Research Internship	
HES 320	Mindfulness Meditation in Behavioral Medicine	
HES 355	Exercise Programming	
HES 372	Anatomy Dissection Laboratory	
HES 375	Advanced Physiology of Exercise	
HES 376	Interventions in Behavioral Medicine	
HES 382	Individual Study	
HES 384	Special Topics in Health and Exercise Science	
HES 386	Honors Research	
HES 388	Field Internship in Health Sciences	
ANT 360	Anthropology of Global Health	
ANT 362	Medical Anthropology	
BHM 310	The Art and Science of Health and Healing	
BIO 346 & 346L	Neurobiology and Neurobiology Lab	
BIO 235	Genetics	
BIO 265	Cellular and Molecular Biology	

BIO 308	Biomechanics
BIO 324	Hormones and Behavior
BIO 332	Microbiology
BIO 343	Molecular Neuroscience
BIO 353	Functional Neuroanatomy
BIO 354	Methods in Neuroscience
BIO 361	Principles of Biological Microscopy
BIO 362	Immunology
BIO 363	Sensory Biology
BIO 365	Biology of the Cell
BIO 367	Virology
BIO 370	Biochemistry I: Macromolecules and Metabolism
BIO 372	Advanced Molecular Biology
BIO 383	Genomics
CHM 370	Biochemistry I: Macromolecules and Metabolism
CHM 373	Biochemistry II
CNS 334	Ethics in Health and Human Services
CNS 335	Health and Human Services in a Diverse Society
CNS 337	Skills in Human Services
CNS 340	Professional Orientation to Health and Human Services
COM 356	Health Communication: Patient-Provider
COM 357	Health Communication Campaigns
COM 358	Health Communication and Bioethics
ECN 240	Economics of Health and Medicine
HPA 150	Introduction to Public Health
PHI 161	Introduction to Bioethics
PHI 368	Concepts of Health & Disease
PHI 373	Philosophy of Science
PSY 241	Developmental Psychology
PSY 243	Biopsychology
PSY 322	Psychopharmacology
SOC 335	Sociology of Health and Illness
SOC 336	Money, Markets and Medicine
STA 112	Introduction to Regression and Data Science
STA 247	Design and Sampling
SPM 302	Advanced Athletic Training

**Co-Requirements**

BIO 150 & 150L	Biology I and Biology I Lab	4
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4

\*

No more than 2 of the 10 required courses may be transferred from another institution.

Majors are not allowed to apply any HES 100-level courses toward the 31 hours required for graduation. A minimum grade point average of

2.0 is required for graduation in courses that comprise a major in the department.

## Honors

Highly qualified majors are invited by the department to apply for admission to the honors program in health and exercise science during the second semester of the junior year. To be graduated with the designation "Honors in Health and Exercise Science," a student must have a minimum grade point average of 3.4 in the major, a minimum overall grade point average of 3.4, and complete an honors research project which includes a written and an oral report. Interested students should consult the coordinator of the department's honors program. For more information, please consult the department's website at [www.wfu.edu/hes/](http://www.wfu.edu/hes/) (<http://www.wfu.edu/hes/>).

## Health Policy and Administration (HPA)

Interdisciplinary Minor

The health policy and administration minor is designed to give students a concentration in the area of public health policy and the study of health care delivery. It is open to all majors and places an emphasis on providing students with the analytical methods and knowledge of institutional complexity necessary to an understanding of the rapidly evolving medical industry. Students interested in either public health policy or administrative roles in health care could benefit from the minor.

## Contact Information

Health Policy and Administration (<http://college.wfu.edu/hpa/>)

## Programs Minor

- Health Policy and Administration, Minor

## Courses

### HPA 150. Introduction to Public Health. (3 h)

Survey of the basic structure of the health care system in the United States. Includes discussion of current issues of public policy toward health, organization of health care delivery, and health system reform. Serves as the introduction to the interdisciplinary minor in health policy and administration. Offered fall semester only.

### HPA 250. Internship in Health Policy and Administration. (3 h)

A semester experience in a health care policy or health care administration organization. Students will work in conjunction with a director who is a researcher on a public health science research project or with an administrator in health care delivery. Students gain relevant practical experience that builds on prior coursework and provides insight into public health policy issues. Open only to senior health policy and administration students. P-HPA 150, completion of one other course, and POL.

### HPA 262. Special Topics. (3 h)

Seminar and/or lecture courses in selected topics. May be repeated if topic differs.

## Faculty

Director, Professor of Health and Exercise Science Shannon L. Mihalko



# Health Policy and Administration, Minor

## Requirements

The coursework requires the following five courses (3 hours each), for a total of 15 hours, plus some notable prerequisites (ECN 150 and an applied statistics course such as ANT 380, BIO 380, BEM 201, HES 262, PSY 311, SOC 271, or STA 111):

Code	Title	Hours
HPA 150	Introduction to Public Health	3
HPA 250	Internship in Health Policy and Administration	3
ECN 240	Economics of Health and Medicine	3
HES 360	Epidemiology	3
Elective in Health Policy and Administration *		3

\*

*Various cross-listed, health-related courses. Some examples of pre-approved electives are given below. The HPA director can approve other courses that might satisfy this requirement.*

## Elective Courses for Health Policy and Administration

May choose one course from the following electives. Additional elective courses may have been approved since publication of this bulletin. For course descriptions, see the relevant department's listings in this publication.

Code	Title	Hours
ANT 362	Medical Anthropology	3
HES 312	Exercise and Health Psychology	3
HPA 262	Special Topics	3
HST 311	Special Topics in History (when topic is Controversies in American Medical History)	3
HST 339	Sickness and Health in American History	3
PHI 161	Introduction to Bioethics	3
PSY 322	Psychopharmacology	3
SOC 335	Sociology of Health and Illness	3

As many of the required courses involve prerequisites, students should plan ahead to ensure they can meet all of the requirements in four years.

## History (HST)

Historians collect, organize, and explain complex data. With impressive skills in critical reading, research, analysis, writing, and public speaking, our majors are prepared for a wide range of professions. Wake Forest's history majors pursue careers that range across entrepreneurship, education, government service, healthcare, public-interest foundations, publishing, consulting, journalism, and beyond. Our students also find their studies in history excellent preparation for graduate study in law, business, and the arts and sciences.

Our faculty's research and teaching investigate the political, religious, social, cultural, and economic ideas and institutions that people have used to order their lives. Our curriculum introduces students to historical

methodologies and the fundamentals of research and writing. We work together to understand history both as a scholarly discipline and as a framework for intellectual inquiry.

When Wake Forest students explore the past, they confront the diverse contexts in which people have lived and they analyze the choices and forces that have produced our world.

## Divisional Credit

Only courses designated by a (D) receive divisional credit. Wake Forest students cannot receive divisional credit for history courses taken at other institutions or study abroad courses not designated by a (D) in the course list. History courses of students who are transferring to Wake Forest from other institutions will be considered on a case-by-case basis. Students with two AP courses (6 credit hours) in History may take any 200- or 300-level course for divisional credit, with the exception of courses numbered 390 and above.

Students contemplating graduate study should acquire a reading knowledge of one modern foreign language for the master of arts degree and two for the PhD.

## Contact Information

Department of History (<http://college.wfu.edu/history/>)  
Tribble Hall B101, Box 7806  
Phone 336-758-5501

## Programs Major

- History, B.A.

## Minor

- History, Minor

## Courses History (HST)

### HST 101. Western Civilization to 1700. (3 h)

Survey of ancient, medieval, and early modern history to 1700. Focus varies with instructor. (CD, D)

### HST 102. Europe and the World in the Modern Era. (3 h)

Survey of modern Europe from 1700 to the present. Focus varies with instructor. (CD, D)

### HST 103. World Civilizations to 1500. (3 h)

Survey of the ancient, classical and medieval civilizations of Eurasia with a brief look at American and sub-Saharan societies. Focus varies with instructor. (CD, D)

### HST 104. World Civilizations since 1500. (3 h)

Survey of the major civilizations of the world in the modern and contemporary periods. Focus varies with instructor. (CD, D)

### HST 105. Africa in World History. (3 h)

Examines the continent of Africa from prehistory to the present in global perspective, as experienced and understood by Africans themselves. Also listed as AAS 105. (CD, D)

**HST 106. Medieval World Civilizations. (3 h)**

Provides an overview of world civilizations in the period generally understood as "medieval," from 600 C.E. to 1600 C.E. The course examines cultures and societies in East Asia, India, Africa, and the Americas as well as Europe and asks if there is such a thing as a "medieval" world history. What characteristics do these widely differing cultures and geographic areas share, and where do they differ? (CD, D)

**HST 107. Middle East & the World. (3 h)**

Examines, in its global context, the Middle East region from the inception of Islam in the 7th century to the 20th century. Combines an introduction to Islamic civilization in its central lands with a close study of its interaction with other societies. (CD, D)

**HST 108. Americas and the World. (3 h)**

Examines North, Central and South America in global perspectives from premodern times to the present with particular attention to political, economic, social, and cultural developments and interactions. (CD, D)

**HST 109. Asia and the World. (3 h)**

Overview of Asia (primarily East, Southeast, and South Asia) since 1500 with emphasis on economic, diplomatic, cultural, and religious interactions with the outside world. (CD, D)

**HST 110. Atlantic World since 1500. (3 h)**

Examines the major developments that have linked the civilizations bordering the Atlantic Ocean from 1500 to the present. Themes include exploration; commerce; European colonization and indigenous responses; disease; religious conversion and revivalism; mestizo and creole culture; imperial warfare; enlightenment; revolution; slavery and abolition; extractive economies; nationalism; 'scientific racism,' invented traditions; the black diaspora and negritude; decolonization; the Cold War; segregation and apartheid; dictatorship; neoliberalism; and globalization. Also listed as AAS 106. (CD, D)

**HST 112. Big History: A History of the Cosmos and Humanity's Place In It. (3 h)**

Beginning 13.7 billion years ago and drawing on the sciences, social sciences, and history, this course offers a contemporary understanding of how the physical, social, and mental worlds people inhabit came to be. Its effort to integrate disciplines that usually remain unconnected should appeal to those who want to see how the pieces of education fit together. (CD, D)

**HST 113. Health, Disease and Healing in World History. (3 h)**

Examines political, economic, and cultural responses to sickness and disease in global historical context, paying particular attention to the intersection of religion and healing, as well as race, class, and gender, in ancient, medieval, early modern, pre-colonial, colonial, and post-colonial societies. (D)

**HST 114. Gender and Sexuality in World History. (3 h)**

Introduces the global and historical breadth of gender and sexual systems. Foundational and current approaches to cross-cultural historical analysis of masculinity, women's rights, and differences between LGBTQ identities and other models. Also listed as WGS 214. (CD, D)

**HST 119. Venice and the World. (3 h)**

The history of Venice is intertwined with many of the central themes of world history. Students will examine the history of Venice from its foundation to the present day, examining the ongoing reciprocal interactions between the city-state, Europe, and the wider world. Offered in Venice only. (CD, D)

**HST 120. Formation of Europe: Habsburg Empire and its Successor States. (3 h)**

The development of Central and East-Central Europe as a multiethnic unity under the Habsburgs, 1526-1918, and its dissolution into successor states and subsequent interactions, 1918-1989. Offered in Vienna. (D)

**HST 121. London and the World. (3 h)**

Introduction to London's history as a global city since the 16th century, focusing on exploration, empire, industrialization, and immigration. (CD, D)

**HST 150. United States History. (3 h)**

Survey of U.S. history from the colonial period to the present.

**HST 151. The Golden Age of Burgundy. (1.5 h)**

Burgundian society, culture, and government in the reigns of Philip the Bold, John the Fearless, Philip the Good, and Charles the Rash, 1384-1477. Offered in Dijon.

**HST 161. History Museums. (1.5 h)**

Introduces students to history museums and surveys the major issues involved in the collection and display of historical objects, discusses the impact of social history on museum interpretations, and traces the ethical issues and public controversies stemming from the treatment of historical topics in museum settings.

**HST 162. History of Wake Forest. (1.5 h)**

A survey of the history of Wake Forest from its beginning, including its written and oral traditions. May include a visit to the town of Wake Forest.

**HST 171. Historical Biography. (1.5 h)**

Study of biographies of men and women who have influenced specific histories and civilizations. May be repeated for credit if topic differs.

**HST 172. Historical Novels. (1.5 h)**

The role of the historical past in selected works of fiction. May be repeated for credit if topic varies.

**HST 173. Historical Films. (1.5 h)**

Examines the value of film as a source for understanding the past. Includes viewing and discussing historical films in relation to primary and secondary source texts. May be repeated for credit if topic varies.

**HST 206. The Early Middle Ages. (3 h)**

European history from the end of the ancient world to the mid-12th century, stressing social and cultural developments.

**HST 207. The High Middle Ages Through the Renaissance. (3 h)**

European history from the mid-12th through the early 16th centuries, stressing social and cultural developments.

**HST 209. Europe: From Renaissance to Revolution. (3 h)**

A survey of European history from the 15th to the 18th century. Topics include the voyages of discovery, the military revolution, the formation of the modern state, religious reformation, witchcraft and the rise of modern science, and pre-industrial economic and social structures including women and the family.

**HST 214. Atlantic History to 1800: Science, Empire, and Environment. (3 h)**

Explores the ways in which western science and empire developed in tandem to control natural resources in the Americas, Africa, and Europe until 1800.

**HST 215. Atlantic History from 1800: Science, Empire, Environment. (3 h)**

Inquiry into the ways in which colonialism and the practices of western science have shaped social, political, and terrestrial landscapes in the Americas, Africa, and Europe from 1800.

**HST 216. General History of Spain. (3 h)**

History of Spain from the pre-Roman period to the present day. Counts as elective for the Spanish major. Offered in Salamanca.

**HST 217. France to 1774. (3 h)**

The history of France from the Paleolithic period to the accession of Louis XVI with particular attention to the early modern period.

**HST 218. France since 1815. (3 h)**

The history of France from the restoration of the monarchy to the Fifth Republic.

**HST 219. Germany to 1871. (3 h)**

Social, economic, and political forces leading to the creation of a single German nation-state out of over 1,700 sovereign and semi-sovereign German states.

**HST 220. Germany: Unification to Unification 1871 to 1990. (3 h)**

The Germans' search for stability and unity in a society riven by conflict and on a continent riven by nationalism.

**HST 221. The British Empire to 1815. (3 h)**

Explores the early history of the British Empire and imperialism until the end of the Napoleonic Wars in 1815, including the Elizabethan conquest of Ireland, global trade and exploration, the foundations of the East India Company, captivity and slavery, and revolution in the Atlantic world, with an emphasis on the place of religion, gender, race, and class in imperial rule.

**HST 222. The British Empire from 1815. (3 h)**

Examines the British Empire and British approaches to imperialism from the end of the Napoleonic Wars in 1815 through to the Brexit crises of the late 2010s. The course considers both formal and informal British influence in Latin America, the Caribbean, Africa, the Middle East and Asia, analyzing the interconnected political, economic, and socio-cultural drivers and outcomes of imperialism, as well as the many anti-imperial movements that developed in response to British rule.

**HST 223. The British Isles to 1750. (3 h)**

Discusses religious reformations in the 16th century; political and scientific experiments in the 17th century; and the commercial revolutions of the 18th century. Examines their effect on the way Englishmen and women conceived of their state, their communities and themselves, exploring social relationships and the changing experience of authority. The course also considers England's relationship to its neighbors, Scotland and Ireland, and these British Isles within the context of early modern Europe.

**HST 224. Great Britain since 1750. (3 h)**

Addresses topics in British history from the Industrial Revolution to New Labour, with attention to how politics and citizenship were linked to imperial power. Explores industrialization, liberalism and their discontents; colonization, decolonization, and immigration; social and urban riot and reform; world war; and the creation of the welfare state and its dismantling. The course also considers Britain's relationship with Ireland and European integration.

**HST 225. History of Venice. (3 h)**

The history of Venice from its origin to the fall of the Venetian Republic. Offered in Venice.

**HST 226. History of London. (1.5-3 h)**

Topographical, social, economic, and political history of London from the earliest times. Lectures, student papers and reports, museum visits and lectures, and on-site inspections. Offered in London.

**HST 228. Georgian and Victorian Society Culture. (3 h)**

Social and economic transformation of England in the 18th and 19th centuries, with particular attention to the rise of professionalism and developments in the arts. Offered in London.

**HST 229. Venetian Society & Culture. (3 h)**

An examination of Venetian society, including the role within Venetian life of music, theatre, the church, and civic ritual. Offered in Venice.

**HST 230. Russia: Origins to 1865. (3 h)**

A survey of the political, social, and economic history of Russia, from its origins to the period of the Great Reforms under Alexander II. Students taking HST 230 cannot receive credit for HST 232/REE 200.

**HST 231. Russia and Soviet Union: 1865 to Present. (3 h)**

A survey of patterns of socio-economic change from the late imperial period to the present, the emergence of the revolutionary movement, and the development of Soviet rule from its establishment to its collapse. Students taking HST 231 cannot receive credit for HST 232/REE 200.

**HST 232. Introduction to Russian and East European Studies. (3 h)**

An interdisciplinary survey of Russia and the Soviet Union, including an examination of society, polity, economy, and culture over time. Also listed as REE 200. Students taking HST 232/REE 200 cannot receive credit for HST 230 or 231. (CD)

**HST 235. The History of European Jewry from the Middle Ages to the Present. (3 h)**

Examines the Jewish historical experience in Europe from the medieval period to the Holocaust and its aftermath. Includes a consideration of social, cultural, economic and political history, and places the particular experience of Jews within the context of changes occurring in Europe from the medieval to the modern period.

**HST 236. The Nazi Holocaust to 1941. (3 h)**

Explores the preconditions and causes of the Nazi Holocaust and situates the Holocaust within the history of European colonial genocide and the rise of totalitarian regimes. Traces the development and radicalism of Nazism within Germany and discusses Nazi efforts to forge a racially pure state from Hitler's ascension to power in 1933 until the invasion of the Soviet Union in 1941. Examines the various ways that Jews and other groups targeted by Nazis responded to the rise of Nazism.

**HST 237. The Nazi Holocaust from 1941. (3 h)**

Examines the systematic attempt to exterminate European Jewry and other groups targeted by Nazi Germany on account of their perceived racial inferiority. In particular examines the period from the 1941 German invasion of the Soviet Union through the end of the war, and discusses the ghettoization of European Jews, the various means of mass murder, and the aftermath of the Holocaust. This class includes an optional trip to the United States Holocaust Memorial Museum in Washington, DC.

**HST 239. Jewish History in the Americas. (3 h)**

Examines the rich history of American Jewry from the period of first settlement to the present. Jews have been present in the Americas since the period of Dutch conquest in the mid-seventeenth century. Over the subsequent three and a half centuries, what was once a distant outpost of the Jewish world has today become a major center, and is home to one of the most diverse, populous, successful, and complicated communities in Jewish history.

**HST 242. Middle East before 1500. (3 h)**

A survey of Middle Eastern history from the rise of Islam to the emergence of the last great Muslim unitary states. The course provides an overview of political history with more in-depth emphasis on the development of Islamic culture and society in the pre-modern era. (CD)

**HST 243. Middle East since 1500. (3 h)**

A survey of modern Middle Eastern history from the collapse of the last great Muslim unitary states to the present day. Topics include the rise and demise of the Ottoman and Safavid empires, socio-political reform, the impact of colonialism, Islamic reform, the development of nationalism, and contemporary social and economic challenges. (CD)

**HST 244. Pre-Modern China to 1850. (3 h)**

Study of traditional China to 1850, with an emphasis on the evolution of political, legal and social institutions and the development of Chinese religion, learning and the arts. (CD)

**HST 245. Modern China since 1850. (3 h)**

Study of modern China from 1850 to the present, focusing on the major political, economic, and cultural transformations occurring in China during this period within the context of modernization, imperialism and (semi) colonialism, world wars and civil wars, revolution and reform, and the ongoing processes of globalization. (CD)

**HST 246. Japan before 1600. (3 h)**

A survey of Japan from earliest times to the coming of Western imperialism, with emphasis on regional ecologies, economic institutions, cultural practice, military organization, political ideology, and foreign relations. (CD)

**HST 247. Japan since 1600. (3 h)**

A survey of Japan in the modern world. Topics include political and cultural revolution, state and empire-building, economic "miracles", social transformations, military conflicts, and intellectual dilemmas. (CD)

**HST 250. Premodern South Asia. (3 h)**

A survey of ancient and medieval South Asia beginning with the Indus Valley civilization to the decline of the Mughal Empire. (CD)

**HST 251. Modern South Asia. (3 h)**

A survey of colonial and post-colonial South Asia beginning with the political conquest of the British East India Company in the mid-18th century until the present. (CD)

**HST 254. American West to 1848. (3 h)**

The first half of a two-semester survey course of the North American West, from roughly 1400 to 1850. Topics include indigenous trade and lifeways, contact, conflict, and cooperation between natives and newcomers, exploration and migration, imperial geopolitical rivalries, and various experiences with western landscapes.

**HST 255. U.S. West from 1848 to the Present. (3 h)**

The second half of a two-semester survey course of the U.S. West, from 1848 to the present. Topics include industrial expansion and urbanization, conflicts with Native Americans, national and ethnic identity formations, contests over natural resources, representations and myths of the West, and religious, cultural, and social diversity.

**HST 256. The U.S. and the World, 1763-1914. (3 h)**

The first half of a two-semester survey on U.S. foreign relations. Major topics explore the economic, political, cultural, and social currents linking the U.S. to Europe, Africa, South America, and Asia between 1763 and 1914. Particular attention is given to the influence of the world system—ranging from empire, war, and migration to industrial competition and economic interdependence—on U.S. diplomacy, commerce, and domestic politics and culture.

**HST 257. The U.S. and the World since 1914. (3 h)**

The second half of a two-semester survey of U.S. foreign relations. Major topics explore the economic, political, cultural and social currents linking the U.S. to Europe, Africa, Latin America, the Middle East and Asia between since 1914. Particular attention is given to the influence of the international system—ranging from hot and cold wars, to decolonization, economic interdependence and transnational businesses and institutions—on U.S. diplomacy, commerce, and domestic politics and culture.

**HST 258. Colonial North America. (3 h)**

Surveys and explores the encounters between natives and newcomers in North America between 1492 and 1763. Topics include development of new communities and cultures, as well as the roles warfare, trade, race, religion, and slavery played in the creation of "new worlds for all."

**HST 259. Revolutionary North America. (3 h)**

Examines the transformation that unfolded during the struggles for sovereignty in North America between 1760 and 1800. Considers the political upheavals that converted some British colonists into insurgents and explores the unlikely unification of disparate provinces into a confederated republic.

**HST 262. Antebellum America. (3 h)**

Examines the sociocultural, economic, religious, and political transformations of American society from the period after the Revolutionary War through the onset of the American Civil War.

**HST 263. The U.S. Civil War and Reconstruction. (3 h)**

The political, social, and military events of the war and the economic, social, and political readjustments which followed.

**HST 264. U.S. History 1877-1933: Industrialization, Urbanization, and Conflict. (3 h)**

Political, social, and economic developments in the U.S. from 1877 to 1933 with emphasis on industrialization, urbanization, immigration, growth of Big Business, imperialism, Progressive reform, war, depression, and race, class, and gender conflicts.

**HST 265. US History since the New Deal. (3 h)**

Political, social, and economic history of the U.S. since 1933 with emphasis on the Depression, wars at home and abroad, unionism, civil rights movements, countercultures, environmentalism, religion, the Imperial Presidency, and liberalism and conservatism.

**HST 266. The History of the Slave South. (3 h)**

Examines slavery and southern distinctiveness, from the first interactions of Europeans, Native Americans and Africans through the Civil War and Emancipation. Also listed as AAS 266. (CD)

**HST 267. The Making of the Modern South since the Civil War. (3 h)**

Traces the history of race relations and southern culture, politics, and economics from sharecropping and segregation through political reform, the Civil Rights Movement, and the Republican New South. (CD)

**HST 268. African History to 1870. (3 h)**

Overview of African history prior to the establishment of European colonial rule, covering the period from the 4th century until 1870. Focuses on sub-Saharan Africa and uses case studies in various regions. (CD)

**HST 269. African History since 1850. (3 h)**

Overview of African history, beginning with the period following the abolition of the Trans Atlantic Slave Trade and ending with contemporary challenges of independent African nations. Emphasizes sub-Saharan African perspectives, initiatives, and historical agency. (CD)



**HST 271. African American History to 1870. (3 h)**

Examines the experiences of African-descended people from Africa to America and from slavery to freedom, with each experience - the slave trade, enslavement, and emancipation - marking a fundamental transformation in black lives. Also listed as AAS 271. (CD)

**HST 272. African American History since 1870. (3 h)**

Examines the experiences of African-descended people from the destruction of slavery to Reconstruction, from rural to urban, and from Jim Crow to Civil Rights, with each experience - emancipation, migration, and enfranchisement - marking a fundamental transformation in black lives. Also listed as AAS 272. (CD)

**HST 275. Modern Latin America. (3 h)**

Survey of Latin-American history since independence, concentrating on the 20th century. Emphasizes race, gender, revolution, populism, dictatorship, resistance movements, and U.S.-Latin American relations. Examines cultural artifacts from multiple genres. (CD)

**HST 284. Latin America's Colonial Past. (3 h)**

Studies the history of Latin America's colonial past from the precolonial era to the wars of independence in the early 19th century. Topics include: Conquest controversies; autonomy, adaptation, and resistance in indigenous and African communities; sexuality and the Inquisition; and evolving systems of race, caste, and gender. (CD)

**HST 300. History Fin de Siecle Vienna. (3 h)**

Examination of major developments in Viennese culture, politics and society from the 1880s to 1918. Important figures to be discussed may include Mahler, Schoenberg, Klimt, Schiele, Kokoshchka, Schnitzler, Musil, Kafka, Freud and Herzl. Offered only in Vienna.

**HST 302. Plants of Empire: Power and Pleasure. (3 h)**

Study of the social, cultural, and political meaning of plants grown to finance and maintain empires since 1500. Includes analysis of both production and use of plant products like sugar, coffee, and opium.

**HST 303. Spaces of Science: Observatory, Laboratory, Field. (3 h)**

Examines how new physical spaces and types of workers have shaped the content, practices, and social contours of western science from 1500.

**HST 304. Travel, History and Landscape in the Mediterranean. (3 h)**

This course considers broader debates about the nature of "Mediterranean" societies in the late medieval and early modern period through case studies of particular places. Topics include cross-cultural cooperation and conflict, travel and travel narratives, the creation of national identities through public history, and contests over development and/or conservation of natural and cultural resources. Offered only in the Mediterranean.

**HST 305. Medieval & Early Modern Iberia. (3 h)**

Examines the variety of Christian, Muslim, and Jewish cultures that flourished on the Iberian peninsula between the years 700 and 1700. Themes include religious diversity and the imposition of orthodoxy, the formation of nation-states and empires, geographic exploration and discovery, and the economics of empire in the early modern period. (CD)

**HST 306. Science, Magic, and Alchemy in Europe, 1400-1700. (3 h)**

Examines scientists and magicians in medieval Europe, who developed theoretical models and practical approaches to understand and to manipulate the natural world. Looks at alchemists, who transformed matter to understand it as well as to make things for practical purposes: metals, gems, medicines, and the philosopher's stone.

**HST 307. Italian Renaissance. (3 h)**

Examination of the economic, political, intellectual, artistic, and social developments in the Italian world from 1350 to 1550. (CD)

**HST 308. World of Alexander the Great. (3 h)**

An examination of Alexander the Great's conquests and the fusion of Greek culture with those of the Near East, Central Asia, and India. Special emphasis placed on the creation of new political institutions and social customs, modes of addressing philosophical and religious issues, as well as the achievements and limitations of Hellenistic Civilization.

**HST 309. European International Relations since World War I. (3 h)**

Surveys European International Relations in the 20th century beyond treaties and alliances to the economic, social, and demographic factors that shaped formal arrangements between states. Covers the impact of new forms of international cooperation, pooled sovereignty, and non-governmental organizations on European diplomacy and internal relations.

**HST 310. 20th Century Eastern Europe. (3 h)**

Examination of the history of 20th century Eastern Europe, including the creation of nation-states, World War II, and the nature of Communist regimes established in the postwar period. Course includes a discussion of the collapse of the Eastern Bloc and the challenges of European integration.

**HST 311. Special Topics in History. (1-3 h)**

Subject varies with instructor.

**HST 311A. Special Topics: American. (1-3 h)**

Subject varies with instructor.

**HST 311E. Special Topics: European. (1-3 h)**

Subject varies with instructor.

**HST 311G. Special Topics: General. (1-3 h)**

Subject varies with instructor.

**HST 311W. Special Topics: Wider World. (1-3 h)**

Topic varies with instructor.

**HST 312. Jews, Greeks and Romans. (3 h)**

Largely from a Jewish context, the course explores the political, religious, social and philosophical values shaped by the collision between Jews, Greeks, and Romans, from the Hellenistic Period to the Middle Ages.

**HST 315. Greek History. (3 h)**

The development of ancient Greek civilization from the Bronze Age to the end of the Classical Period stressing social institutions, individual character, and freedom of social choice within the framework of cultural, political, and intellectual history.

**HST 316. Rome: Republic and Empire. (3 h)**

A survey of Roman history and civilization from its beginning to about 500 C.E., with emphasis on the conquest of the Mediterranean world, the evolution of the Republican state, the growth of autocracy, the administration of the empire, and the interaction between Romans and non-Romans.

**HST 317. The French Revolution and Napoleonic Empire. (3 h)**

The revolution and wars that constitute one of the pivotal points in modern history.

**HST 318. Weimar Germany. (3 h)**

Art, literature, music, and film of Weimar Germany, 1919-1933, in historical context. German or history credit determined at registration. Also listed as GES 331.



**HST 320. Write and Record! Diaries and Memoirs of the Nazi Holocaust. (3 h)**

Examines a wide range of diaries and memoirs to illuminate the historical period of Nazism, seeking to understand daily life under Nazi rule, the brutality of the perpetrators, and the many responses of Jews forced to live in such circumstances. From Anne Frank's account of hiding in an Amsterdam secret annex to Art Spiegelman's graphic novel of his parent's experience in Auschwitz, the diaries and memoirs of Holocaust victims provide an invaluable resource for historians.

**HST 321. Zionism, Palestine, and Israel in Historical Perspective. (3 h)**

Investigates both the European causes of Zionism and the Middle Eastern consequences of the establishment of the State of Israel. Through our discussion, students will be introduced to many of the scholarly debates over the history, practices, and consequences of Zionism, the State of Israel, and the Israel-Palestinian conflict.

**HST 322. Migrants and Refugees in Modern History. (3 h)**

Explores forced migrations and the development of the concept of refuge from the 16th to 20th centuries, drawing on cases from around the world. Considers how states, empires, and non-governmental organizations have handled migrants and refugees, as well as the lived experiences of displaced individuals.

**HST 323. Wives, Writers, and Witches: Women and Gender in Early Modern Europe, 1500-1800. (3 h)**

Examines the diverse range of women's experiences in early modern Europe, using gender as a lens for analyzing transformations in households, culture, society, and politics between 1500 and 1800. Considers how women negotiated dominant gender ideals and how they contributed to and were impacted by the Renaissance and Reformation, empire, the Scientific Revolution, the Enlightenment, and political revolution.

**HST 324. Fashion in the Eighteenth Century. (3 h)**

Examines the relationship between consumer culture and democratic politics in the eighteenth-century, focusing on Britain, North America, France, and Haiti. Considers laws regulating dress; the relationship between democracy, political resistance, and costume; the construction of political allegiance through clothes and symbols; and the ways fashion mediated ideas about empire, race, and gender.

**HST 325. English Kings, Queens, and Spectacle. (3 h)**

Examines how English royal authority was created, legitimized, performed, and challenged, between the reigns of Henry VIII and George III through ritual, image, and text. Topics include: gender and power; court culture; the press and political revolution; popular politics and propaganda; graphic satire; and the commercialization of politics.

**HST 326. The Industrial Revolution in England. (3 h)**

A study of the social, economic, and political causes and effects of the Industrial Revolution in England. Offered in London.

**HST 327. Profit and Power in Britain. (3 h)**

Examines economic ideas and British society between 1688 and 1914. Topics include connections between consumption and identity; the relationship of morals to markets; the role of gender and the household; knowledge, technology, and the industrial revolution; and the place of free trade in the political imagination.

**HST 328. History of the English Common Law. (3 h)**

A study of the origins and development of the English common law and its legacy to modern legal processes and principles.

**HST 331. The United States in Age of Empire, 1877 - 1919. (3 h)**

Explores the late 19th and early 20th centuries when the United States joined in the global scramble for empire. Examines the domestic and international causes of American imperial expansion; the modes of rule that the U.S. exercised in its formal and informal possessions; and the political and intellectual debates at home and abroad about America's expansion as a world power.

**HST 332. The United States and the Global Cold War. (3 h)**

Considers United States efforts to secure its perceived interests through "nation building" and economic development in Africa, Latin America, the Middle East, and much of Asia during the Cold War and after. Emphasizes the ideological and cultural dimensions of American intervention.

**HST 333. European Diplomacy 1848-1914. (3 h)**

The diplomacy of the great powers, with some attention given to the role of publicity in international affairs. Topics include the unification of Italy and of Germany, the Bismarckian system, and the coming of World War I.

**HST 334. Mystics, Monarchs, and Masses in South Asian Islam. (3 h)**

An introduction to Islam through South Asian social, political, cultural, and intellectual history. (CD)

**HST 335. Hindus and Muslims in India, Pakistan, and Beyond. (3 h)**

Examines the shared yet different, intertwined yet separate histories of the Hindus and Muslims of modern India, Pakistan, Bangladesh, and Sri Lanka primarily over the last two centuries. Explores the checkered existence of the two communities in order to understand diversity and questions of coexistence and conflict. (CD)

**HST 336. Gender and Power in African History. (3 h)**

Examines the close relationship between understandings of gender and power in African societies with particular focus on the last several hundred years. After addressing the sources and methods scholars have used to address these topics, the course examines conceptions of gender and power in pre-colonial African societies, the impact of the colonial period on men and women, the gendered nature of nationalism and independence, and the importance of gender and power to many of Africa's post-colonial challenges. (CD)

**HST 337. Women and Gender in Early America. (3 h)**

History of women and gender roles from 1600 through the Civil War, including the social constructions of femininity and masculinity and their political, economic, and cultural significance. (CD)

**HST 338. Sexuality, Race and Class in the United States since 1850. (3 h)**

History of gender relations from the mid-nineteenth century to the present. Analyzes the varying definitions of femininity and masculinity, the changing notions of sexuality, and the continuity and diversity of gender roles with special attention to race, class, and ethnicity.

**HST 339. Sickness and Health in American History. (3 h)**

Analysis of major trends in health, sickness, and disease within the broad context of social, political, and economic developments. Examines indigenous healing; colonial medicine; emergence of hospitals and asylums; public health; medical ethics; race, class and gender issues; and natural versus high-tech approaches to health care in the 20th century.

**HST 340. Urban Africa. (3 h)**

Examines how urban residents have worked to creatively shape some of sub-Saharan Africa's major transformations. Major topics include the social and cultural fabric of pre-colonial African cities, the impact of colonialism on African towns, cities as sites of revolution and independence, and the contemporary conditions and challenges facing urban residents. While popular imagination suggests that the African past is largely a rural one, many of the continents' most explosive social and cultural transformations have taken place in its cities. (CD)

**HST 341. Africans in the Atlantic World, 1750-1815. (3 h)**

Explores Africans' experience in the Atlantic world (Africa, Europe and the Americas) during the era of the slave trade by examining their encounters with Indians and Europeans and their adjustment to slave traders in West Africa. Also listed as AAS 341, AES 341. (CD)

**HST 343. The Silk Roads. (3 h)**

Explores the global exchanges across land and sea from the Bronze Age to the Early Modern Era, and their impact on the states and stateless societies connected by the Silk Road from China and Japan to the Mediterranean and the British Isles. (CD)

**HST 344. Early Modernity in China. (3 h)**

This course explores historic transformations in Chinese economy, society, thought, and culture from 1500 to 1800. These developments are placed within their local, global, and comparative context. Students read a wide variety of Chinese primary sources in English translation, including philosophical treatises, literary works, letters, diaries, and memoirs, some of which were written by Jesuit missionaries from Catholic Europe. (CD)

**HST 345. Early Modern Global Encounters: China and the World, 1400-1800. (3 h)**

Studies the impact of China's encounters with the early modern world. Examines how New World and European developments helped China transform its economy, modes of warfare and empire-building, thought, and culture. Asks how the global circulation of Chinese commodities and culture shaped the early modern world.

**HST 347. The Rise of Asian Economic Power since WWII. (3 h)**

An exploration of how Japan, South Korea, and China became dominant in world economies. Focus on business practices, foreign trade, government policy, and consumer and labor markets in the process of high-speed economic growth. Concludes with examination of recent challenges of national debt, increasing international competition, and aging societies. (CD)

**HST 348. Samurai and Geisha: Fact, Film, and Fiction. (3 h)**

Focuses on two well-known groups in Japanese history, the samurai (warriors) and geisha (entertainers). By analyzing historical studies and primary sources, as well as works of fiction and films about samurai and geisha, the course considers how Japanese and Western historians, novelists, and filmmakers have portrayed the two groups and by implication Japan and its history in the modern period. (CD)

**HST 349. American Foundations. (3 h)**

An interdisciplinary study of American art, music, literature, and social history with particular reference to the art collection at Reynolda House, Museum of American Art. Lectures, discussions, and field trips, including a tour of New York City museums. Term project in American history. Also listed as Art 331, Interdisciplinary Honors 393, 394, and Music 307. Offered at Reynolda House in summer only.

**HST 350. World Economic History: Globalization, Wealth and Poverty, 1500-Present. (3 h)**

Explores the growth of globalization and its role in the creation of wealth and poverty in both developed and underdeveloped nations. Focus on trade, industrialization, and agricultural and technological advances in global contexts. (CD)

**HST 352. Ten Years of Madness: The Chinese Cultural Revolution, 1966 to 1976. (3 h)**

A history of the Chinese Cultural Revolution from 1966 to 1976. Examines the origins, consequences, and collective memories of the catastrophic political events and the social and cultural transformations that took place in China during the last decade of Mao's leadership. (CD)

**HST 353. War and Society in Early America. (3 h)**

Examines the evolution of warfare among the indigenous and colonial societies of North America between 1500 and 1800 and considers the roles of economics, class, gender, race, religion, and ideology in cultures of violence.

**HST 354. The Early American Republic. (3 h)**

A history of the formative generation of the United States. Considers the dramatic transformations of the constitutional, economic, and racial orders, as well as new performances in politics, national identity, gender, and culture.

**HST 356. Jacksonian America 1815-1850. (3 h)**

The United States in the age of Jackson, Clay, Calhoun, and Webster.

**HST 358. Race, Gender and the Courts. (3 h)**

Examines the impact of state and federal court cases upon the evolution of race and gender relations in the U.S. from 1789 to the present. Each case is placed within the political, economic and social historical context for the given time periods. Race includes Native Americans, African Americans, Asian Americans, and Latino Americans. This class will analyze government intervention, inaction, and creative interpretation. (CD)

**HST 359. Prostitutes, Machos, and Travestis: Sex and Gender in Latin American History. (3 h)**

Explores gender and sexuality across 20th century Latin America and the Caribbean. Applies new theoretical developments in gender, masculinity, and LGBT studies to the region's history of race, revolution, labor, dictatorship, and social movements. Cases include the Mexican, Cuban, and Nicaraguan Revolutions and the Dominican and Argentine dictatorships. (CD)

**HST 361. A History of Hip Hop. (3 h)**

Scholarly analysis of the historical development and political import of hip hop culture from a transnational Black Studies perspective.

**HST 362. American Constitutional History. (3 h)**

Origins of the Constitution, the controversies involving the nature of the Union, and constitutional readjustments to meet the new American industrialism.

**HST 363. Law, Justice, and Reparations. (3 h)**

Introduction to the global praxis of reparative and transformative justice through historical case studies from the ancient world to the present.

**HST 365. Modern Native American History. (3 h)**

Considers broad historical issues and debates about Native American identity, experiences with and memories of colonialism, cultural preservation and dynamism, and political sovereignty from 1830 to the present. Focuses on individual accounts, tribal case studies, and popular representations of Native people. (CD)

**HST 366. Historic Preservation and Conservation. (3 h)**

Explores the history of the preservation and conservation movements organized to save historic buildings and landscapes in the U.S. and other nations. Examines the laws, international charters, national, statewide, and local agencies, practices, collaborations, and emerging challenges of historic preservation and conservation.

**HST 367. Public History. (3 h)**

Introduces students to the major issues involved in the practice, interpretation, and display of history for nonacademic audiences in public settings. Central themes include controversial historical interpretations, the role of history in popular culture, issues and aims in exhibiting history, and the politics of historical memory. Explores some of the many ways people create, convey, and contest history, major themes in community and local history, and the problems and possibilities of working as historians in public settings.

**HST 368. U.S. Environmental History. (3 h)**

Focuses on human actors and actions while highlighting how the material, or natural, world impacted Americans and shaped the nation. Students will investigate U.S. politics, society, and culture through the lens of the environment while exploring how Americans defined, represented, and used their natural environment over time.

**HST 369. Modern Military History. (3 h)**

Making war in the modern era, with special attention to the social context of military activity. Counts toward the American distribution for majors. Credit not allowed for both HST 369 and MIL 229.

**HST 370. Topics in North Carolina History. (3 h)**

A general chronological survey of North Carolina with emphasis on selected topics. May be repeated for credit if topic varies.

**HST 371. Transgender History, Identity, and Politics in the U.S. (3 h)**

This course explores the experiences of and responses to transgender, gender non-conforming, and intersex (TGI) people in nineteenth- and twentieth-century America. We will examine how scientific/medical authorities, legal authorities, and everyday people have understood and responded to various kinds of gender non-conformity. Same as WGS 305. (CD)

**HST 372. Queer Public Histories. (3 h)**

Explores how public history projects (oral histories, museums, archives, documentaries) document gay, lesbian, and queer communities in the U.S. Discusses how historical and contemporary LGBTQ stories have been collected and examines the various queer identities that emerge through this process. Same as WGS 306.

**HST 373. Anglo-American Relations since 1940. (3 h)**

A study of the relations between the United States and Britain from 1940 to the present. Offered in London.

**HST 374. Protest and Rebellion in Latin America. (3 h)**

A study of the history of protest movements and rebellions in Latin America from primitive and agrarian revolts to mass working class and socialist organizations. (CD)

**HST 375. Black Lives. (3 h)**

Explores both the lived experience and the historical reality of African Americans. Black lives are profoundly shaped by their group experience, influenced in no small part by the role of racism. The biographical approach individuates historical figures struggling to fashion identity. Topics include character development, intimacy, gender roles, public and private personas, self-deceptions or defenses, and personal perceptions of biases. The craft of writing biography is taught throughout the semester. Also listed as AAS 375. (CD)

**HST 376. Civil Rights and Black Consciousness Movements. (3 h)**

A social and religious history of the African-American struggle for citizenship rights and freedom from World War II to the present. Also listed as AAS 376. (CD)

**HST 378. Race, Memory, and Identity. (3 h)**

Explores the collective memory and identity of American-Indian and African-American communities and their response to historical trauma in their cultural imagination, spirituality, and political and social activism. Also listed as AAS 378, REL 348. (CD)

**HST 380. America at Work. (3 h)**

Examines the American entrepreneurial spirit within the broader context of industrial, social, and economic change from the colonial period to the present and explores the social and cultural meanings attached to work and workers, owners and innovators, businesses and technologies, management and leadership. Also listed as ENT 380. (CD)

**HST 381. Religious Utopias and the American Experience. (3 h)**

Religious groups of many different origins have found in North America an open space for creating settlements that would embody their ideals. This course surveys a range of such 18th- and 19th-century utopian communities, including Moravians, Rappites, Shakers, and the Oneida and Amana colonies. Also listed as REL 346.

**HST 382. Religion in the Development of Higher Education. (3 h)**

Examines the role of religious groups in the founding of American colleges and universities and explores how their role has changed across history up through contemporary trends and issues. Major themes include the heritage of religion in European higher education; institutions of higher education founded by specific American religious groups; religion in the liberal arts curriculum; religious activities in student life; the relationship of colleges and universities with religious sponsors and constituents, focusing on controversies such as science and religion; the impact of universities on liberal arts colleges; and the trends toward growth and "secularization" in the last 50 years.

**HST 384. Global Outlaws History since 1500. (3 h)**

Examines the motivations, ideologies, goals, and behavior of those who have been deemed "outlaws" to international society since 1500, including pirates, terrorists, smugglers, war criminals, and violators of copyright. Analyzes the role of power in creating the global regimes that define and target such activities.

**HST 385. History through Film: Bollywood and the Making of Modern India. (3 h)**

Juxtaposes historical films made by the world's largest film industry base out of Bombay/Mumbai with textual primary sources and secondary historical works and seeks to understand films as both interpretations and sources of history. Explores specific themes such as nation, gender, caste, and community that are critical to understanding modern Indian and South Asian history and culture. (CD)

**HST 387. The Last Great Muslim Empires. (3 h)**

Examines, in a comparative way, central themes in the history of the Ottoman, Mughal, and Safavid Empires in the early modern period (1400-1800). Considers the ways in which Muslim rulers fostered political legitimacy, ruled over non-Muslim and heterodox subject populations, and recruited persons of diverse religious and ethnic background into state service. (CD)

**HST 388. Nation, Faith, and Gender in the Middle East. (3 h)**

Traces the development of nationalism and its interaction with religious, transnational, and gender identities in the Middle East in the 19th and 20th centuries. Topics include Zionism, Abramism, Turkish nationalism, and Islamic revivalism. (CD)

**HST 389. The British Empire in the Middle East. (3 h)**

Covering the period from the late 18th to late 20th centuries, this course considers British involvement in the Middle East, exploring the political, economic, social and cultural facets of imperial power, decolonization and post-colonial international relations. (CD)

**HST 390. Research Seminar. (4 h)**

Offered by members of the faculty on topics of their choice. A paper is required.

**HST 391. Making History. (3 h)**

Seminar explores how historians make history through analysis, synthesis, and interpretation. Open to all students. All honors students must take HST 391.

**HST 392. Individual Research. (4 h)**

Writing of a major research paper. May be taken in lieu of HST 390. P-POI.

**HST 395. Internship in History. (1-3 h)**

Internship in the community that involves both hands-on experience and academic study. Juniors and seniors only. P-POI.

**HST 397. Historical Writing Tutorial. (1.5 h)**

Individual supervision of historical writing to improve a project initiated in HST 390 or HST 392. Does not count toward major or minor requirements. P-POI.

**HST 398. Individual Study. (1-3 h)**

Project for a qualified student in an area of study not otherwise available in the department; subject to approval. Work must be equivalent to an upper-level course.

**HST 399. Directed Reading. (1-3 h)**

Concentrated reading in an area of study not otherwise available. P-POI.

## Faculty

**Chair** M. Raisur Rahman

**Provost and Professor, Presidential Endowed Chair in Southern History** Michele K. Gillespie

**Professors** Simone M. Caron, Robert I. Hellyer, Jeffrey D. Lerner, Monique E. O'Connell, Anthony S. Parent Jr.

**The Michael H. and Deborah Rubin Presidential Chair of Jewish History and Professor** Barry Trachtenberg

**Associate Professors** Lisa M. Blee, Benjamin A. Coates, Stephanie Koscak, Nathan A. Plageman, M. Raisur Rahman, John A. Ruddiman, Susan Z. Rupp, Penelope J. Sinanoglou, Charles L. Wilkins, Mir Yarfitz, Qiong Zhang

**Assistant Professors** Guy Mount, J'Nese Williams

**Visiting Professor** Charles Thomas

**Visiting Assistant Professors** Nisrine Rahal, Daniel Burton-Rose, Joseph Ross

## History, B.A.

### Requirements

Consists of a minimum of 31 hours and must include:

Code	Title	Hours
HST 390 or HST 392	Research Seminar Individual Research	4
Select three hours in pre-modern history:		3
HST 206	The Early Middle Ages	
HST 207	The High Middle Ages Through the Renaissance	

HST 209	Europe: From Renaissance to Revolution	
HST 217	France to 1774	
HST 219	Germany to 1871	
HST 223	The British Isles to 1750	
HST 230	Russia: Origins to 1865	
HST 242	Middle East before 1500	
HST 244	Pre-Modern China to 1850	
HST 246	Japan before 1600	
HST 250	Premodern South Asia	
HST 254	American West to 1848	
HST 258	Colonial North America	
HST 268	African History to 1870	
HST 284	Latin America's Colonial Past	
HST 304	Travel, History and Landscape in the Mediterranean	
HST 305	Medieval & Early Modern Iberia	
HST 307	Italian Renaissance	
HST 308	World of Alexander the Great	
HST 312	Jews, Greeks and Romans	
HST 315	Greek History	
HST 316	Rome: Republic and Empire	
HST 323	Wives, Writers, and Witches: Women and Gender in Early Modern Europe, 1500-1800	
HST 324	Fashion in the Eighteenth Century	
HST 325	English Kings, Queens, and Spectacle	
HST 328	History of the English Common Law	
HST 341	Africans in the Atlantic World, 1750-1815	
HST 344	Early Modernity in China	
HST 345	Early Modern Global Encounters: China and the World, 1400-1800	
HST 353	War and Society in Early America	
HST 387	The Last Great Muslim Empires	
Select three hours in each of the following three fields:		9
U.S. History		
European History		
African, Asian, Latin American, or Middle Eastern History		

History courses HST 101, HST 102, HST 103, HST 104, HST 105, HST 106, HST 107, HST 108, HST 109, HST 110, HST 112, HST 113, HST 114, HST 120, as well as those numbered 390 and above count toward the major but cannot be used to meet the distributional or pre-modern requirements.

Majors may count only two courses numbered 100-150 toward the required 31 hours.

Majors may include within the required 31 hours up to six hours of advanced placement or comparable work and up to six hours of any combination of HST 395, HST 398, and HST 399, other than the hours earned in HST 397. The student must take at least 15 hours of class work in history at Wake Forest University and have a GPA of 2.0 in history to graduate with the major.

Courses taken pass/fail do not meet the requirements for the major or minor.



Students who are history majors or minors may elect to complete a thematic concentration as part of their program of study. Concentrations require 9 hours of coursework, but do not require any additional hours beyond those needed for the major or minor. Students declaring a concentration must do so prior to the beginning of their final semester. Concentrations are offered in the following specializations:

1. Cultural/Intellectual History
2. Economics, Trade, and Commerce
3. Gender/Sexuality/LGBTQ
4. Global/Transnational History
5. International Relations and Military
6. Jewish History
7. Politics, Governance, and Law
8. Religion and Society
9. Science, Medicine & Technology
10. Social History
11. Individualized Concentration

To complete a concentration, students must select courses in consultation with their major or minor adviser, submit an application to the department, and earn a 'C' in each course. Students who complete the requirements for a concentration will be awarded a certificate by the department and have the concentration included on their college transcript.

## Honors

Highly qualified majors should apply for admission to the honors program in history. To be graduated with the designation "Honors in History," the student must complete HST 391, present an honors-quality research paper, successfully defend the paper in an oral examination, and earn an overall grade point average of 3.3 with an average of 3.5 on work in history. For additional information, students should consult members of the department.

## History, Minor Requirements

Requires 18 hours. Minors may count only two courses numbered 100-150 toward the required 18 hours and must take at least 9 hours of course work in history at Wake Forest University.

Courses taken pass/fail do not meet the requirements for the major or minor.

Students who are history majors or minors may elect to complete a thematic concentration as part of their program of study. Concentrations require 9 hours of coursework, but do not require any additional hours beyond those needed for the major or minor. Students declaring a concentration must do so prior to the beginning of their final semester. Concentrations are offered in the following specializations:

1. Cultural/Intellectual History
2. Economics, Trade, and Commerce
3. Gender/Sexuality/LGBTQ
4. Global/Transnational History
5. International Relations and Military
6. Jewish History
7. Politics, Governance, and Law

8. Religion and Society
9. Science, Medicine & Technology
10. Social History
11. Individualized Concentration

To complete a concentration, students must select courses in consultation with their major or minor adviser, submit an application to the department, and earn a 'C' in each course. Students who complete the requirements for a concentration will be awarded a certificate by the department and have the concentration included on their college transcript.

## Interdisciplinary Honors (HON)

A series of seminar courses of an interdisciplinary nature is open to qualified undergraduates. Most of these seminars are team-taught by faculty representing diverse academic disciplines. Students interested in admission to any one of these seminars should consult the coordinator.

### Courses

#### Interdisciplinary Honors (HON)

##### HON 131. Approaches to Human Experience I. (3 h)

An inquiry into the nature and interrelationships of several approaches to man's experience, represented by the work of three such minds as Leonardo da Vinci, Dante, Klee, Lorenz, Confucius, Dostoevsky, Descartes, Goya, Mozart, Jefferson, and Bohr. Seminar discussion based on primary and secondary sources, including musical works and paintings. Written reports and a term paper required. Offered in alternate years.

##### HON 132. Approaches to Human Experience II. (3 h)

An inquiry into the nature and interrelationships of several approaches to man's experience, represented by the work of three such minds as Leonardo da Vinci, Dante, Klee, Lorenz, Confucius, Dostoevsky, Descartes, Goya, Mozart, Jefferson, and Bohr. Seminar discussion based on primary and secondary sources, including musical works and paintings. Written reports and a term paper required. Offered in alternate years.

##### HON 133. Approaches to Human Experience II. (3 h)

A parallel course to HON 131 and 132, concentrating on the work of a different set of figures such as Einstein, Galileo, Keynes, Pascal, Camus, Picasso, Ibsen, Stravinsky, Sophocles, and Bach. Offered in alternate years.

##### HON 134. Approaches to Human Experience II. (3 h)

A parallel course to HON 131 and 132, concentrating on the work of a different set of figures such as Einstein, Galileo, Keynes, Pascal, Camus, Picasso, Ibsen, Stravinsky, Sophocles, and Bach. Offered in alternate years.

##### HON 236. The Force of Impressionism. (3 h)

Impressionism and its impact on modern painting and literature, with attention to origins and theories of style. Painters to include Manet, Monet, Renoir, Degas, and Cezanne. Writers to include Baudelaire, Flaubert, Mallarme, James, Pound, Joyce, and Woolf.

##### HON 237. The Scientific Outlook. (3 h)

An exploration of the origins and development of the scientific method and some of its contemporary applications in the natural and social sciences and the humanities.



**HON 238. Romanticism. (3 h)**

Romanticism as a recurrent characteristic of mind and art and as a specific historical movement in Europe and America in the late eighteenth and nineteenth centuries. Emphasis on primary materials in philosophy, literature, music, and painting.

**HON 240. Adventures in Self-Understanding. (3 h)**

Examination and discussion of significant accounts of the quest for understanding of the self, in differing historical periods, cultural contexts, and genres. Among figures who may be discussed are Augustine, Dante, Gandhi, Montaigne, Descartes, Pascal, and selected modern writers.

**HON 241. The Tragic View. (3 h)**

The theory of tragedy in ancient and modern times; the expression of the tragic in literature, art, music, theatre, and film.

**HON 242. The Comic View. (3 h)**

The theory of comedy in ancient and modern times; the expression of the comic in literature, art, music, theatre, and film.

**HON 247. The Mythic View. (3 h)**

The nature of myth through creation and hero myths; the uses to which myths have been put in different historical periods; various modern explanations of myth (literary, religious, anthropological, psychoanalytic, social, and historical).

**HON 248. The Ironic View. (3 h)**

An investigation of the ironic view of life in literature, art, history, theater, and film.

**HON 257. Images of Aging in Humanities. (3 h)**

Multidisciplinary presentation and discussion of portrayals of aging in selected materials from several of the liberal arts: philosophical and religious perspectives; selections from literature and the visual arts; historical development of perceptions of aging; imaging of aging in contemporary culture.

**HON 258. Venice in Art and Literature. (3 h)**

An exploration of what Venice has meant to nonnative artists and writers, and what they have made of it. Artists and writers include Byron, Turner, Ruskin, Henry James, Sargent, Whistler, Proust, Mann, and others.

**HON 260. Rethinking Space, Place, and Gender in the City. (3 h)**

Explores the intersection of feminist theory, feminist geography, urban design, and anthropology, with the goal of developing strategies for activating spaces that serve all citizens.

**HON 265. Humanity and Nature. (3 h)**

A multidisciplinary exploration of relations of human beings to nature, and of scientific, economic, and political factors in current environmental concerns. Selected religious, classical, and philosophical texts; works of visual art; selected discussions of ecology and human responsibility. Also listed as HMN 365.

**HON 281. Directed Study. (3 h)**

Readings on an interdisciplinary topic approved by the Committee on Honors; presentation of a major research or interpretive paper based on these readings, under the direction of a faculty member; an oral examination on the topic, administered by the faculty supervisor and the Committee on Honors. Eligible students who wish to take this course must submit a written request to the Committee on Honors by the end of the junior year. Not open to candidates for departmental honors.

**HON 285. Performance Art and Theory. (3 h)**

Introduction to the theory of performance art and its practice, with attention to its interdisciplinary underpinnings in art, music, dance, and theatre. Student performances required.

**HON 310. The Medieval World: Special Topics. (3 h)**

A team-taught interdisciplinary course spanning the Middle Ages (500-1500) which considers artistic and/or literary representations and texts in the context of political, historical, or religious culture of the medieval period in Western and non-Western areas of the world. The specific content is determined by the individual instructors.

**HON 365. Literature, Song, and Folklore in Scotland, Ireland, and Appalachia. (3 h)**

A study of the diaspora of Scottish and Irish literature, song, and folklore to the Appalachian region of the United States from the 17th Century to the Present.

**HON 390. Postmodern Thought and Expression. (3 h)**

An exploration of postmodern philosophy, literature, and art, beginning with Nietzsche, Foucault, and Derrida, and extending into experiments in literature and art of the late twentieth and early twenty-first centuries.

**HON 393. American Foundations I. (3 h)**

Interdisciplinary study of American art, music, literature, and social history with particular reference to the art collection at Reynolda House Museum of American Art. Lecture and discussion. Also listed as ART 331, HST 349, and MUS 307. Offered at Reynolda House in summer only. English majors may receive credit for ENG 302. Major credit in any department dependent upon staffing by that department.

**HON 394. American Foundations II. (3 h)**

Interdisciplinary study of American art, music, literature, and social history with particular reference to the art collection and/or exhibitions at Reynolda House Museum of American Art. Lecture and discussion. Also listed as ART 331, HST 349, and MUS 307. English majors may receive credit for ENG 302. Major credit in any department dependent upon staffing by that department.

## Faculty

Coordinator, Professor of English Barry Maine

## Interdisciplinary Humanities (HMN)

Interdisciplinary Minor

The minor in Interdisciplinary Humanities explores the enduring centrality of humanity in artistic, literary, and intellectual manifestations from diverse geographical and historical contexts. Courses focus on the intellectual roots of both Western and non-Western civilizations, the emergence of philosophical concepts, and the development of social values and beliefs across time and space.

## Contact Information

Interdisciplinary Humanities (<http://college.wfu.edu/humanities/>)  
Reynolda Hall 102  
Phone 336-758-4497

## Programs

### Minor

- Interdisciplinary Humanities, Minor

## Courses

### Interdisciplinary Humanities (HMN)

#### HMN 160. Contemporary Venetian Experience. (1.5 h)

Social, artistic and environmental aspects of life in contemporary Venice. Includes site visits, guest lectures, and interviews with Venetians. Taught only in Venice. Pass/fail.

#### HMN 170. Contemporary Spanish Experience. (1.5 h)

Social, political, cultural, and environmental factors of life in Spain today. Taught in Salamanca only. Pass/fail only.

#### HMN 180. Contemporary London Experience. (1.5 h)

Social, political, cultural, and environmental factors of life in London today. Taught only in London. Pass/fail.

#### HMN 186. Contemporary Chilean Experience. (1.5 h)

Social, political, cultural, and environmental factors of life in Chile today. Pass/fail. Taught in Chile only.

#### HMN 190. Contemporary Viennese Experience. (1.5 h)

Social, cultural, and environmental factors of life in contemporary Vienna. Includes site visits, guest lectures and interviews with Viennese. Taught only in Vienna. Pass/Fail only.

#### HMN 200. Introduction to Humanities: Themes in Literature, Culture, and Film. (3 h)

An introduction through literature and film to the history, principles, and concepts of the Humanities, using as its framework an examination of such topics as dystopia and utopia, the influence of Classical principles on contemporary Western cultures, social justice and human rights in literature and film, and other topics central to the humanities. Literary and film analysis will explore how cultural values and beliefs are expressed in media and writing, as well as how these beliefs are manifested in popular culture. The course will include creative writing exercises that explore various literary tropes and humanistic themes. (D)

#### HMN 211. Dialogues with Antiquity. (3 h)

Introduction to key ideas and concepts from ancient cultures and their legacies in medieval, modern, and contemporary societies through an interdisciplinary lens. Topics vary with the instructor. (D)

#### HMN 212. Reading the Modern World. (3 h)

Analyzes pivotal moments in modern and contemporary world history through artistic, literary, and cultural manifestations. Course topics vary with the instructor and may include the rise of nationalism and western democracy, the development of European colonialism, and the social, political, and religious causes of international conflicts from world wars to terrorism. (D)

#### HMN 213. Studies in European Literature. (3 h)

Texts studied are by such authors as Dante, Montaigne, Cervantes, Goethe, Dostoevsky, and Camus. (D)

#### HMN 219. Introduction to Japanese Literature. (3 h)

Explores Japanese literature of the modern and contemporary periods. The course examines ways in which literature reveals underlying Japanese values and provides commentary on social, cultural, class, sexuality and gender-based tensions in Japanese society. Course topics include narratives of Japanese cultural and historical development and tropes of modernity in film, art, and culture. (CD, D)

#### HMN 220. Historical Perspectives on the Humanities. (3 h)

Introduction to the concepts and methodology of the curriculum inspiring the Pro Humanitate motto. Investigation of the historical development of the humanities as an academic field founded in the principles of the liberal arts and of its relationship to theology, natural science, and social science.

#### HMN 223. African and Caribbean Literature. (3 h)

Examines works by writers from Africa and the Caribbean to investigate the intersection of history and personal history, and the role of race, class, and gender in the construction of cultural identity in the colonial and the postcolonial context. (CD,D)

#### HMN 225. Literature, Travel, and Discovery. (3 h)

Explores various works, primarily in translation, from Homer to the present that focuses on the relationship between travel and discovery, especially as travel establishes the ongoing connection between the sacred and the profane for both guest and host.

#### HMN 226. Interdisciplinary Approaches to Contemporary Fiction. (3 h)

Examines the formal and thematic developments of the short story and the novel, focusing on fiction's engagement with history, culture, and society from a transnational and interdisciplinary perspective. (CD, D)

#### HMN 227. Engaging the Humanities: Social Justice and Equity in Communities. (3 h)

This course articulates and experiments with frameworks in the Humanities for critically and compassionately engaging pressing social concerns. Course activities include learning to ethically enter into communities, to remain accountable, and to imagine a more equitable society. Readings from contemporary social justice, ethics and literary scholars, in addition to case studies, will provide an introduction to approaches to navigating social contexts and collaborating with community partners. (CD)

#### HMN 228. Viennese Culture 1860-1914. (3 h)

A study of late nineteenth and early twentieth century Vienna as reflected in the matrix of the city's civic and artistic life. Offered in Vienna.

#### HMN 232. Italy in Literature. (3 h)

Readings and discussions in fictions, drama, and poetry that highlight trends and genres in Italian literature from the Middle Ages through contemporary times, and/or literature that features Italy as seen through the eyes of foreigners. Taught only in Venice.

#### HMN 262. Racism, Heterosexism, and Religious Intolerance. (3 h)

A comparative cultural examination through fiction and non-fiction sources of the initiation, maintenance, and treatment of prejudice, with emphasis on American society from the Jim Crow era to the present.

#### HMN 272. Literature and Ethics. (3 h)

Exploration of the possibility of applying ethical frameworks to literature and the challenges raised in fields including the health humanities and bioethics that can challenge literary analysis. The course will explore ethics through prose fiction and nonfiction, poetry, drama, and other writing. Representative authors may include Shakespeare, Hawthorne, Austen, Browning, Dostoevsky, Silone, Nabokov, Miller and Ishiguro. (CD, D)

#### HMN 275. Inclusive Public Spaces: Examining Role of Space, Place and Gender. (3 h)

Examines the design, accessibility, and use of public space, focusing on cultural values and intersections of class, gender, and ethnicity. (CD)

**HMN 290. The Humanities through Film, Literature and Media. (3 h)**

Using film, literature and media genres as tropes for analysis, an exploration of new and innovative approaches to the humanities in the late 20th and early 21st century including public humanities, digital humanities, and environmental humanities and examining cultural studies, interdisciplinary studies, and gender and sexuality studies as approaches for investigating social justice, environmental justice, and social action. (CD)

**HMN 291. The Humanities and History: Intersections of Public History and the Public Humanities. (3 h)**

Exploration of approaches to public engagement developed in humanities disciplines and an examination of contributions of disciplines in the humanities and the liberal arts to civic discourse and to public engagement. The course includes design and implementation of a local public humanities project.

**HMN 292. Environmentalism, the Humanities, and Gender. (3 h)**

Survey of the global spread of Environmentalism, with an emphasis on its evolution as a disciplinary field that includes eco-feminism and feminist perspectives on the environment. Topics include the investigation of women's roles in environmental history and the construction of global environmental narratives. Also listed as WGS 309.

**HMN 294. Digital Approaches in the Humanities. (1.5, 3 h)**

An introduction to the concepts and tools of the digital humanities. Projects in the digital humanities include exercises that employ the use of these tools to examine data and narratives of the humanities, including disciplinary approaches in literature, public history, women's, gender, and sexuality studies, and media studies.

**HMN 295. Social Entrepreneurship and the Humanities: Innovation, Public Engagement, and Social Change. (3 h)**

Introduction to the role played by the humanities in social entrepreneurship, exploring the premise that norms can be developed for the application of the humanities, and that the knowledge derived in this process can empower and be a tool in community-based engagement and social change. Course includes a social entrepreneurial project in the local community. Also listed as ENT 321.

**HMN 365. Humanity and Nature. (1.5, 3 h)**

Examines the relationships between different social groups and nature from a variety of perspectives: philosophical, scientific, religious, political, legal, and aesthetic with a focus on how various humanistic perspectives articulate a sustainable and viable relationship with nature. The class engages religious, classical, and philosophical texts; visual art; discussions of ecology and human responsibility.

**HMN 370. Medicine and the Humanities. (3 h)**

Explores ideas and questions at the intersection of medical science and the humanities. Topics include the expression of disease in literature and art; the ethics of genetics research; the interplay of religion and medicine; the economics of health care; and the interplay between medical research and care and issues of race, gender, sexuality, colonialism, and disability.

**HMN 374. Humanities and Law. (3 h)**

Examines the common roots of law, philosophy, literature, and politics. Focuses on the interpretative strategies and critical skills that legal professionals, humanists, and artists share.

**HMN 375. Urban Design and the Human Experience. (3 h)**

A study of the role that urban design and planning play in shaping the urban experience, and the impact of design choices on the evolution of the cities and their possible futures. The course will explore human potential and expression in the built environment, drawing from literary and non-fictional accounts of life in cities. Observations and design exercises in local neighborhood and community spaces will serve as a basis for understanding the role of place in urban culture and its ability to shape the human experience. (CD)

**HMN 385. Special Topics. (1-3 h)**

Selected themes and approaches to the study of human culture that bridge disciplinary and/or national boundaries. Can be repeated for credit.

**HMN 389. Directed Reading and Research. (1.5 h)**

A research project in the humanities that pursues a topic studied in one of the courses of the minor and a synthesis of views from a least two traditional disciplines.

**HMN 390. Directed Writing. (1.5 h)**

Capstone project in the minor. P - HMN 389.

## Faculty

**Director** José Luis Venegas

**Wake Forest Professor of the Humanities** Corey D.B. Walker

**Professor** José Luis Venegas

**Associate Professors** Eric Ashley Hairston, Michael K. Lamb, David P. Phillips

**Mellon Assistant Professor** William H. Mosley

**Mellon Teacher-Scholar Postdoctoral Fellow** Rebecca Croog

## Interdisciplinary Humanities, Minor Requirements

Candidates for the minor are required to take the following courses for a total of 15 hours.

Code	Title	Hours
HMN 200	Introduction to Humanities: Themes in Literature, Culture, and Film	3
HMN 211	Dialogues with Antiquity	3
HMN 212	Reading the Modern World	3
Select six hours of Approved Electives		6

HMN 389 and HMN 390, a year-long research project, can count as an elective towards the 15 hour requirement. When these courses are in progress, the student is assigned a minor adviser who assists in planning the purpose and detail of the student's project.

## Electives for Interdisciplinary Humanities

Code	Title	Hours
HMN 213	Studies in European Literature	3
HMN 219	Introduction to Japanese Literature	3
HMN 220	Historical Perspectives on the Humanities	3
HMN 223	African and Caribbean Literature	3
HMN 225	Literature, Travel, and Discovery	3
HMN 226	Interdisciplinary Approaches to Contemporary Fiction	3
HMN 227	Engaging the Humanities: Social Justice and Equity in Communities	3

HMN 228	Viennese Culture 1860-1914	3
HMN 232	Italy in Literature	3
HMN 262	Racism, Heterosexism, and Religious Intolerance	3
HMN 272	Literature and Ethics	3
HMN 290	The Humanities through Film, Literature and Media	3
HMN 291	The Humanities and History: Intersections of Public History and the Public Humanities	3
HMN 292	Environmentalism, the Humanities, and Gender	3
HMN 294	Digital Approaches in the Humanities	1.5,3
HMN 295	Social Entrepreneurship and the Humanities: Innovation, Public Engagement, and Social Change	3
HMN 365	Humanity and Nature	1.5,3
HMN 370	Medicine and the Humanities	3
HMN 374	Humanities and Law	3
HMN 375	Urban Design and the Human Experience	3
HMN 385	Special Topics	1-3
HMN 389	Directed Reading and Research	1.5
HMN 390	Directed Writing	1.5

## Interdisciplinary Major (IND)

Interdisciplinary Major

Highly qualified students may design an Interdisciplinary Major, with a unified focus, on a topic not available as a regular major.

## Contact Information

Interdisciplinary Major (<http://college.wfu.edu/academics/opportunities/design-your-own-major/>)

## Programs Majors

- Interdisciplinary Studies, B.A.
- Interdisciplinary Studies, B.S.

## Courses

### Interdisciplinary Major (IND)

IND 399. Senior Project. (3 h)

An independent project carried out under the supervision of a faculty member. (Required for all IND Majors) P - POI.

## Faculty

Coordinator: Eric Stottlemeyer, Associate Teaching Professor of English

## Interdisciplinary Studies, B.A.

### Requirements

The **Interdisciplinary Major** consists of courses offered by two or more departments, for a minimum of 42 hours, and must include IND 399. A second major may not be declared. A minor may be declared;

however, courses used in the interdisciplinary major may not also meet requirements in the minor.

Proposals should be submitted to the Coordinator only after students have completed 40 hours at Wake Forest, though planning can and should begin sooner. Guidelines for submitting proposals can be found on the Interdisciplinary Major website (<http://college.wfu.edu/academics/opportunities/design-your-own-major/>). Proposals are reviewed by the Open Curriculum Committee, which reserves the right to accept or reject them.

## Interdisciplinary Studies, B.S. Requirements

The **Interdisciplinary Major** consists of courses offered by two or more departments, for a minimum of 42 hours, and must include IND 399. A second major may not be declared. A minor may be declared; however, courses used in the interdisciplinary major may not also meet requirements in the minor.

Proposals should be submitted to the Coordinator only after students have completed 40 hours at Wake Forest, though planning can and should begin sooner. Guidelines for submitting proposals can be found on the Interdisciplinary Major website (<http://college.wfu.edu/academics/opportunities/design-your-own-major/>). Proposals are reviewed by the Open Curriculum Committee, which reserves the right to accept or reject them.

## Italian Studies (ITA)

The Program's mission is to guide students towards proficiency in Italian and toward the knowledge necessary to communicate effectively in a variety of cultural contexts. Foreign language literacy and intercultural competence are central components of a liberal arts education and open up diverse and unique career opportunities.

## Programs

Italian Studies offers a minor in Italian Language and Culture and a foreign area study in Italian Studies. The requirements for completion are those in effect in the bulletin year when the declaration of the minor or foreign area study occurs.

## Study Abroad

The Department strongly encourages students of Italian to spend a year, a semester, or a summer studying abroad. Overseas study in concert with on-campus coursework helps students develop greater fluency, deeper knowledge of other cultures, and increased awareness of their own language, attitudes, and beliefs.

## Special Notes

**Pass/Fail Policy for 100-Level Language Courses:**

Sophomores, juniors, and seniors may choose to take 100-level language courses pass/fail, subject to instructor approval and the following requirements:

1. Pass/fail students must achieve an overall course grade of C or better to pass.
2. Pass/fail students are subject to the same attendance policy as all students.



3. Pass/fail students must complete each component of the course included in the syllabus grade breakdown. That is, students will not be able to skip any one part of the course, such as homework or the final exam, and still earn a passing grade.

## Contact Information

Italian Studies (<https://italian.wfu.edu/>)  
Greene Hall 324, Box 7566  
Phone 336-758-5487

## Programs Minor

- Italian Language and Culture, Minor

## Foreign Area Studies

- Italian Studies

## Study Abroad Study Abroad Programs in Italian

- Casa Artom Program (<https://bulletin.wfu.edu/undergraduate/departments-programs/italian-studies/study-abroad/casa-artom/>)
- Sorrento Program (<https://bulletin.wfu.edu/undergraduate/departments-programs/italian-studies/study-abroad/sorrento/>)

## Courses Italian (ITA)

### ITA 111. Elementary Italian I. (3 h)

Beginners course covering grammar essentials and emphasizing speaking, writing, and the reading of elementary texts. Lab required. ITA 111 and 112 count for students in the Venice program.

### ITA 112. Elementary Italian II. (3 h)

Beginners course covering grammar essentials and emphasizing speaking, writing, and the reading of elementary texts. Lab required. ITA 111 and 112 count for students in the Venice program.

### ITA 113. Intensive Elementary Italian. (4 h)

Intensive course for beginners, emphasizing the structure of the language and oral practice. Recommended for students in the Venice program and for language minors. Credit not given for both ITA 113 and ITA 111 or 112. Lab required. Lecture. By placement or faculty recommendation.

### ITA 153. Intermediate Italian. (4 h)

Continuation of ITA 113, with emphasis on speaking, developing students' reading, writing skills and preparing them for oral and written discussion of literary texts in ITA 212 or 213. Lab required. P-ITA 112 or 113.

### ITA 154. Intermediate Italian. (3 h)

An intermediate-level course intended for students who have taken the 111-112 sequence. It offers the opportunity to develop further their reading, writing and conversation skills and prepare for oral and written discussion of literary texts in ITA 212 or 213. Lab required. P-ITA 111-112.

### ITA 196. Italian Across the Curriculum. (1.5 h)

Coursework in Italian done as an adjunct to specially-designated courses throughout the College curriculum. May be taken for grade of Pass/Fail. P-POI.

### ITA 197. Italian for Reading Knowledge. (1.5 h)

Review of essential Italian grammar, usage, vocabulary, and processing strategies for reading various types of literary, social science, and technical publications for content. Designed for students interested mainly in strengthening reading proficiency in the language and aimed at preparing students to take the graduate reading exam administered at the end of the course. Undergraduate credit given. Offered in the first half of the semester. P-Intermediate Italian or equivalent and placement exam.

### ITA 212. Exploring the Italian World. (3 h)

Continued language study through exploration of significant cultural expression from the multifaceted Italian world. Credit not given for both ITA 212 and 213. P - ITA 153 or equivalent.

### ITA 213. Introduction to Italian Literature. (3 h)

Reading of selected texts in Italian. Satisfies basic requirement in foreign language. Students cannot receive credit for both ITA 212 and 213. P-ITA 153 or equivalent.

### ITA 217. Studies of Italy. (3 h)

Survey course on Italian literature from authors from the various regions of Italy and on special cultural themes such as Italian immigration and new immigrations in Italy to give to students in Venice a deeper and broader understanding of Italian cultural complexity. Only taught in Venice. P - ITA 212 or 213 or POI.

### ITA 260. Contemporary Italy. (3 h)

Study of society and culture in contemporary Italy. Offers elements of civilization, arts, gender, politics, literature and cinema and includes Italian-American studies. Intended for students interested in continuing Italian beyond the language requirement. P-ITA 212, 213 or POI.

### ITA 280. Business Italian. (3 h)

Development of vocabulary and communication skills necessary to operate in Italian business settings. Emphasis on cross-cultural competency in the context of Italian business practices. P-ITA 212 or 213.

### ITA 319. Grammar and Composition. (3 h)

Review of the basics of structure and vocabulary; detailed examination of syntax and idiomatic expressions; practice in translation of texts of diverse styles and from varied sources; and free composition. P-ITA 212, 213 or 216 or equivalent.

### ITA 324. Italian Regional Cultures. (3 h)

Focuses on different aspects of regional cultures in Italy. Emphasizes local lifestyles, literatures, and cinematography. Regional cultures and historic background are analyzed and compared through class demonstrations and cultural artifacts. P - ITA 319 or POI.

### ITA 326. Comedy in Italian Cinema. (3 h)

Study of modern Italian society through the analysis of films from the 1950s to the present. Taught in Italian. P - ITA 319 or POI.

### ITA 327. Modern Italian Cinema. (3 h)

Study of the major developments of modern Italian cinema. Full-length feature films by Federico Fellini, Ettore Scola, Pier Paolo Pasolini, Bernardo Bertolucci, Marco Bellocchio, Gianni Amelio, Nanni Moretti, Gabriele Moretti Salvatores, Giuseppe Tornatore, Massimo Troisi, Roberto Benigni, and other Italian filmmakers will be studied and discussed from different perspectives. P - ITA 319 or POI.

### ITA 328. Dante's Divine Comedy. (3 h)

Introduces Italian medieval literature and culture through a selected, critical reading of Dante's masterpiece and other medieval texts. Introduces students to the intellectual and social context of the Italian Middle Ages by relating the texts to the cultural, political, social, and philosophical concerns of the period. P - ITA 319 or POI.



**ITA 329. Love, Gender, and Diversity in Italian Epic. (3 h)**

The course focuses on spaces and modalities of representation of love, gender, and diversity in Italian epic through text and images, including films. P - ITA 319 or POI.

**ITA 333. Italian Theatre. (3 h)**

Study of representative Italian drama such as commedia dell'arte and works from Machiavelli, Goldoni, and Dario Fo. P - ITA 319 or POI.

**ITA 335. Italian Women Writers. (3 h)**

Study of representative novels by women writers from Italy and the Italian world, with emphasis on the historical novel within its cultural context. P - ITA 319 or POI.

**ITA 336. Italian Women and the City. (3 h)**

This course proposes, through Italian readings and films, the interpenetration of women's lives with the urban environment, both physical and imagined. It proposes to be a guide to mapping not only how city spaces shape or limit women's lives, but also how women participate in the construction or reconstruction of these spaces. P-ITA 319 or POI.

**ITA 338. South in Contemporary Italy. (3 h)**

Throughout centuries of struggles for nationhood, southern Italy as a society dealt with many obstacles: hastened modernization, regionalism and organized crime. This course examines southern Italy as a society through history, short novels, films, newspapers and academic articles within a national perspective. P-any 200-level course.

**ITA 340. Traveling with Muhammad and Dante. (3 h)**

Examines, in literary and visual forms, the Book of the Ladder of Muhammad and Dante's Inferno where the journeys of the two travelers into the afterlife are narrated. P-ITA 319 or POI.

**ITA 342. Boccaccio's Decameron or "Sex in the City": Rethinking Community in Medieval Florence. (3 h)**

Studies the impact of the plague that hit Europe in 1348 and the power of storytelling to rebuild the community. P - ITA 319 or POI.

**ITA 346. Narrating and Visualizing the Mediterranean in the Italian Trecento. (3 h)**

This course examines the representation of the Mediterranean through texts and images. P - ITA 319 or POI.

**ITA 375. Special Topics. (3 h)**

Selected special topics in Italian literature. P - ITA 319 or POI.

**ITA 381. Italian Independent Study. (1.5-3 h)**

May be repeated once for credit. P - POI.

## Italian Literature and Culture in English (IAS)

**IAS 210. Introduction to Italian Literature. (3 h)**

Italian literature through the centuries focusing on Italy's most significant contributions to Western literature and culture. Includes major works in poetry, theater, and novels that explore Italian historical, social, and cultural experiences and reflect on the process of literary creation. (D)

**IAS 212. Contemporary Italian Fiction. (3 h)**

Introduction to works of fiction in post-World War II Italy. Themes vary and may include historical trauma, the changing faces of Italy, and the role and forms of fiction in the contemporary world. (D)

**IAS 214. Italian Drama. (3 h)**

Survey of Italy's most influential contributions to the history of theater, ranging from Commedia dell'arte, Renaissance spectacle, and the bourgeois theater of Carlo Goldoni to the Nobel prize-winning 20th century playwrights Luigi Pirandello and Dario Fo. (D)

**IAS 220. Italian Women Writers. (3 h)**

Through readings, films, and documentaries, explores the foremost issues concerning contemporary women's writing in the Italian context —women's fight against marginalization and struggle for freedom, both economic and social, and the right to assert themselves. (D)

**IAS 310. Italian Historical Fiction. (3 h)**

Inquiry into Italian novels and stories blending fictional and historical elements. (D)

**IAS 325. Italian Neorealism in Films and Novels. (3 h)**

Study of important films, novels, and short stories of Italian Neorealism, including considerations of the history, philosophy, politics, artistic movements and civic renaissance of postwar Italian life that led to its development. (D)

**IAS 360. Dante. (3 h)**

Study of the Divina Commedia as epic, prophecy, autobiography, and poetry, relating it to antiquity, Christianity, Dante's European present, the birth new intellectual and poetic forms, and Dante's own afterlife in the West. (D)

**IAS 375. Special Topics. (3 h)**

Selected special topics in Italian literature, cinema, society and/or culture.

**IAS 380. History of Italian Cinema. (3 h)**

Examines the cultural history and aesthetics of motion pictures through the works of significant Italian filmmakers and genres from silent era to the 21st century.

## Faculty

**Program Director** Rémi Lanzoni

**Professor** Rémi Lanzoni

**Associate Teaching Professor** Silvia Tiboni-Craft

**Assistant Teaching Professor** John Welsh

**Visiting Assistant Professor** Toni Veneri

## Italian Language and Culture, Minor Requirements

Requires 15 hours in Italian courses to include:

Code	Title	Hours
ITA 212 or ITA 213	Exploring the Italian World Introduction to Italian Literature	3
ITA 319	Grammar and Composition	3
Two additional 300-level ITA courses		
One elective above ITA 213		

\*

*Students must achieve at least a C grade in ITA 319.*

Students must achieve a GPA of 2.0 in the minor.

## Italian Studies Requirements

Foreign Area Study

**Coordinator, Professor and Director of Italian Studies** Rémi Lanzoni

A semester in Venice or another approved course of study in Italy (or summer program at Middlebury, Vermont) is required.

Code	Title	Hours
ITA 212	Exploring the Italian World	3
or ITA 213	Introduction to Italian Literature	
ITA 319	Grammar and Composition	3
Select three courses from the following groups: *		9
I. Literature		
II. Fine Arts		
III. History and the Social Sciences		

\*

At least one each from Groups II and III.

Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this publication.

## I. Literature

Code	Title	Hours
COM 370	Special Topics (when topic is Tree Italian Masters)	3
HMN 213	Studies in European Literature (appropriate topics and approval)	3
IAS 325	Italian Neorealism in Films and Novels	3
ITA 326	Comedy in Italian Cinema	3
ITA 327	Modern Italian Cinema	3

## II. Fine Arts

Code	Title	Hours
ART 245	Art and Architecture of the Roman World	3
ART 268	16th Century Art in Italy: Magnificence and Reform	3
ART 269	Venetian Renaissance Art (offered in Venice)	3
ART 396	Art History Seminar (when topic is Three Italian Masters)	4
MSC 121	Music History and Culture I	3
MSC 122	Music History and Culture II	3
MSC 123	Special Topics in Music History & Culture	3

## III. History and the Social Sciences

Code	Title	Hours
HST 225	History of Venice (offered in Venice)	3
HST 229	Venetian Society & Culture (offered in Venice)	3
HST 398	Individual Study (if directed toward Italy)	1-3

Students may also take appropriate courses in other disciplines in the Venice program and appropriate individual study topics. To graduate with a Foreign Area Study in Italian Studies, students must contact the Registrar's Office during the spring semester of the senior year to request that a transcript copy be sent to the Italian Studies Director for approval.

## Jewish Studies

Interdisciplinary Minor

**The Jewish Studies minor** emphasizes Jewish history, religion, thought, texts, literature, the arts, traditions, and the ways that they have formed in the context of various civilizations from antiquity to the present.

Judaism and Jewish civilization developed - and continue to do so - as a result of interaction with other religions and cultures. The minor, therefore, is trans-regional/national and thereby links disparate fields of study that are usually examined separately. Jews and Judaism are studied within the broader context of world civilizations and the spectrum of the arts, humanities, and social sciences. In this regard, the minor complements already existing areas of interest in a number of majors and disciplines, (such as American Ethnic Studies, History, International Studies, Medieval Studies, Politics and International Affairs, and Religious Studies).

The interdisciplinary approach of the minor exposes students to a wide range of disciplines and, like other established interdisciplinary minors, gives students the opportunity for synthesizing and critically reflecting on their course of study. The Jewish Studies minor provides interested students a grounding for graduate study in the humanities, religion, and social sciences.

Additional elective courses may have been approved since publication of this bulletin. The program director maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listing in this bulletin.

## Contact Information

Jewish Studies (<https://jewishlife.wfu.edu/resources/academics-jewish-studies-program/>)

## Programs

- Jewish Studies, Minor

## Faculty

**Director and Associate Professor** Mir Yarfitz

**The Michael H. and Deborah Rubin Presidential Chair of Jewish History and Associate Professor** Barry Trachtenberg

## Jewish Studies, Minor

A minimum of fifteen credit hours is required to graduate with a minor in Jewish Studies. Courses for the minor are approved by the Advisory Committee of the Jewish Studies Program. The courses must be from at least two departments, at least three must be upper level courses (200 level or above). No more than six credit hours of Hebrew or another Jewish language can be counted toward the minimum number of courses required.

Code	Title	Hours
COM 339	Practices of Citizenship *	3
ENG 364	Advanced Studies in Literary Criticism *	3
ENG 371	American Ethnic Literature *	3
ENG 377	American Jewish Literature *	3
GER 212	Introduction to German Short Fiction	3

GES 337	Myth and National Identity Formation	3
GER 350	German-Jewish Literature and Culture	3
GES 351	German-Jewish Literature and Culture	3
HST 235	The History of European Jewry from the Middle Ages to the Present	3
HST 236	The Nazi Holocaust to 1941 (Rise of Nazism, Jewish Responses, Global Reaction)	3
HST 237	The Nazi Holocaust from 1941 (War, Genocide, and Aftermath)	3
HST 239	Jewish History in the Americas	3
HST 305	Medieval & Early Modern Iberia	3
HST 310	20th Century Eastern Europe *	3
HST 312	Jews, Greeks and Romans	3
HST 320	Write and Record! Diaries and Memoirs of the Nazi Holocaust	3
HST 321	Zionism, Palestine, and Israel in Historical Perspective	3
NLL 111 & NLL 112	Elementary Hebrew and Elementary Hebrew	6
NLL 153	Intermediate Hebrew	3
NLL 211 & NLL 212	Hebrew Literature and Hebrew Literature II	6
NLL 311	Aramaic	3
NLL 314	Readings from the Rabbis	3
POL 242	Topics in Comparative Politics (The Politics of Exile or The Politics of Exile and Diaspora) *	3
POL 259	Palestine and the Arab-Israeli Conflict	3
REL 113	Introduction to Jewish Traditions	3
REL 308	Sacred Scripture in the Traditions of Abraham	3
REL 310	The Prophetic Literature	3
REL 312	The Critical Study of the Pentateuch	3
REL 315 & REL 316	Field Research in Biblical Archeology and Field Research in Biblical Archeology	6
REL 317	Wisdom Literature *	3
REL 328	Jewish-Christian Relations and the New Testament	3
REL 355	Jewish Identities: Religion, Race, and Rights	3
REL 356	Faces of Modern Judaism	3
REL 357	Jews in the United States	3
SPA 331	Medieval Spain: A Cultural and Literary Perspective *	3

\*

*Indicates the course must be approved by the instructor and the Jewish Studies director.*

## Journalism (JOU)

The Journalism Program is dedicated to educating students in the discipline and values of an independent press and its role in a free and democratic society. Students will learn and practice truthful, verified, and comprehensive reporting to tell stories in a range of media for the public interest. We value journalism that gives voice to a full range of voices,

a practice that requires cultural competence of its practitioners. In the spirit of Pro Humanitate, we also support independent journalism locally and beyond through the work of our faculty and students.

## Contact Information

Journalism Program

## Programs

### Minor

- Journalism, Minor

## Courses

### Journalism (JOU)

#### JOU 270. Introduction to Journalism. (3 h)

Fundamentals of news reporting, news writing, and news judgment. Digital skills introduced and practiced. Intensive in-class writing.

#### JOU 278. News Literacy. (3 h)

Exploring the difference between news and propaganda, news and opinion, bias and fairness, citizen reporting and professional journalism with a goal of training more discriminating and thoughtful producers and consumers of news. Included: historical context of the news industry.

#### JOU 310. Editing. (3 h)

Fundamentals in copy editing and headline writing as it applies to print and online journalism. Applying grammar, adherence to Associated Press style, and use of photos, lay-out and news judgment to improve news and feature stories. Intensive in-class editing. P - JOU 270 or POI.

#### JOU 315. Beat Reporting. (3 h)

Fundamentals in identifying and developing news and feature beats. Emphasis on interviewing skills, source development, story identification and writing for print and online. Digital skills such as blogging, photography, video production, and social media practiced. Highly interactive. P - JOU 270.

#### JOU 320. Community Journalism. (3 h)

Students leave campus to report on a Winston-Salem neighborhood, producing stories for public audiences in a range of media focused on the people and places that create community. P - JOU 270 or POI.

#### JOU 321. Environmental Journalism. (3 h)

Learn to report on issues related to the environment, from climate change to science to local land-use policy, and produce stories in a range of media. Explore questions at the intersection of climate change, geopolitics, science writing, news coverage, community activism, racial justice, and multimedia journalism, with specific topics and projects determined by the instructor in any given semester. May be repeated once with permission of the instructor.

#### JOU 322. Investigating Innocence, at the Intersection of Journalism, Narrative and the Law. (3 h)

Learn to write like a journalist and think like a lawyer by investigating and writing about an ongoing case of a wrongful conviction under review by the law school's Innocence & Justice Clinic. Law students and undergraduates work together with instruction by professors in law and journalism. Also listed as WRI 322. P-POI.

**JOU 330. Podcasting. (3 h)**

Introduction to audio storytelling. As the world of podcasting and nonfiction audio grows rapidly, students will learn the building blocks and best practices of audio journalism, including sound editing, and interviewing, and story, and will discuss what journalism means in these changing times.

**JOU 331. On the Air with WFDD. (3 h)**

Learn the fundamentals of audio reporting including interviewing techniques, writing for radio, beat coverage, audio recording and editing, and social media to produce stories for broadcast on the local NPR affiliate WFDD. P-JOU 270 or POI.

**JOU 335. Multimedia Storytelling. (3 h)**

Provides concepts and applied skills related to digital news production, digital research, use of search engine optimization and analytics, social media as a reporting and branding tool, navigating content management systems, visual storytelling and web publishing.

**JOU 340. Magazine Writing. (3 h)**

Learn and practice the skills needed to produce magazine stories for publication. Focusing on a single topic of their own choosing, students learn advanced principles of interviewing, document research, story structure, character development, and explanatory journalism as they read and analyze some of the best magazine stories written over the past thirty years. Also listed as WRI 344. P-JOU 270.

**JOU 345. Sports Journalism. (3 h)**

Introduction to the world of sports, the lives of athletes and the influence both have on American culture and college campuses. Students will keep a blog, conduct regular interviews, cover on- and off-campus sporting events, write opinion columns, produce multimedia stories and profile Wake Forest athletes. P - JOU 270 or POI.

**JOU 350. Writing for Public Relations and Advertising. (3 h)**

Principles and techniques of public relations and applied advertising and marketing. Students use case studies to develop public relations and advertising strategies. Also listed as COM 117.

**JOU 355. Broadcast Journalism. (3 h)**

An introduction to the theory and practice of broadcast journalism. Topics will include ethics, technology, and the media as industry. Projects will address writing, producing, and performing for radio and television. Also listed as COM 215.

**JOU 370. International Reporting. (3 h)**

Students explore a part of the world as journalists do, interviewing, observing, and exploring to produce stories that shed light on the people, culture, and issues that define that place. P - JOU 270 or POI.

**JOU 375. Special Topics in Journalism. (1-3 h)**

Study and practice of new trends, innovations and subject matters in journalism. May be repeated once for credit, provided the topic has changed. P - JOU 270 or POI.

**JOU 380. Deep Dive. (1.5 h)**

Provides an intensive exploration of a specific topic in journalism in such areas as photojournalism, investigative reporting, and race and the media. Varies by semester and instructor. 1.5 h, may be repeated once with permission of the instructor.

**JOU 390. Internship. (1-3 h)**

Practical experience in journalism. Students work with a faculty adviser. Cannot be repeated except with approval of the director.

**JOU 395. Individual Study. (1-3 h)**

Independent study with faculty guidance. By prearrangement.

## Faculty

**Director, Professor of the Practice** Phoebe Zerwick

**Professor of the Practice** Justin Catanoso

**Assistant Professor of the Practice** Ivan Weiss

**Adjunct Lecturer** Paul Garber, Mandy Locke, Jeremy Markovich, Melba Newsome, Robert Samuels, Barry Yeoman

**Part-time Lecturer** Maria Henson

## Journalism, Minor Requirements

The Journalism Program offers an interdisciplinary minor in the practice of journalism and its role in a free society. Students learn to report and tell stories in a range of media, with attention to verified facts, independence, and cultural competence. A minor in journalism pairs well with any major in the College or School of Business. It consists of 18 credits, beginning with the gateway course JOU 270, Introduction to Journalism. JOU 278, News Literacy, is a second required course and can be taken at any time. Students take 12 hours of elective credit, which can be drawn from upper-level JOU courses or a list of courses in other departments across the College. Students may only count one elective toward another major or minor. Students may also take Journalism courses for general elective credit and, with permission, for credit in such departments as Communication, Biology, Writing, Philosophy, Politics and International Affairs, and African American Studies.

Code	Title	Hours
<b>Required Minor Courses</b>		
JOU 270	Introduction to Journalism *	3
JOU 278	News Literacy **	3
Select four additional Journalism Course Electives ( <a href="https://bulletin.wfu.edu/courses-az/jou/">https://bulletin.wfu.edu/courses-az/jou/</a> )		12

(Students may pick one course from the following list to fulfill an elective in the minor.)

\*

JOU 270 is a pre-requisite for advanced writing courses.

\*\*

JOU 278 can be taken at any time.

## Interdisciplinary Electives

The practice of journalism, with its central role in American democracy and culture, requires students to tell compelling stories in a range of media. Increasingly, journalism is also a data-driven field, with some of the most important stories of our time based on the analysis of data. Students may pick one course from the following list to fulfill elective credit in Journalism. With approval of the director, students interested in tailoring the minor to a particular interest have the option of selecting a second interdisciplinary elective from the list below or choosing one upper-level course not listed below.

Please refer to departmental listings for more detail on each course.

Code	Title	Hours
<b>Storytelling Courses</b>		
ART 114	Introduction to Film and Video Art	3
ART 119	Introduction to Darkroom Photography	3
ART 120	Introduction to Digital Photography	3

ART 122	Design Studio: Visualization of Ideas	3
ART 214	Film and Video Art: Site Specific	4
ART 224	Film and Video Art: Cyberspace	4
ART 229	Digital Photography	4
COM 247	Media Production I	3
COM 262	Writing for Public Relations and Advertising	3
COM 309	Visual Storytelling	3
COM 310	Media Production II	3
COM 316	Screenwriting	3
COM 325	On Camera Performance	3
COM 365	Imagination Project	3
CRW 287	Literary Nonfiction Workshop	3
CRW 387	Advanced Literary Nonfiction Workshop	3
ENV 306	Topics in Environmental Studies	1-4
HST 367	Public History	3
WGS/ENT 326	Telling Women's Lives: Writing about Entrepreneurs, Activists, and Thought Leaders	3
WRI 210	Advanced Academic Writing	3
WRI 212	Literary Nonfiction: Art of the Essay	3
WRI 320	Writing in and about Science: Scientists as Writers and Writers as Scientists	3
<b>Computer, Technology and Information Literacy Courses</b>		
CSC 321	Database Management Systems	3
CSC 322	Data Management and Analytics	3
CSC 361	Digital Media	3
CSC 363	Computer Graphics	3
CSC 373	Data Mining	3
<b>Media, Democracy and Culture Courses</b>		
COM 245	Introduction to Mass Communication	3
COM 319	Media Ethics	3
HST 362	American Constitutional History	3
LIB 130	Topics in Mis- and Disinformation	1.5
POL 217	Politics and the Mass Media	3
WGS 271	Making Sense of the News Through a Feminist Lens	1-3

## Latin-American and Latino Studies (LAS)

Interdisciplinary Minor

The Latin American and Latino Studies Program was established to encourage the study of Latin American and Latino history, culture, geography, economics and politics. Working with students and a distinguished interdisciplinary faculty, the Program is committed to enhancing and advancing the understanding of and appreciation for Latin America and its people.

## Five-Year BA/MA Degree Program Option

Students who choose to minor in Latin-American and Latino Studies have the opportunity to pursue a joint BA/MA program in conjunction with the Center for Latin-American Studies at Georgetown University in Washington, D.C. This program allows outstanding students interested in Latin America to begin work toward an interdisciplinary master's degree

in Latin-American studies while still undergraduates at Wake Forest, and to complete both degrees within a five-year period. The Bachelor of Arts degree is awarded by Wake Forest, while the master's degree is awarded by Georgetown. Interested students should contact the director of Latin-American studies or the five-year degree program coordinator.

## Semester in Argentina/Chile

The Latin-American and Latino Studies minor offers a spring semester program based in Santiago, Chile with a three week study component in Buenos Aires, Argentina. Students go as a group, accompanied by a professor from the College. No particular major or minor is required for eligibility. Interested students should contact Peter Siavelis in the Politics and International Affairs Department, or visit the Center for Global Programs and Studies website (<http://global.wfu.edu>).

## Latina/o Mentoring Initiative

WFU's Latin American and Latino Studies (LALS), in partnership with El Buen Pastor Latino Community Services (EBPLCS), offers a mentoring program for Latino middle school and high school youth of Winston-Salem, North Carolina. The program consists of pairing WFU students with Latino students affiliated with EBPLCS for a mentoring relationship that lasts at least two years. WFU mentors who are LALS minors have the opportunity to earn three LALS credit hours for partaking in an independent study course. This course entails working on a research project assessing the mentoring program under the guidance of an LALS faculty member. Some of the benefits for LALS minors partaking in this initiative include: developing a more comprehensive understanding of the strength and struggles of Latino students in the U.S., developing critical thinking, analytical, quantitative literacy and writing skills, developing strong leadership and interpersonal communication skills, receiving LALS course credit for partaking in an independent study, and developing a rewarding relationship with a local Latino student that can last a lifetime. For more information, contact the co-directors of the mentoring program, Betina Wilkinson or Peter Siavelis.

## Contact Information

Latin American and Latino Studies (<http://college.wfu.edu/lals/>)

## Programs Minor

- Latin-American and Latino Studies, Minor

## Courses

### Latin-American and Latino Studies (LAS)

#### LAS 210. Introduction to Latin-American and Latino Studies. (3 h)

Introduces the historical, economic, cultural, and social issues which shape Latin America. (CD)

#### LAS 220C. Afro-Cuban Cultural Expression. (3 h)

A comprehensive study of Cuban culture with a concentration on the artistic manifestations of Afro-Cuban religions. Students study literature, art, film, music, and popular culture to analyze how Afro-Cuban culture constitutes national culture. Also listed as SPA 368. Offered in Havana. (CD)



**LAS 281. Contemporary Chile in Latin American Perspective. (3 h)**

Introduces the nature and content of contemporary Chilean politics by placing them in a wider analysis of Latin American politics, history, and society, and international relations. Normally offered in Chile unless otherwise noted.

**LAS 310. Special Topics in Latin American and Latino Studies. (3 h)**

Selected topics in Latin American and Latino studies; topics vary from year to year. (CD)

**LAS 380. Latin American and Latino Studies Honors Colloquium. (4 h)**

Honors capstone colloquium consisting of varied readings and an individual research project. Normally offered in Chile unless otherwise noted.

**LAS 388. Internship in Latin American and Latino Studies. (1-3 h)**

Internship course designed to meet the needs and interests of selected students, to be carried out under the supervision of a faculty member in the Latin American and Latino Studies minor. P - POL.

**LAS 398. Individual Study. (1-3 h)**

A reading or research course designed to meet the needs and interests of selected students, to be carried out under the supervision of a faculty member in the Latin American Studies minor. P-POI.

## Faculty

**Director** Ana-María González Wahl

## Latin-American and Latino Studies, Minor

### Requirements

Provides an opportunity for students to undertake a multidisciplinary study of the history, culture, economics, and politics of Latin America, the Caribbean, and of the Latino population in the U.S. It consists of a total of 15 hours; three of these (but no more) may also count toward the student's major. Courses applied toward other minors may also be applied toward the Latin-American and Latino Studies minor. Candidates for the minor are required to take:

Code	Title	Hours
<b>Required Minor Courses</b>		
LAS 210	Introduction to Latin-American and Latino Studies	3
Select 12 hours of coursework related to Latin America or to Latinos in the U.S **		12

\*

*LAS 310 if taken in Chile as part of the honors in Latin-American and Latino Studies program can also fulfill the LAS 210 requirement.*

\*\*

*No more than six of these 12 hours may be in a single discipline.*

Candidates should demonstrate proficiency in Spanish or Portuguese either by completing at least one Spanish or Portuguese course at the 200 level or by undergoing an oral proficiency interview with a member of the faculty of the Department of Romance Languages.

Students may choose from the following list of electives when designing their minor. See the relevant department listings for course descriptions. Additional elective courses may have been approved since publication

of this bulletin. The program director maintains a complete list of all approved elective courses (<http://college.wfu.edu/lals/>).

## Electives for Latin-American and Latino Studies

Code	Title	Hours
ANT 327	Global Justice and Human Rights in Latin America	3
ANT 342	Applied Anthropology	3
ANT 360	Anthropology of Global Health	3
ANT 383 & ANT 384	Field program in Cultural Anthropology and Field Program in Cultural Anthropology	6
ANT 385 & ANT 386	Special Problems Seminar and Special Problems Seminar (if related to Latin America)	6
BIO 349	Tropical Biodiversity of the Amazon and Andes	4
ECN 351	International Trade	3
ECN 352	International Finance	3
ECN 358	Economic Growth and Development	3
ENG 357	Studies in Chicano/a Literature	3
HST 104	World Civilizations since 1500 (if related to Latin America)	3
HST 108	Americas and the World	3
HST 275	Modern Latin America	3
HST 284	Latin America's Colonial Past	3
HST 311	Special Topics in History (if related to Latin America)	3
HST 359	Prostitutes, Machos, and Travestis: Sex and Gender in Latin American History	3
HST 374	Protest and Rebellion in Latin America	3
HST 390	Research Seminar (if related to Latin America)	4
HMN 186	Contemporary Chilean Experience	1.5
HMN 223	African and Caribbean Literature	3
MSC 104	Music of Latin America	3
PHI 239	Latin American & Latinx Philosophy	3
POL 210	Topics In United States Politics and Policy	3
POL 214	Latina/o/x Politics	3
POL 236	Government and Politics in Latin America	3
POL 240	Politics of Human Rights	3
POL 242	Topics in Comparative Politics (if related to Latin America)	3
POL 257	Politics of International Development	3
POL 300	Senior Seminar in Political Science (if related to Latin America) *	4
PTG 111 & PTG 112	Elementary Portuguese and Elementary Portuguese **	6
PTG 113	Intensive Elementary Portuguese	4
PTG 154	Accelerated Intermediate Portuguese	3
PTG 212	Exploring the Lusophone World	3
REL 103B	Introduction to Latin American Christian Traditions	3

REL 390	Special Topics in Religion (if related to Latin America)	1.5-3	SPA 355	Romantic Nationalism, Avant-garde Nihilism, and the Deconstruction of Utopia	3
SOC 356	Sociology of Immigration	3	SPA 356	Transgressing Borders: Identity in Latin-American and U.S. Latino Cultures	3
SOC 359	Race and Racism	3	SPA 357	Spanish American Short Story	3
SOC 386	Special Topics Seminar in Culture and Social Movements (if related to Latin America or Latino Studies)	3	SPA 358	Spanish-American Novel	3
SPA 309	Grammar and Composition	4	SPA 359	Spanish-American Theater: From Page to Stage	3
SPA 309L	Grammar and Composition for Heritage Speakers of Spanish	4	SPA 360	Contemporary Theatre	3
SPA 310	Anecdotes, Bestsellers, Cuentos. The ABCs of Storytelling in the Spanish-Speaking World	3	SPA 361	Fictions of Mexican Revolution	3
SPA 311	Bard, Ballad, Bolero. Poetry, and Song in the Spanish-Speaking World	3	SPA 363	Cultural and Social Entrepreneurship: Promotion of Latin American and Latino Societies	3
SPA 312	Page, Stage, and Performance. Theater and Drama of the Spanish-Speaking World	3	SPA 366	Advanced Topics in Literary and Cultural Studies (if related to Latin America or Latino Studies)	3
SPA 313	Lights, Camera, ¡Acción!. Cinema and Culture in the Spanish-Speaking World	3	SPA 367	Cuban Literature (offered in Havana)	3
SPA 316	Paradise in Perspective: An Interdisciplinary Approach to the Wider Caribbean	3	SPA 368	Afro Cuban Cultural Expression (offered in Havana)	3
SPA 317	Mil máscaras/ A Thousand Masks: Interdisciplinary Approaches to Mexico and Central America	3	SPA 369	Special Topics in Literary and Cultural Studies (if related to Latin America or Latino Studies)	1.5-3
SPA 318	The Andes to Patagonia: Interdisciplinary Approaches to South American Culture	3	SPA 379	Special Topics in Hispanic Linguistics (if related to Latin America or Latino Studies)	3
SPA 319	Literary and Cultural Studies of Spanish America	3	SPA 390	International Business: Spain and Latin America	3
SPA 322	Spanish pronunciation and Dialect Variation	3	SPA 397	Spanish Independent Study (if related to Latin America or Latino Studies)	1.5
SPA 325	Spanish for Business I	3	SPA 398	Honors Directed Reading and Research (if related to Latin America or Latino Studies)	1.5
SPA 326	International Business: Spain/Latin America	3	SPA 399	Honors Directed Writing (if related to Latin America or Latino Studies)	3
SPA 327	Spanish for Business II	3	WGS 322	Feminist, Womanist, Mujerista Theologies: Constructive Perspectives on Christian Thought	3
SPA 341	Latin American Historical Fiction: Memory, Myth, and Social Justice	3	WGS 377	Special Topics (if related to Latin America)	1.5-3
SPA 342	From Colonial to Postcolonial Voices	3	<p><i>* Suggested for LAS minors who major in political science.</i></p> <p><i>** Students must complete both PTG 111 and PTG 112 to receive 3 hours towards the minor.</i></p>		
SPA 343	Travel Literature	1.5-3			
SPA 344	The 18th- and 19th-century Periodical Press in Spain and Spanish America	1.5-3	<h2>Honors</h2> <p>The honors designation in Latin-American and Latino Studies is a recognition of outstanding scholarship in the area, as evidenced by academic achievement, critical thinking, intellectual initiative and deep familiarity with the culture and peoples of Latin America. To receive honors in Latin-American and Latino Studies highly qualified students must apply and be selected to complete the Chile Honors Semester which will normally be offered in the fall in Santiago, Chile. Students will undertake focused individual research in the country by participating in LAS 380 and pursue other related coursework. Students are required to present the research findings from their honors colloquium independent project upon return to campus. To receive honors in Latin-American and Latino Studies students must also at the time of graduation have a 3.4 GPA or higher in courses pursued for the minor and an overall GPA of 3.2</p>		
SPA 345	The Transatlantic Civil War	3			
SPA 346	Transatlantic Transitions: Postdictatorship in Spain and the Southern Cone	3			
SPA 347	Contemporary Theater in Spain and Spanish America	3			
SPA 348	Contemporary Women Novelists and their Female Characters (if related to Latin America or Latino Studies)	3			
SPA 349	Great Authors and Directors (if related to Latin America or Latino Studies)	1.5-3			
SPA 350	Film Adaptations of Literary Works (if related to Latin America or Latino Studies)	3			
SPA 351	Cinema and Society (if related to Latin America or Latino Studies)	3			

or higher. Interested students should contact Professor Peter Siavelis in the Politics and International Affairs department, or visit the Center for International Studies website at <http://cis.wfu.edu/>.

## Linguistics (LIN)

Interdisciplinary Minor

The interdisciplinary Linguistics minor offers academic courses across a variety of disciplines. The minor was established in 1993 by faculty from the departments of Anthropology, Classics, Communication, Education, English, French Studies, German-Russian, Humanities, and Spanish and Italian. The minor is currently directed by Professor Irma Alarcón who is assisted by a core group of faculty members drawn from various departments across campus.

By nature and approach, linguistics is integrated tightly with the core mission of the University. Linguistics encourages students to analyze data and to “ask why,” to evaluate evidence of various kinds that bears on issues of language acquisition and use, and to see multiple perspectives on problems and evaluate them critically. It is inherently interdisciplinary and stimulates an interconnected perspective, drawing on social sciences, liberal arts, and even physical sciences, as in phonetics (acoustics) and psycholinguistics (neuroscience, imaging techniques); and it is oriented towards the many cultural heritages of the world. It investigates language in all its forms (oral, written, signed) as a distinctive and universal trait of what makes us human — arguably, the field that is most “Pro-Humanitate” of all. And it emphasizes both the diversity of an estimated 6,000 languages and their common core in human cognition and sociocultural functions.

## Contact Information

Linguistics (<http://college.wfu.edu/linguistics/>)

## Programs

### Minor

- Linguistics, Minor

## Courses

### Linguistics (LIN)

#### LIN 150. Introduction to Linguistics. (3 h)

The social phenomenon of language: how it originated and developed, how it is learned and used, its relationship to other kinds of behavior; types of language (oral, written, signed) and language families; analysis of linguistic data; social issues of language use. Also listed as ANT 150. (CD)

#### LIN 309. Modern English Grammar. (3 h)

A linguistics approach to grammar study. Includes a critical exploration of issues such as grammatical change and variation, the origins and effects of grammar prescriptions/proscriptions, the place of grammar instruction in education, and the politics of language authority. Also listed as ENG 309.

#### LIN 310. Sociolinguistics and Dialectology. (3 h)

Study of variation in language: effects of regional background, social class, ethnic group, gender, and setting; social attitudes toward language; outcomes of linguistic conflicts in the community; evolution of research methods for investigating language differences and the diffusion of change. P- LIN 150/ANT 150 or POI.

#### LIN 330. Introduction to Psycholinguistics and Language Acquisition. (3 h)

A psychological and linguistic study of the mental processes underlying the acquisition and use of language; how children acquire the structure of language and how adults make use of linguistic systems.

#### LIN 333. Language and Gender. (3 h)

Uses an anthropological perspective to examine relationships between language structure, language use, persons, and social categories. Also listed ANT 333.

#### LIN 337. TESOL Linguistics. (3 h)

Introduces the theoretical and practical linguistics resources and skills for teaching English to speakers of other languages (TESOL) within the United States or abroad. Also listed as EDU 337. P-LIN 150/ANT 150 or ENG 304 or POI; knowledge of a second language is recommended.

#### LIN 340. Special Topics in Linguistics. (3 h)

Interdisciplinary study of selected topics, such as morphology, phonology/phonetics, syntax, historical linguistics, history of linguistic theory, semiotics, and ethnolinguistics, issues in Asian linguistics, language and gender. May be repeated for credit if topic varies. P- LIN 150/ANT 150 or POI.

#### LIN 350. Language, Indigeneity and Globalization. (3 h)

Taking a global case-study approach, this seminar explores the role language plays in contemporary identity formation and expression, from indigenous to transnational contexts. Addresses relationships among language and: colonialism, postcolonialism, nationalism, cultural revitalization, standardization, social and economic inequality, boundary-formation, and processes of cultural inclusion and exclusion. Also listed as ANT 350. (CD)

#### LIN 351. Comparative Communication. (1.5, 3 h)

A comparison of communicative and linguistic processes in one or more national cultures with those of the United States. Also listed as COM 351. (CD)

#### LIN 351A. Comparative Communication Japan. (1.5, 3 h)

#### LIN 351B. Comparative Communication Russia. (1.5, 3 h)

#### LIN 351C. Comparative Communication Great Britain. (1.5, 3 h)

#### LIN 351D. Comparative Communication Multiple Countries. (1.5, 3 h)

#### LIN 351E. Comparative Communication China. (1.5, 3 h)

#### LIN 352. Linguistics Cross-Cultural Communication. (3 h)

Introduction to the nature of language, communication practices, nonverbal communication, and their cross-cultural variability. Teaches awareness of and respect for a range of culturally-specific communicative practices and provides analytic skills (linguistics, semiotic, and ethnographic) with which to recognize and assess such practices. This course differs from COM 350 (Intercultural Communication) in its greater emphasis on approaches from linguistics and anthropology. (CD)

#### LIN 354. Field Methods in Linguistic Anthropology. (4 h)

Trains students in basic skills of collecting and analyzing linguistic data at the levels of phonetics-phonology, grammar, lexico-semantics, discourse, and sociocultural context. Students will learn about the research questions that drive linguistic fieldwork as well as the relevant methods, tools and practical and ethical concerns. Also listed as ANT 354. P-ANT 150/LIN 150 or POI.

**LIN 355. Language and Culture. (3 h)**

Covers theoretical and methodological approaches to the study of language and culture, including: semiotics, structuralism, ethnoscience, the ethnography of communication, and sociolinguistics. Topics include: linguistic relativity; grammar and worldview; lexicon and thought; language use and social inequality; language and gender; and other areas. Also listed as ANT 355.

**LIN 356. Language and Social Justice: Signs, Stigma, and Social Capital. (3 h)**

Explores contemporary topics on how language use serves to create, sustain, justify, resist, and alter social and economic inequality; constitutes social action; embeds social orders in linguistic structures. Course is collaborative, hands-on, seminar-style. Also listed as ANT 356. (CD)

**LIN 375. Philosophy of Language. (3 h)**

A study of such philosophical issues about language as truth and meaning, reference and description, proper names, indexicals, modality, tense, the semantic paradoxes, and the differences between languages and other sorts of sign systems. Also listed as PHI 375. P-POI.

**LIN 380. Quantitative Text Analysis. (3 h)**

Introduction to the fundamental concepts and practical programming skills from data science applied to the task of quantitative text analysis. Course surveys methods for selecting, organizing, extracting, and analyzing information from textual data sources to generate novel insight into topics from a variety of linguistics and language-related fields. P-POI.

**LIN 383. Language Engineering: Localization and Terminology. (3 h)**

Introduction to the process of making a product linguistically and culturally appropriate to the target locale, and to computer-assisted terminology management. Surveys applications in translation technology. P-POI.

**LIN 390. The Structure of English. (3 h)**

An introduction to the principles and techniques of modern linguistics applied to contemporary American English. Also listed as ENG 390.

**LIN 398. Individual Study. (1-3 h)**

Designed to meet the needs of selected students, to be carried out under the supervision of a faculty member in the linguistics minor program. P-ANT 150/LIN 150 and POI.

**LIN 399. Individual Study. (1-3 h)**

Designed to meet the needs of selected students, to be carried out under the supervision of a faculty member in the linguistics minor program. P-ANT 150/LIN 150 and POI.

## Faculty

**Director** Tiffany Judy

**Core Faculty:**

**Associate Professor of Anthropology** Margaret Bender

**Associate Professor of English** Zak Lancaster

**Associate Teaching Professor of English** Jon Smart

**Associate Professor of French** Stéphanie Pellet

**Associate Professors of Spanish** Jerid Francom, Tiffany Judy

**Assistant Professor of Spanish** César Gutiérrez

## Linguistics, Minor

### Requirements

The interdisciplinary minor in linguistics requires:

Code	Title	Hours
LIN/ANT 150	Introduction to Linguistics	3
Select 12 additional hours of the following three groups: *		12
Linguistic Courses		
Historical Linguistics		
Related Topics		

\*

*It is recommended that at least one course be from historical linguistics.*

Students minoring in linguistics are strongly encouraged to study foreign languages, achieving proficiency in at least one, and social and behavioral sciences. The minor may be usefully combined with a major in a foreign language, English, anthropology (or other social science), philosophy, or communication.

Students intending to minor in linguistics should consult the director, preferably during their sophomore year. Students may choose from the approved list of electives when designing their minor. For course descriptions, see the relevant department's listings in this publication. Additional elective courses may have been approved since publication of this bulletin. The director maintains a complete list of all elective courses that fulfill the minor.

## Linguistic Courses

Code	Title	Hours
LIN/ANT 150	Introduction to Linguistics	3
LIN/ENG 309	Modern English Grammar	3
LIN 310	Sociolinguistics and Dialectology	3
LIN 330	Introduction to Psycholinguistics and Language Acquisition	3
LIN/ANT 333	Language and Gender	3
LIN/EDU 337	TESOL Linguistics	3
LIN 340	Special Topics in Linguistics	3
LIN/ANT 350	Language, Indigeneity and Globalization	3
LIN 352	Linguistics Cross-Cultural Communication	3
LIN/ANT 354	Field Methods in Linguistic Anthropology	4
LIN/ANT 355	Language and Culture	3
LIN/PHI 375	Philosophy of Language	3
LIN 380	Quantitative Text Analysis	3
LIN 383	Language Engineering: Localization and Terminology	3
LIN/ENG 390	The Structure of English	3
LIN 398/399	Individual Study	1-3

## Historical Linguistics

Code	Title	Hours
ENG 304	History of the English Language	3
FRH 341	Rise of French	3
GES 345	History of the German Language	3
RUS 332	The History of Russian Language	3
SPA 370	History of the Spanish Language	3

## Related Topics

Code	Title	Hours
ANT/EDU 353	Language in Education	3
EDU 354	Content Pedagogy (Methods of Teaching World Languages)	3
FRH 322	French Phonetics	3
FRH 342	Structure of French	3
FRH 343	Modern French	3
FRH 345	Language and Society	3
RUS 330	Structure of Russian	3
SPA 320	Introduction to Hispanic Linguistics	3
SPA 322	Spanish pronunciation and Dialect Variation	3
SPA 371	Contrastive Spanish/English Grammar and Stylistics	3
SPA 372	Acquisition of Spanish	3
SPA 373	Language and Society	3
SPA 379	Special Topics in Hispanic Linguistics	3

## Mathematics (MTH)

A major in mathematics can be achieved by satisfying the requirements listed for either the bachelor of arts or bachelor of science. Lower division students are urged to consult a member of the departmental faculty before enrolling in courses other than those satisfying Division V requirements.

In order to declare a major in the department a student must have earned a C or better, or AP credit in, two courses from the following list: MTH 111, MTH 112, MTH 113, MTH 117, MTH 121.

A minimum grade point average of 2.0 in courses which comprise a major or minor in the department is required for graduation with any major or minor which the department offers. Students may not major in the department and minor in mathematics or double-major within the department.

The department regularly schedules activities in mathematics for students that enhance the course offerings. Examples are:

- Participation in the annual Putnam examination
- The COMAP contest in mathematical modeling
- The American Statistical Association DataFest
- Local chapter of the AWM (American Women in Mathematics)
- Data science and hackathon events
- Meetings of the mathematics and statistics club
- Seminars and courses which build upon the regularly scheduled course offerings
- Student research with faculty
- The Math and Stats Center provides an opportunity for students to receive tutoring in all MTH and STA courses throughout the year. Opportunities to serve as a tutor are also available.

Students who are enrolled at Wake Forest may not take courses in mathematics at other institutions to satisfy divisional requirements.

## Contact Information

Department of Mathematics (<http://college.wfu.edu/math/>)

Manchester Hall 127, Box 7388  
Phone 336-758-5300

## Programs Majors

- Applied Mathematics, B.S.
- Mathematical Economics, B.S.
- Mathematics, B.A.
- Mathematics, B.S.

## Minors

- Mathematics, Minor

## Courses Mathematics (MTH)

### MTH 104. Fundamentals of Algebra and Trigonometry. (2 h)

A review of the essentials of algebra and trigonometry in a guided laboratory setting. Admission by permission only. Not to be counted towards any major or minor offered by the department. Pass/Fail only.

### MTH 105. Fundamentals of Algebra and Trigonometry. (1-3 h)

A review of the essentials of algebra and trigonometry. Admission by permission only (generally, a student must have taken fewer than three years of high school mathematics to be eligible for admission). Not to be counted towards any major or minor offered by the department.

### MTH 105L. Precalculus Assessment Lab. (1 h)

A review of the essentials of algebra and trigonometry in a guided laboratory setting. Admission by permission only. Not to be counted towards any major or minor offered by the department. Pass/Fail only.

### MTH 106. Calculus Foundations. (3 h)

Fall semester of a 2-semester sequence. Functions, limits, continuity, derivatives and their applications. Additional topics may vary by instructor. Calculus placement exam and permission of instructor are required. Intended for first-year students seeking additional support in precalculus integrated with calculus topics in preparation for majors/minors in Div. IV, Div. V, pre-health, or business. Course to be followed by MTH 111 in the spring. Course does not include credit toward a major in the department. P - POI. (QR)

### MTH 107. Explorations in Mathematics. (4 h)

An introduction to mathematical reasoning and problem solving. Topics vary by instructor and may include one or more of the following: knot theory, Euclidean and non-Euclidean geometry, set theory, cryptography, discrete models, number theory, discrete mathematics, chaos theory, probability, and MAPLE programming. Lab. (D, QR)

### MTH 111. Calculus with Analytic Geometry I. (4 h)

Functions of a real variable, trigonometric, exponential and logarithmic functions, limits, continuity, differentiation, applications of derivatives, indeterminate forms, introduction to integration, the fundamental theorem of calculus. Lab. (D, QR)

### MTH 112. Calculus with Analytic Geometry II. (4 h)

Techniques of integration, applications of integration, improper integrals, sequences, Taylor's formula, and infinite series, including power series. Lab. P-MTH 111 or POI. (D, QR)



**MTH 113. Multivariable Calculus. (4 h)**

The calculus of vector functions, including geometry of Euclidean space, differentiation, extrema, line integrals, multiple integrals, and Green's, Stokes', and divergence theorems. Lab. P-MTH 112 or POI. (D, QR)

**MTH 117. Discrete Mathematics. (4 h)**

Introduction to various topics in discrete mathematics applicable to computer science including sets, relations, Boolean algebra, propositional logic, functions, computability, proof techniques, graph theory, and elementary combinatorics. Lab. (D, QR)

**MTH 121. Linear Algebra I. (3 h)**

Vectors, linear transformations and matrices, the invertible matrix theorem, determinants, eigenvalues and eigenvectors, and orthogonal projections. Credit not allowed for both MTH 121 and 205. (D, QR)

**MTH 165. Problem-Solving Seminar. (1 h)**

Weekly seminar designed for students who wish to participate in mathematical competition such as the annual Putnam examination. Not to be counted toward any major or minor offered by the department. May be repeated for credit. Pass/Fail only.

**MTH 172. Mathematics and Social Justice. (1.5 h)**

A survey of how mathematical tools relate to various social justice issues. Topics include fairly drawing electoral districts, determining income subsidies to combat evictions, and assessing the impacts of industrial agriculture. Also explores how certain applications reinforce existing systems of oppression and present new ethical dilemmas. Not to be counted toward any major or minor offered by the department. Pass/Fail only.

**MTH 191. Research Exploration in Mathematics. (1-2 h)**

A course for first- and second-year students interested in an early research experience in mathematics. Students will participate in introductory research projects while developing skills for success. Not to be counted toward any major or minor offered by the department. Pass/Fail only.

**MTH 205. Introduction to Linear Algebra and Differential Equations. (4 h)**

Specific topics covered include: vector algebra, solving linear systems of equations, rank, vector spaces, determinants, eigenvalues, linear transformations, first order differential equations, second order linear ordinary differential equations, and power series solutions to differential equations. Credit not allowed for both MTH 205 and MTH 251 or for both MTH 205 and MTH 121. P-MTH 112 or POI.

**MTH 214. Multivariable Analysis. (3 h)**

Functions between Euclidean spaces, multivariable limits, differentiation, change of variables, line and surface integrals, vector fields, integration theorems for vector fields, Implicit & Inverse Function Theorems, Contraction Mapping Theorem, applications, other selected topics from analysis in multiple dimensions. P-MTH 113, and MTH 121 or MTH 205.

**MTH 215. Axiomatic Systems. (3 h)**

The development of set theory, geometry, point set topology or other mathematical system from either an axiomatic or inquiry-based learning perspective. Problem solving, mathematical logic, and rigorous proof writing are emphasized. With prior departmental permission, this course may be repeated when topics differ substantially. (P-MTH 117 or POI) (D, QR)

**MTH 225. Linear Algebra II. (3 h)**

A continuation of the study of linear algebra and its applications over the real and complex numbers to include vector spaces, the spectral theorem, and the singular value decomposition. Additional topics may include quadratic forms, Gershgorin's circle theorem, analytic functions of matrices, pseudoinverses, and other topics chosen by the instructor. P-MTH 112 and (MTH 121 or MTH 205) or POI. C or P-MTH 117.

**MTH 243. Codes and Cryptography. (3 h)**

Essential concepts in coding theory and cryptography. Congruences, cryptosystems, public key, Huffman codes, information theory, and other coding methods. P - MTH 117 or POI. (D)

**MTH 251. Ordinary Differential Equations. (3 h)**

Linear equations with constant coefficients, linear equations with variable coefficients, and existence and uniqueness theorems for first order equations. Credit not allowed for both MTH 251 and MTH 205. P-MTH 112 or POI. (D, QR)

**MTH 253. Operations Research. (3 h)**

Mathematical models and optimization techniques. Studies in linear programming, simplex method, duality, sensitivity analysis, and other selected topics. P-P-(MTH 111 or MTH 112 or MTH 113) and (MTH 121 or MTH 205) or POI. (D, QR)

**MTH 254. Optimization Theory. (3 h)**

Unconstrained and constrained optimization problems; Lagrange multiplier methods; second-order sufficient conditions; inequality constraints; and Karush-Kuhn-Tucker conditions. P-MTH 113 and (MTH 121 or MTH 205) or POI.

**MTH 283. Topics in Mathematics. (1-3 h)**

Topics in mathematics not considered in regular courses or which continue study begun in regular courses. Content varies.

**MTH 306. Advanced Mathematics for the Physical Sciences. (3 h)**

Advanced topics in linear algebra, special functions, integral transforms and partial differential equations. Not to be counted toward any major offered by the department except for the major in mathematical business. P-MTH 205 or MTH 251 or POI.

**MTH 311. Introductory Real Analysis I. (3 h)**

Limits and continuity in metric spaces, sequences and series, differentiation and Riemann-Stieltjes integration, uniform convergence, power series and Fourier series, differentiation of vector functions, implicit and inverse function theorems. P-MTH 113 and MTH 117 or POI.

**MTH 312. Introductory Real Analysis II. (3 h)**

Limits and continuity in metric spaces, sequences and series, differentiation and Riemann-Stieltjes integration, uniform convergence, power series and Fourier series, differentiation of vector functions, implicit and inverse function theorems. P-MTH 311 or POI.

**MTH 317. Complex Analysis I. (3 h)**

Analytic functions, Cauchy's theorem and its consequences, power series, and residue calculus. P-MTH 113 and MTH 117 or POI. (D)

**MTH 321. Modern Algebra I. (3 h)**

Introduction to modern abstract algebra through the study of groups, rings, integral domains, and fields. P-MTH 117 and (MTH 121 or MTH 205) or POI. (D)

**MTH 322. Modern Algebra II. (3 h)**

A continuation of modern abstract algebra through the study of additional properties of groups, rings, and fields. P-MTH 321 or POI. (D)

**MTH 324. Advanced Linear Algebra. (3 h)**

Thorough treatment of vector spaces and linear transformations over an arbitrary field, canonical forms, inner product spaces, and linear groups. P-MTH 321 or POI. (D)

**MTH 326. Numerical Linear Algebra. (3 h)**

Numerical methods for solving matrix and related problems in science and engineering using a high-level matrix-oriented language such as MATLAB. Topics will include systems of linear equations, least squares methods, and eigenvalue computations. Special emphasis given to applications. Also listed as CSC 352. P-MTH 112 and MTH 121 or 205, or POI. (D)

**MTH 331. Geometry. (3 h)**

An introduction to axiomatic geometry including a comparison of Euclidean and non-Euclidean geometries. P - MTH 117 or POI. (D)

**MTH 333. Introductory Topology. (3 h)**

Topics vary and may include knot theory, topological spaces, homeomorphisms, classification of surfaces, manifolds, Euler characteristic, and the fundamental group. P - MTH 117 or POI.

**MTH 334. Differential Geometry. (3 h)**

Introduction to the theory of curves and surfaces in two and three dimensional space, including such topics as curvature, geodesics, and minimal surfaces. P-MTH 113 or POI. (D)

**MTH 345. Elementary Number Theory. (3 h)**

Properties of integers, congruences, and prime numbers, with additional topics chosen from arithmetic functions, primitive roots, quadratic residues, Pythagorean triples, and sums of squares. P-MTH 117. (D)

**MTH 346. Modern Number Theory. (3 h)**

A selection of number theory topics of recent interest. Some examples include elliptic curves, partitions, modular forms, the Riemann zeta function, and algebraic number theory. P-MTH 117. (D)

**MTH 347. Graph Theory. (3 h)**

Paths, circuits, trees, planar graphs, spanning trees, graph coloring, perfect graphs, Ramsey theory, directed graphs, enumeration of graphs, and graph theoretic algorithms. P-MTH 117 or POI. (D)

**MTH 348. Combinatorial Analysis I. (3 h)**

Enumeration techniques, generating functions, recurrence formulas, the principle of inclusion and exclusion, Polya theory, graph theory, combinatorial algorithms, partially ordered sets, designs, Ramsey theory, symmetric functions, and Schur functions. P-MTH 117 or POI. (D)

**MTH 349. Combinatorial Analysis II. (3 h)**

Enumeration techniques, generating functions, recurrence formulas, the principle of inclusion and exclusion, Polya theory, graph theory, combinatorial algorithms, partially ordered sets, designs, Ramsey theory, symmetric functions, and Schur functions. P-MTH 117 or POI. (D)

**MTH 351. Introduction to Mathematical Modeling. (3 h)**

Introduction to the mathematical modeling, analysis and simulation of continuous processes using MATLAB, Mathematica or Maple. Topics include dimensional analysis, stability analysis, bifurcation theory, one-dimensional flows, phase plane analysis, index theory, limit cycles, chaotic dynamics, hyperbolic conservation laws and traveling waves. P- (MTH 121 and 251) or MTH 205 or POI.

**MTH 352. Partial Differential Equations. (3 h)**

A detailed study of partial differential equations, including the heat, wave, and Laplace equations, using methods such as separation of variables, characteristics, Green's functions, and the maximum principle. P-MTH 113 and (MTH 205 or MTH 251) or POI. (D)

**MTH 353. Probability Models. (3 h)**

Introduction to probability models, Markov chains, Poisson processes and Markov decision processes. Applications will emphasize problems in business and management science. P-MTH 111 and MTH 121 or 205, or POI. (D)

**MTH 354. Discrete Dynamical Systems. (3 h)**

Introduction to the theory of discrete dynamical systems as applied to disciplines such as biology and economics. Includes methods for finding explicit solutions, equilibrium and stability analysis, phase plane analysis, analysis of Markov chains, and bifurcation theory. P-MTH 112 and 121 or POI. (D)

**MTH 355. Introduction to Numerical Methods. (3 h)**

Numerical computations on modern computer architectures; floating point arithmetic and round-off error. Programming in a scientific/engineering language such as MATLAB, C, or FORTRAN. Algorithms and computer techniques for the solution of problems such as roots of functions, approximation, integration, systems of linear equations and least squares methods. Also listed as CSC 355. P-MTH 112, MTH 121 or 205 or 206, or POI. (D)

**MTH 357. Probability. (3 h)**

Probability distributions, mathematical expectation, and sampling distributions. MTH 357 covers much of the material on the syllabus for the first actuarial exam. Also listed as STA 310. P-MTH 112 or 205 or POI. (D)

**MTH 359. Multivariate Statistics. (3 h)**

A course in fundamental network theory concepts, including measures of network structure, community detection, clustering, and network modelling and inference. Topics also draw from recent advances in the analysis of networks and network data, as well as applications in economics, sociology, biology, computer science, and other areas. Also listed as STA 352. P-MTH 117 or MTH 121 or MTH 205 and one course in STA at the 200 level or above. (D)

**MTH 372. Math, Statistics, and Society. (1-3 h)**

A survey of mathematical and statistical applications arising from problems in politics, social justice, or racial justice; and/or an examination of instances, present and historical, where mathematics and statistics function as a tool promoting inclusion or exclusion; and/or an exploration of mathematics and statistics as human endeavors and contributions from diverse populations. Topics vary by instructor. May not be counted toward any major or minor offered in the department. May be repeatable for credit with prior approval of the department. Pass/Fail only.

**MTH 381. Individual Study. (1-3 h)**

A course of independent study directed by a faculty advisor. By prearrangement. May be repeated for credit when covering new material.

**MTH 383. Advanced Topics in Mathematics. (1-3 h)**

Topics in mathematics not considered in regular courses or which continue study begun in regular courses. Content varies. May be repeated for credit when covering new material.

**MTH 391. Senior Seminar Preparation. (1 h)**

Independent study or research directed by a faculty advisor by prearrangement with the adviser.

**MTH 392. Senior Seminar Presentation. (1 h)**

Preparation of a paper, followed by a one-hour oral presentation based upon work in MTH 391.

**MTH 605. Introduction to Linear Algebra and Differential Equations. (3 h)**

Specific topics covered include: vector algebra, solving linear systems of equations, rank, vector spaces, determinants, eigenvalues, linear transformations, first order differential equations, second order linear ordinary differential equations, and power series solutions to differential equations. May not be used toward any graduate degree offered by the department.

**MTH 606. Advanced Mathematics for the Physical Sciences. (3 h)**

Advanced topics in linear algebra, special functions, integral transforms, and partial differential equations. May not be used toward any graduate degree offered by the department. P-MTH 605.

**MTH 611. Introductory Real Analysis I. (3 h)**

Limits and continuity in metric spaces, sequences and series, differentiation and Riemann-Stieltjes integration, uniform convergence, power series and Fourier series, differentiation of vector functions, implicit and inverse function theorems.

**MTH 617. Complex Analysis I. (3 h)**

Analytic functions, Cauchy's theorem and its consequences, power series, and residue calculus.

**MTH 624. Linear Algebra II. (3 h)**

A thorough treatment of vector spaces and linear transformations over an arbitrary field, canonical forms, inner product spaces, and linear groups.

**MTH 626. Numerical Linear Algebra. (3 h)**

An introduction to numerical methods for solving matrix and related problems in science and engineering using a high-level matrix-oriented language such as MATLAB. Topics include systems of linear equations, least squares methods, and eigenvalue computations. Special emphasis is given to applications.

**MTH 631. Geometry. (3 h)**

An introduction to axiomatic geometry including a comparison of Euclidean and non-Euclidean geometries.

**MTH 634. Differential Geometry. (3 h)**

Introduction to the theory of curves and surfaces in two and three dimensional space including such topics as curvature, geodesics, and minimal surfaces.

**MTH 645. Elementary Number Theory. (3 h)**

Course topics include properties of integers, congruences, and prime numbers, with additional topics chosen from arithmetic functions, primitive roots, quadratic residues, Pythagorean triples, and sums of squares.

**MTH 646. Modern Number Theory. (3 h)**

Course topics include a selection of number-theory topics of recent interest. Some examples include elliptic curves, partitions, modular forms, the Riemann zeta function, and algebraic number theory.

**MTH 647. Graph Theory. (3 h)**

Paths, circuits, trees, planar graphs, spanning trees, graph coloring, perfect graphs, Ramsey theory, directed graphs, enumeration of graphs and graph theoretic algorithms.

**MTH 648. Combinatorial Analysis I. (3 h)**

Enumeration techniques, generating functions, recurrence formulas, the principle of inclusion and exclusion, Polya theory, graph theory, combinatorial algorithms, partially ordered sets, designs, Ramsey theory, symmetric functions, and Schur functions.

**MTH 651. Introduction to Mathematical Modeling. (3 h)**

Introduction to the mathematical modeling, analysis and simulation of continuous processes using MATLAB, Mathematica or Maple. Topics include dimensional analysis, stability analysis, bifurcation theory, one-dimensional flows, phase plane analysis, index theory, limit cycles, chaotic dynamics, hyperbolic conservation laws and traveling waves.

**MTH 652. Partial Differential Equations. (3 h)**

A detailed study of partial differential equations, including the heat, wave, and Laplace equations, using methods such as separation of variables, characteristics, Green's functions, and the maximum principle.

**MTH 654. Discrete Dynamical Systems. (3 h)**

Introduction to the theory of discrete dynamical systems as applied to disciplines such as biology and economics. Includes methods for finding explicit solutions, equilibrium and stability analysis, phase plane analysis, analysis of Markov chains and bifurcation theory.

**MTH 655. Introduction to Numerical Methods. (3 h)**

An introduction to numerical computations on modern computer architectures; floating point arithmetic and round-off error including programming in a scientific/engineering language such as MATLAB, C, or Fortran. Topics include algorithms and computer techniques for the solution of problems such as roots of functions, approximations, integration, systems of linear equations and least squares methods. Also listed as CSC 655.

**MTH 657. Probability. (3 h)**

Distributions of discrete and continuous random variables, sampling distributions. Covers much of the material on the syllabus for the first actuarial exam. This course is cross-listed as STA 610.

**MTH 658. Mathematical Statistics. (3 h)**

This course will cover derivation of point estimators, hypothesis testing, and confidence intervals using both maximum likelihood and Bayesian approaches. P - MTH 657 or POI.

**MTH 681. Individual Study. (1, 2 h)**

A course of independent study directed by a faculty adviser. By prearrangement. May be repeated for credit.

**MTH 682. Reading in Mathematics. (1-3 h)**

Reading in mathematical topics to provide a foundational basis for more advanced study in a particular area. May not be used to satisfy any requirement in the MS degree with thesis. No more than three hours may be applied to the requirements for the MS degree without thesis. May be repeated for credit for a total of 3 hours.

**MTH 683. Advanced Topics in Mathematics. (1-3 h)**

Topics in mathematics that are not considered in regular courses. Content varies.

**MTH 691. Research Exploration in Mathematics. (1-3 h)**

Students will participate in introductory research projects while developing skills for success. May not be used towards any degree offered by the department. Pass/Fail only. POI only.

**MTH 711. Real Analysis. (3 h)**

An introduction to analysis on metric spaces and to calculus on Banach spaces with applications.

**MTH 712. Real Analysis. (3 h)**

Measure and integration theory, elementary functional analysis, selected advanced topics in analysis.

**MTH 715. Seminar in Analysis. (1 h)****MTH 716. Seminar in Analysis. (1 h)****MTH 717. Optimization in Banach Spaces. (3 h)**

Banach and Hilbert spaces, best approximations, linear operators and adjoints, Frechet derivatives and nonlinear optimization, fixed points and iterative methods. Applications to control theory, mathematical programming, and numerical analysis.

**MTH 718. Topics in Analysis. (3 h)**

Selected topics from functional analysis or analytic function theory.

**MTH 721. Abstract Algebra. (3 h)**

Groups, rings, fields, extensions, Euclidean domains, polynomials, vector spaces, Galois theory.

**MTH 722. Abstract Algebra. (3 h)**

Groups, rings, fields, extensions, Euclidean domains, polynomials, vector spaces, Galois theory.

**MTH 724. Seminar on Theory of Matrices. (1 h)****MTH 725. Seminar in Algebra. (1 h)****MTH 726. Seminar in Algebra. (1 h)****MTH 728. Topics in Algebra. (3 h)**

Topics vary and may include algebraic coding theory, algebraic number theory, matrix theory, representation theory, non-commutative ring theory.

**MTH 731. Topology. (3 h)**

Point-set topology including topological spaces, continuity, connectedness, compactness, and metric spaces. Additional topics in topology may include classification of surface, algebraic topology, and knot theory.

**MTH 732. Topics in Topology and Geometry. (3 h)**

Topics vary and may include knot theory, algebraic topology, differential topology, manifolds, and Riemannian geometry. May be repeated for credit. P - 731 or POI.

**MTH 733. Topics in Topology and Geometry. (3 h)**

Topics vary and may include knot theory, non-Euclidean geometry, combinatorial topology, differential topology, minimal surfaces and algebraic topology. Howard.

**MTH 735. Seminar on Topology. (1 h)****MTH 736. Seminar on Topology. (1 h)****MTH 737. Seminar on Geometry. (1 h)****MTH 738. Seminar on Geometry. (1 h)****MTH 744. Topics in Number Theory. (3 h)**

Topics vary and are chosen from the areas of analytic, algebraic, and elementary number theory. Topics may include Farey fractions, the theory of partitions, Waring's problem, prime number theorem, and Dirichlet's problem.

**MTH 745. Seminar on Number Theory. (1 h)****MTH 746. Seminar on Number Theory. (1 h)****MTH 747. Topics in Discrete Mathematics. (3 h)**

Topics vary and may include enumerative combinatorics, graph theory, algebraic combinatorics, combinatorial optimization, coding theory, experimental designs, Ramsey theory, Polya theory, representational theory, set theory and mathematical logic.

**MTH 748. Seminar on Combinatorial Analysis. (1 h)****MTH 749. Seminar on Combinatorial Analysis. (1 h)****MTH 750. Dynamical Systems. (3 h)**

Introduction to modern theory of dynamical systems. Linear and nonlinear autonomous differential equations, invariant sets, closed orbits, Poincare maps, structural stability, center manifolds, normal forms, local bifurcations of equilibria, linear and non-linear maps, hyperbolic sets, attractors, symbolic representation, fractal dimensions. P - MTH 611.

**MTH 752. Topics in Applied Mathematics. (3 h)**

Topics vary and may include computational methods in differential equations, optimization methods, approximation techniques, eigenvalue problems. May be repeated for credit.

**MTH 753. Nonlinear Optimization. (3 h)**

The problem of finding global minimums of functions is addressed in the context of problems in which many local minima exist. Numerical techniques are emphasized, including gradient descent and quasi-Newton methods. Current literature is examined and a comparison made of various techniques for both unconstrained and constrained optimization problems. Credit not allowed for both MTH 753 and CSC 753. P - MTH 655 or CSC 655.

**MTH 754. Numerical Methods for Partial Differential Equations. (3 h)**

Numerical techniques for solving partial differential equations (including elliptic, parabolic, and hyperbolic) are studied along with applications to science and engineering. Theoretical foundations are described and emphasis is placed on algorithm design and implementation using either C, FORTRAN, or MATLAB. Credit not allowed for both MTH 754 and CSC 754. P-MTH 655 or CSC 655.

**MTH 757. Stochastic Processes and Applications. (3 h)**

This course includes the axiomatic foundations of probability theory and an introduction to stochastic processes. Applications may include Markov chains, Markov Chain Monte Carlo with Metropolis-Hastings, Gibb sampling, Brownian motion, and related topics, with an emphasis on modern developments. This course is cross-listed as STA 710. P-MTH 657 or STA 610 and MTH 611 or POI.

**MTH 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**MTH 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Faculty

**Chair** Stephen Robinson

**Wake Forest Taylor Professor** Stephen Robinson

**Clark Family Faculty Fellow and Professor** Jennifer Erway Fey

**Sterge Faculty Fellow and Professor** Ellen Kirkman

**Professors** Edward Allen, Hugh Howards, Miaohua Jiang, Sarah Mason, Sarah Raynor, Jeremy Rouse

**Associate Professors** Abbey Bourdon, John Gemmer, W. Frank Moore, R. Jason Parsley

**Associate Teaching Professor and Director of the Math and Stats Center** Lynne Yengulalp

**Associate Teaching Professor** Justin Allman

**Sterge Faculty Fellows and Assistant Professors** Claudia Falcon and Leandro Lichtenfelz

**Assistant Professor** Fan Yang

**Teacher-Scholar Postdoctoral Fellows** J. Dylan Bruney, Kyle Celano, Thomas Kindred, Jacob Mayle, and Tolulope Oke

**Visiting Assistant Professors** Katie Betancourt, C. Williams Chukwu, Peter Merckx, and Chee Han Tan



# Applied Mathematics, B.S.

## Requirements

The bachelor of science in applied mathematics requires the following:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	3
MTH 225	Linear Algebra II	3
MTH 251	Ordinary Differential Equations	3
MTH 311	Introductory Real Analysis I	3
MTH 351	Introduction to Mathematical Modeling	3
MTH 326	Numerical Linear Algebra	3
or CSC 352	Numerical Linear Algebra	
MTH 357	Probability	3
Choose one of the following:		3
STA 311	Statistical Inference	
STA 312	Linear Models	
STA 362	Multivariate Statistics	
STA 364	Computational and Nonparametric Statistics	
Choose 3 additional 3-hour MTH or STA courses numbered 200 or above *		9
Choose one of the following:		
CSC 111	Introduction to Computer Science	4
CSC 112	Fundamentals of Computer Science	4
Choose one year-long sequence outside of mathematics and statistics chosen from the following:		
CSC 201 or 221, and one additional CSC course numbered 200 or above		
PHY 113 & PHY 114	General Physics I and General Physics II	
CHM 111 & CHM 280	College Chemistry I and College Chemistry II	
BIO 150 & BIO 160	Biology I and Biology II	
a sequence approved by the applied mathematics major adviser		

\*  
excluding MTH 306 and MTH 381

To declare this major, at least three of MTH 111, MTH 112, MTH 113, MTH 117, MTH 121 and STA 112 must be completed with a grade of at least a C or through AP credit.

## Honors

To be graduated with the designation "Honors in Mathematics," or "Honors in Applied Mathematics," students must satisfactorily complete a senior research paper, and they must have a minimum grade point average of 3.5 in the major and 3.0 in all college coursework. For additional information, members of the departmental faculty should be consulted.

# Mathematical Economics, B.S.

## Requirements

The Department of Mathematics and the Department of Economics offer a joint major leading to a bachelor of science degree in mathematical economics. This interdisciplinary program offers the student an opportunity to apply mathematical methods to the development of economic theory, models, and quantitative analysis. The major has the following course requirements:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 121	Linear Algebra I	3
MTH 254	Optimization Theory	3
ECN 150	Introduction to Economics	3
ECN 210	Intermediate Mathematical Microeconomics	3
ECN 211	Intermediate Mathematical Macroeconomics	3
ECN 215	Econometric Theory and Methods	3
ECN 318	Advanced Topics in Mathematical Economics	3
Select one of the following:		3
MTH 354	Discrete Dynamical Systems	
ECN 316	Game Theory	
ECN 317	Market Design	
Select one of the following:		3
ECN 322	Money, Banking, & Financial Markets	
ECN 352	International Finance	
ECN 374	Topics in Macroeconomics	
ECN 375	Macroeconomic Models	
Select two additional courses with the approval of the program advisers		6

Students selecting the joint major must receive permission from both the Department of Mathematics and the Department of Economics. Prior to declaring the major, students must have a minimum grade B- or AP credit in ECN 150 and MTH 112, or else have permission from both the Department of Economics and Department of Mathematics. Graduation requirements include a grade of at least a C- in MTH 113, MTH 121, ECN 210 and ECN 211.

## Honors

Students who have a GPA of at least 3.0 overall and 3.3 in courses in the mathematical economics major and who complete the research course ECN 399 or MTH 391 and MTH 392 with a minimum grade of B- will be considered by the faculty for the graduation distinction, "Honors in Mathematical Economics."

# Mathematics, B.A.

## Requirements

Requires:



Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	3
or MTH 225	Linear Algebra II	
MTH 321	Modern Algebra I	3
Select one of the following:		3
MTH 214	Multivariable Analysis	
MTH 311	Introductory Real Analysis I	
MTH 317	Complex Analysis I	
Select at least four additional 3-hour MTH courses numbered higher than 109 or STA courses numbered higher than 111, at most two of which can be from STA. At least two of these electives must be numbered above 300 and at most one of those can be from STA. *		12

\*

Excluding MTH 306, MTH 381, STA 381, and STA 383.

## Honors

To be graduated with the designation "Honors in Mathematics," or "Honors in Applied Mathematics," students must satisfactorily complete a senior research paper, and they must have a minimum grade point average of 3.5 in the major and 3.0 in all college coursework. For additional information, members of the departmental faculty should be consulted.

## Mathematics, B.S.

### Requirements

Requires:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	4
or MTH 205	Introduction to Linear Algebra and Differential Equations	
MTH 225	Linear Algebra II	3
MTH 311	Introductory Real Analysis I	3
MTH 321	Modern Algebra I	3
MTH 391	Senior Seminar Preparation	1
MTH 392	Senior Seminar Presentation	1
Select at least six additional 3-hour MTH courses numbered higher than 109 or STA courses numbered higher than 111, at most three of which can be from STA. At least three of these electives must be numbered above 300, and at most one of those can be from STA. *		18

\*

Excluding MTH 306, MTH 381, STA 381, and STA 383.

## Honors

To be graduated with the designation "Honors in Mathematics," or "Honors in Applied Mathematics," students must satisfactorily complete

a senior research paper, and they must have a minimum grade point average of 3.5 in the major and 3.0 in all college coursework. For additional information, members of the departmental faculty should be consulted.

## Mathematics, Minor

### Requirements

Requires:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	3-4
or MTH 121	Linear Algebra I	
or MTH 205	Introduction to Linear Algebra and Differential Equations	

Select four other MTH or STA courses of at least 3 hours each 12-16

\*

Numbered higher than MTH 106, two of which must be MTH courses numbered above 200. Credit is allowed for at most one of MTH 107, STA 107 or STA 111.

## Medieval and Early Modern Studies

Interdisciplinary Minor

Medieval and Early Modern studies involve faculty from various departments at Wake Forest University, among them English, history, art history, classics, romance languages, German, philosophy, music and religion. The program integrates practices of thinking across periods, cultures, territories, and disciplines, even as Medieval Studies at Wake Forest continues to emphasize the importance of intensive training in disciplinary knowledge and practice. One of the greatest values of our program is that it is one of the central places at Wake Forest University where students experience interdisciplinarity. In fact, this program has been an inspiration to and model for other developing programs. Among areas of study in the humanities, medieval and early modern cultures are perhaps most naturally cross-disciplinary.

What we think of as modern culture and modern institutions were founded in the Middle Ages. The study of the Middle Ages offers us the opportunity to examine the formation of western civilization and literature in the aftermath of the fall of Rome. Early Modern studies enables us to trace the transformation of late medieval society and culture into an entirely new epoch, the Renaissance, which was an extremely innovative period that reconfigured all the disciplines and set the stage for developments in modern science, politics, economics, social organization, and the arts.. This program brings medieval and early modern studies into an ever more complex, inter-dependent, and internationalized twenty-first century, emphasizing the interrelationship of culture, ideas, technologies, religions, and movements across periods of time and geography.

## Contact Information

Medieval and Early Modern Studies (<http://college.wfu.edu/medievalstudies/>)

Kirby Hall 313

Phone 336-758-4497

Programs  
Minor

- Medieval and Early Modern Studies, Minor

Faculty

Director, Professor of English Gale Sigal

Medieval and Early Modern Studies,  
Minor

Requirements

The interdisciplinary minor in medieval and early modern studies requires 18 hours, chosen from at least three different departments. Courses from the student’s major may count in the minor. Students have the opportunity to attend the six-week Summer Medieval Program at Oxford University in England, for which they receive 4.5 hours (two courses) which count toward the minor. (For details about application to the Oxford program, and possible financial aid, consult Gale Sigal in the English department.)

Courses may be chosen from the following list. Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. For course descriptions, see the relevant department’s listings in this publication.

Electives for Medieval and Early Modern  
Studies

Code	Title	Hours
ART 252	Romanesque Art and Architecture	3
ART 253	The Gothic Cathedral	3
ART 254	Luxury Arts in the Middle Ages	3
ART 267	Early Italian Renaissance Art	3
ART 268	16th Century Art in Italy: Magnificence and Reform	3
ART 269	Venetian Renaissance Art	3
ART 270	Northern Renaissance Art	3
ART 272	17th-Century European Art: Politics, Power and Patronage	3
ART 274	17th-Century Dutch Painting	3
ART 396	Art History Seminar (when topic is on Medieval and Byzantine art)	4
ENG 305	Old English Language and Literature	3
ENG 308	Beowulf	3
ENG 310	The Medieval World	3
ENG 311	The Legend of Arthur	3
ENG 312	Medieval Poetry	3
ENG 313	Roots of Song	3
ENG 315	Chaucer	3
ENG 320	British Drama to 1642	3
ENG 323	Shakespeare	3
ENG 325	16th-Century British Literature	3
ENG 326	Studies in English Renaissance Literature	3

ENG 327	Milton	3
ENG 328	17th-Century British Literature	3
FRH 370	Seminar in French and Francophone Studies (periodically offered in medieval studies)	3
GER 380	German Literature before 1700	3
GES 345	History of the German Language	3
GES 391	Germanic Myths and Monsters	3
HST 119	Venice and the World	3
HST 206	The Early Middle Ages	3
HST 207	The High Middle Ages Through the Renaissance	3
HST 209	Europe: From Renaissance to Revolution	3
HST 217	France to 1774	3
HST 223	The British Isles to 1750	3
HST 242	Middle East before 1500	3
HST 311	Special Topics in History (when topic is medieval)	3
HON 310	The Medieval World: Special Topics	3
HMN 225	Literature, Travel, and Discovery (when topic is medieval)	3
ITA 329	Love, Gender, and Diversity in Italian Epic	3
ITA 340	Traveling with Muhammad and Dante	3
ITA 342	Boccaccio's Decameron or "Sex in the City": Rethinking Community in Medieval Florence	3
LAT 120	Reading Medieval Latin	1.5-3
PHI 237	Medieval Philosophy	3
REL 368	Protestant and Catholic Reformations	3
REL 372	History of Christian Thought	3
SPA 330	The Debate about Woman in Late Medieval Spain	3
SPA 331	Medieval Spain: A Cultural and Literary Perspective	3
SPA 332	The Golden Age of Spain	3
SPA 333	The Spain of Don Quijote	3
SPA 341	Latin American Historical Fiction: Memory, Myth, and Social Justice	3
THE 310	History of Western Theatre I (Beginnings to 1642)	3

Students intending to minor in medieval studies should consult the coordinator, preferably during the sophomore year.

Middle East and South Asia Studies

Interdisciplinary Minor

The Middle East and South Asia Studies Program began as an interdisciplinary minor in 2004. Since that time, the Program has grown rapidly to include twenty-three faculty members distributed across ten departments of the college and the Divinity School and to graduate around 20 students each year. The Program also administers summer study abroad programs in Morocco, India, Nepal, Indonesia, and Egypt and mentors students’ study abroad experiences and overseas research across the region. Intended as an interdisciplinary space for faculty and students with an academic interest across region that encompasses

the Middle East and South Asia, the Program regularly sponsors guest lectures, film series, workshops, and international conferences on the campus of Wake Forest University.

The Middle East and South Asia Studies Program maintains institutional affiliations with the American Institute for Maghribi Studies (AIMS), the American Institute of Pakistan Studies (AIPS), the American Institute of Indian Studies (AIIS), and the American Institute for Sri Lankan Studies (AISLS).

## Contact Information

Middle East and South Asia Studies Program (<http://college.wfu.edu/mesasprogram/>)

## Programs Minors

- Arabic, Minor
- Middle East and South Asia Studies, Minor

## Courses Arabic (ARB)

### ARB 111. Elementary Arabic I. (3 h)

The first semester of a two-semester course designed for students with no or very limited knowledge of the language. Introduction to Arabic sounds and script as well as basic grammar, with oral and written drills and reading of simple texts. Focus is on laying the foundation for reading, writing, listening, and speaking skills in Modern Standard Arabic.

### ARB 112. Elementary Arabic II. (3 h)

The second semester of a two-semester course designed for students with no or very limited knowledge of the language. Mastery of Arabic sounds and script is assumed. Building of vocabulary and grammar through oral and written drills and reading of simple texts. Focus is on developing proficiency in reading, writing, listening, and speaking skills in Modern Standard Arabic. P-ARB 111.

### ARB 153. Intermediate Arabic I. (4 h)

Review of grammar and focus on the acquisition of more complex grammatical structures, vocabulary building, and expansion of reading, writing, listening, and speaking skills in Modern Standard Arabic. P-ARB 112.

### ARB 201. Intermediate Arabic II. (3 h)

Further building of vocabulary and grammar and expansion of reading, writing, listening, and speaking skills in Modern Standard Arabic. P-ARB 153.

### ARB 218. Standard Arabic Conversation I. (3 h)

A language course based on cultural material intended to develop students' aural skills and oral proficiency in Modern Standard Arabic by increasing vocabulary and reinforcing command of grammar. P-ARB 153.

### ARB 219. Standard Arabic Conversation II. (3 h)

A continuation of ARB 218. P-ARB 218 or POI.

### ARB 221. Colloquial Arabic Conversation I. (3 h)

Focus on a particular regional dialect of Arabic (e.g., Egyptian, Levantine, Iraqi, Gulf, or North African) to give students the listening and speaking skills necessary to communicate in everyday language in informal situations. Designed for students with no knowledge of the particular dialect being taught. Course may be repeated for credit for a different Arabic dialect. P-ARB 153 or POI.

### ARB 222. Colloquial Arabic Conversation II. (3 h)

A continuation of ARB 221. Designed for students with elementary knowledge of the dialect being taught. Course may be repeated for credit for a different Arabic dialect. P-ARB 221 in the same dialect or POI.

### ARB 230. Upper Intermediate Arabic I. (3 h)

With an emphasis on speaking and writing, this course will develop students' oral and written proficiency on an upper intermediate level of fluency. P— ARB 201.

### ARB 231. Upper Intermediate Arabic II. (3 h)

A continuation of ARB 230. P - ARB 230.

### ARB 288. Individual Study in Arabic Language or Cultural Studies. (1-3 h)

Course may be repeated for a total of 6 credit hours. P-POI.

### ARB 301. Advanced Arabic I. (3 h)

This course will develop students' oral, written, and reading proficiency on an advanced level of fluency. P - ARB 231.

### ARB 302. Advanced Arabic II. (3 h)

A continuation of ARB 301. P - ARB 301.

### ARB 305. Special Topics in Arabic. (1-3 h)

Arabic language study with a particular limited focus, e.g., Quranic Arabic, composition, grammar, novels. May be repeated for credit if topic varies. P - ARB 153, 201, or POI depending on the topic.

### ARB 306. Special Topics in Arabic Studies. (3 h)

Course in English offering in-depth study of particular aspects of Arabic language, literature or culture not included in the regular course offerings. May be repeated for credit when topics vary.

### ARB 324. Introduction to Arabic Literature. (3 h)

Reading of selected texts in Arabic, ranging from pre-Islamic poetry to the Quran and Prophetic Hadiths to medieval fiction, nonfiction works like biographies and travel literature, and modern short stories, for the purpose of building vocabulary and reading skills, expanding knowledge of grammatical structures and literary genres, and deepening cultural understanding. P - ARB 231 or equivalent.

### ARB 325. Multimedia Arabic. (3 h)

With a focus on current affairs in the Middle East and the Arabic-speaking world, students will read, listen to, and view authentic materials from various print and electronic media in Arabic. P - ARB 231.

### ARB 350. Classical Arab-Islamic Civilization through Literature. (3 h)

Examines how Arabs and Muslims in classical and medieval times (600-1400 A.D.) approached the pleasures of worldly life, organized their social domain by ethics/law, constructed their worldview through religion, reacted to nature by science, and attempted to resolve their cultural inconsistencies through theology, philosophy, and mysticism. Also listed as HMN 350. (CD, D)

### ARB 351. Modern Arab World through Literature. (3 h)

Study of the global significance of the 330 million Arabs as the fourth largest community in the world and Arabic as the fifth most widely spoken language from a historical and thematic perspective (1400 A.D to the present) through literary selections covering the periods of premodernity, Arab renaissance, colonialism, state-building, and globalization. Also listed as ARB 351. (CD, D)

## Hindi-Urdu (HNU)

### HNU 111. Elementary Hindi-Urdu I. (3 h)

Introduction to modern Hindi-Urdu. Designed for students with no knowledge of the language. Focus is on developing reading, writing, and conversation skills for practical contexts. Instruction in the Devanagari and Nastaliq scripts and the cultures of Indian and Pakistan. Fall only.

**HNU 112. Elementary Hindi-Urdu II. (3 h)**  
Continued instruction in modern Hindi-Urdu. Students with previous background may place into this course with the instructor’s permission. Focus is on developing reading, writing, and conversation skills for practical contexts. Instruction in the Devanagari and Nastaliq scripts and the cultures of India and Pakistan. Spring only. P-HNU 111.

**HNU 140. Introduction to the Hindi script (Devanagari). (1 h)**  
Introduction to the Devanagari writing system used in Hindi, as well as other South Asian languages, including Nepali and Sanskrit. Includes an overview of the Hindi-Urdu sound system and language. Students with prior proficiency in spoken Hindi or Urdu may complete this course in preparation for entering Intermediate Hindi-Urdu (HNU 153 and 201).

**HNU 141. Introduction to the Urdu script (Nastaliq). (1 h)**  
Introduction to the Nastaliq writing system used in Urdu, as well as Persian, Punjabi, and Kashmiri. Includes an overview of the Hindi-Urdu sound system and language. Students with prior proficiency in spoken Hindi or Urdu may complete this course in preparation for entering Intermediate Hindi-Urdu (HNU 153 and 201).

**HNU 153. Intermediate Hindi-Urdu I. (3 h)**  
Second year of modern Hindi-Urdu. Students with comparable proficiency may place into this course with the instructor’s permission. Focus is on building oral and written communication skills in a range of contexts. Exploration of the cultures of India and Pakistan through discussions of authentic materials. Instruction in Devanagari and Nastaliq scripts. Fall only. P-HNU 112.

**HNU 201. Intermediate Hindi-Urdu II. (3 h)**  
Continued intermediate instruction in spoken and written Hindi-Urdu. Students with previous background may place into this course with the instructor’s permission. Focus is on building oral and written communication skills in a range of contexts. Exploration of the cultures of India and Pakistan through discussions of authentic materials. Instruction in Devanagari and Nastaliq scripts. Spring only. P-HNU 153.

**HNU 230. Advanced Hindi-Urdu I. (1-3 h)**  
Third year of modern Hindi-Urdu. Focuses on interpreting authentic written and audiovisual materials, as well as developing accuracy and fluency in oral and written communication. Instruction in Devanagari and Nastaliq scripts. P-HNU 201 or POI.

**HNU 231. Advanced Hindi-Urdu II. (1-3 h)**  
Continuation of HNU 230. P-POI.

**HNU 287. Special Topics in Hindi-Urdu Language or Cultural Studies. (1-3 h)**  
Selected themes and approaches to Hindi-Urdu language, culture, literature, drama, and/or film. May be repeated for credit when topic varies.

**HNU 288. Individual Study in Hindi-Urdu Language or Cultural Studies. (1-3 h)**  
Course may be repeated for a total of 6 credit hours. P-POI.

Middle East and South Asia Studies (MES)

**MES 110. Introductory Topics in Middle East and South Asia Studies. (1-3 h)**  
Introductory level course on selected topics in Middle East and South Asia Studies. May be repeated for credit if course content differs. (CD)

**MES 210. Intermediate Topics in Middle East and South Asia Studies. (1-3 h)**  
Intermediate level course on selected topics in Middle East and South Asia Studies. May be repeated for credit if course content differs. (CD)

**MES 310. Advanced Topics in Middle East and South Asia Studies. (1-3 h)**  
Advanced level course in selected topics in Middle East and South Asia Studies. May be repeated for credit if course content differs. (CD)

**MES 390. Individual Study. (1-3 h)**  
Designed to meet the needs and interests of selected students who have declared the minor. Carried out under the supervision of a faculty member affiliated with the Middle East and South Asia Studies program. P-POI.

Faculty

**Program Co-Director and Associate Professor of History** Charles Wilkins  
**Program Co-Director and Professor of Religion** Nelly Van Doorn-Harder  
**Assistant Professor of Hindi-Urdu** Peter Knapczyk  
**Assistant Teaching Professor of Arabic** Rayed Khedher

Arabic, Minor

Requirements

Requires 12 hours above ARB 153. Must include at least one of the following core courses: ARB 201, ARB 230, ARB 231, ARB 301, ARB 302.

May include either English-language content course (ARB 350 or ARB 351) but not both. Study abroad is highly recommended but not required. Students must achieve a GPA of at least 2.0 in the minor.

Middle East and South Asia Studies, Minor

Requirements

The Middle East and South Asia Studies minor provides students with an opportunity to engage in a multidisciplinary study of the history, politics, literature, peoples, and cultures of the Middle East and South Asia. To fulfill the minor, students must complete 18 hours from an approved list of courses. Students may count no more than 10 hours from any of the foreign language offerings toward the minor. Additional elective courses may have been approved since publication of this bulletin. The program’s co-directors maintain a complete list of all approved elective courses. For course descriptions, see the relevant department’s listings in this publication. Some courses relevant to the minor are not taught on a regular basis; others are offered by visiting or temporary faculty.

Electives for Middle East and South Asia Studies

Code	Title	Hours
ANT 334	People and Cultures of South Asia	3
ANT 383 & ANT 384	Field program in Cultural Anthropology and Field Program in Cultural Anthropology (when topic is appropriate)	6
ANT 385 & ANT 386	Special Problems Seminar and Special Problems Seminar (when topic is appropriate)	6
ARB 111 & ARB 112	Elementary Arabic I and Elementary Arabic II	6
ARB 153	Intermediate Arabic I	4
ARB 201	Intermediate Arabic II	3
ARB 218 & ARB 219	Standard Arabic Conversation I and Standard Arabic Conversation II	6

ARB 221 & ARB 222	Colloquial Arabic Conversation I and Colloquial Arabic Conversation II	6	HST 334	Mystics, Monarchs, and Masses in South Asian Islam	3
ARB 230 & ARB 231	Upper Intermediate Arabic I and Upper Intermediate Arabic II	6	HST 335	Hindus and Muslims in India, Pakistan, and Beyond	3
ARB 288	Individual Study in Arabic Language or Cultural Studies	1.5-3	HST 343	The Silk Roads	3
ARB 301 & ARB 302	Advanced Arabic I and Advanced Arabic II	6	HST 385	History through Film: Bollywood and the Making of Modern India	3
ARB 305	Special Topics in Arabic	3	HST 387	The Last Great Muslim Empires	3
ARB 324	Introduction to Arabic Literature	3	HST 388	Nation, Faith, and Gender in the Middle East	3
ARB 325	Multimedia Arabic	3	HST 389	The British Empire in the Middle East	3
ARB 350	Classical Arab-Islamic Civilization through Literature	3	HST 390	Research Seminar (when topic is appropriate)	4
ARB 351	Modern Arab World through Literature	3	HST 398	Individual Study (when topic is appropriate)	1-3
ART 104	Topics in World Art (when topic is appropriate)	3	HST 399	Directed Reading (when topic is appropriate)	1-3
ART 203	Islamic Art and Architecture	3	MES 110	Introductory Topics in Middle East and South Asia Studies	1-3
ART 204	South Asian Art and Architecture	3	MES 210	Intermediate Topics in Middle East and South Asia Studies	1-3
ART 205	The Architecture of Devotion in South Asia	3	MES 310	Advanced Topics in Middle East and South Asia Studies	1-3
ART 206	Art and Empire: India and Europe, 1500-1900	3	MES 390	Individual Study	1-3
ART 207	Building Empire: Early Modern Islamic Architecture	3	MSC 101	Introduction to the Music of World Cultures	3
ART 208	Ottoman Art and Architecture	3	MSC 105	Performing Arts of Asia	3
ART 286	Topics in Art and Architectural History (when topic is appropriate)	3	MSC 150	Gamelan Ensemble	1
ART 351	Topics in Gender and Art (when topic is appropriate)	3	NLL 111 & NLL 112	Elementary Hebrew and Elementary Hebrew	6
ART 396	Art History Seminar (when topic is appropriate)	4	NLL 153	Intermediate Hebrew	3
COM 370	Special Topics (when topic is appropriate)	3	NLL 211 & NLL 212	Hebrew Literature and Hebrew Literature II	6
ENG 358	Postcolonial Literature	3	NLL 213	Studies in Modern Hebrew	3
ENG 359	Studies in Postcolonial Literature	3	NLL 301	Introduction to Semitic Languages	3
HNU 111 & HNU 112	Elementary Hindi-Urdu I and Elementary Hindi-Urdu II	6	NLL 302 & NLL 303	Akkadian I and Akkadian II	6
HNU 140	Introduction to the Hindi script (Devanagari)	1	NLL 310	Intermediate Readings in Classical Hebrew	1
HNU 141	Introduction to the Urdu script (Nastaliq)	1	NLL 311	Aramaic	3
HNU 153 & HNU 201	Intermediate Hindi-Urdu I and Intermediate Hindi-Urdu II	6	NLL 321 & NLL 322	Introduction to Middle Egyptian I and Introduction to Middle Egyptian II	6
HNU 287	Special Topics in Hindi-Urdu Language or Cultural Studies	1-3	POL 241	Contemporary India	3
HNU 288	Individual Study in Hindi-Urdu Language or Cultural Studies	1-3	POL 242	Topics in Comparative Politics (when topic is appropriate)	3
HST 107	Middle East & the World	3	POL 246	Politics and Policies in South Asia	3
HST 109	Asia and the World	3	POL 250	Afghanistan, Pakistan, Iraq and U.S. Policy since 2001	3
HST 242	Middle East before 1500	3	POL 251	Politics of Forced Migration	3
HST 243	Middle East since 1500	3	POL 252	Topics in International Politics (when topic is appropriate)	3
HST 250	Premodern South Asia	3	POL 255	Terrorism and Political Violence	3
HST 251	Modern South Asia	3	POL 257	Politics of International Development	3
HST 305	Medieval & Early Modern Iberia	3	POL 259	Palestine and the Arab-Israeli Conflict	3
HST 311	Special Topics in History (when topic is appropriate)	3	POL 263	U.S. Foreign Policy in the Middle East	3
HST 321	Zionism, Palestine, and Israel in Historical Perspective	3	POL 269	Topics in Political Theory (when topic is appropriate)	3
			POL 274	Arab and Islamic Political Thought	3



POL 282	Gandhi	3
POL 286	Topics in Political Science (when topic is appropriate)	3
POL 287	Individual Study (when topic is appropriate)	3
POL 288	Directed Reading (when topic is appropriate)	3
POL 300	Senior Seminar in Political Science (when topic is appropriate)	4
REL 104A	Introduction to Asian Religions	3
REL 104B	Introduction to South Asian Religions	3
REL 105	Monotheisms: Judaism, Christianity, and Islam	3
REL 108	Introduction to Hindu Traditions	3
REL 109	Introduction to Buddhist Traditions	3
REL 110	Introduction to Islamic Traditions	3
REL 113	Introduction to Jewish Traditions	3
REL 286 & REL 287	Directed Reading and Directed Reading (when topic is appropriate)	4
REL 312	The Critical Study of the Pentateuch	3
REL 313	Near Eastern Archeology	3
REL 355	Jewish Identities: Religion, Race, and Rights	3
REL 356	Faces of Modern Judaism	3
REL 362	Topics in Islam	3
REL 383	The Quran and the Prophet	3
REL 384	Islam and Law: Varieties in Interpretation and Expression	3
REL 385	Topics in South Asian Religions	3
REL 386	Indian Epics	3
REL 387	Priests, Warriors and Ascetics in Ancient India	3
REL 388	South Asian Women: Religion, Culture and Politics	3
REL 389	Islam in the West: Changes and Challenges	3
REL 390	Special Topics in Religion (when topic is appropriate)	3
WGS 377	Special Topics (when topic is appropriate)	3

## Honors

The honors designation in Middle East and South Asia Studies is a recognition of outstanding scholarship in the area, as evidenced by academic achievement, intellectual initiative and deep familiarity with the culture and peoples of the Middle East and South Asia. To receive honors in Middle East and South Asia Studies, highly qualified students must undertake focused individual research in some aspect of Middle East and/or South Asia studies or study abroad in at least one country in the region. Students are required to provide an oral presentation of their research findings or of their critical analysis of their study abroad experience at the spring honors colloquium that follows their return to campus. To receive honors in Middle East and South Asia Studies student must at the time of graduation have both a 3.6 GPA or higher in courses pursued for the minor and an overall GPA of 3.2 or higher. Interested students should contact one of the program directors to discuss.

## Military Science (MIL)

### Army

Completion of Army Reserve Officers' Training Corps (AROTC) requirements and recommendation for appointment by the Professor of Military Science may result in commissioning as a second lieutenant in the active or reserve force components of the Army of the United States, as determined by the Secretary of the Army.

The AROTC program is composed of the basic course and the advanced course.

Code	Title	Hours
<b>Basic Course</b>		
MIL 121	Introduction to the Army *	3
MIL 122	Foundations of Leadership	3
MIL 123	Leadership and Ethics *	3
MIL 124	Army Doctrine and Decision Making	3
May also be completed, partially or fully, by three alternative methods:		
Previous attendance of military initial entry training		
A six-week long Cadet Initial Entry Training (CIET)		
Constructive credit for other military service determined appropriate by the professor of military science		
<b>Advanced Course</b>		
MIL 225	Training Management and the Warfighting Functions	3
MIL 226	Applied Leadership in Small Unit Operations	3
MIL 227	The Army Officer	3
MIL 228	Company Grade Leadership	3
MIL 119	Advanced Leadership Lab **	1
MIL 120	Advanced Leadership Lab **	1

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*Students may take MIL 121 or MIL 123 without taking MIL 117 or MIL 118 if they are not currently receiving an ROTC scholarship. If they intend to pursue a scholarship or contract, participation is encouraged.*

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*Required for all advanced courses.*

### Basic Course

No military obligation is incurred by enrollment in the basic course, except by Army ROTC Scholarship cadets.

### Advanced Course

Enrollment in the advanced AROTC courses is only for students who have signed a service obligation which they will fulfill after graduation with the United States Army, Army Reserve, or Army National Guard, and they must also attend the five-week Advanced Camp, usually attended during the summer between the junior and senior years. Army ROTC scholarships are available to qualified applicants (both those already enrolled in the AROTC program and those not yet enrolled) through annual competition.

## Air Force

In addition to AROTC, students may participate in the Air Force Reserve Officer Training Corps (AFROTC) Program through North Carolina A&T State University in Greensboro in order to receive a commission as an active duty second lieutenant in the U.S. Air Force (USAF). The department offers a four-year program where students enroll at the beginning of their freshman year and continue through award of a bachelor's degree. The four-year program can be modified for students up until the beginning of the spring semester of a student's sophomore year.

Freshmen or sophomore students attend a 1-hour class and a 2-hour leadership laboratory each week in addition to two 1-hour physical training sessions. Students who compete favorably for the award of an Enrollment Allocation will attend a four-week summer field training program at Maxwell Air Force Base, AL. During the junior and senior years, students attend 3 hours of class, a 2-hour leadership laboratory, and two 1-hour physical training sessions.

For more information on the AFROTC Program, contact any instructor or the Unit Admissions Officer in the Department of Aerospace Studies, Campbell Hall, North Carolina A&T State University, telephone (336.334.7707). For course offerings visit this site (<https://www.ncat.edu/provost/academic-affairs/rotc/air-force/cadet-life.php>).

## Contact Information

Department of Military Science (<http://college.wfu.edu/ROTC/>)  
Phone 336-758-5545

## Courses

### Military Science (MIL)

#### MIL 114. Leadership. (1.5 h)

An examination of the fundamentals contributing to the development of a personal style of leadership with emphasis on the dimensions of junior executive management.

#### MIL 117. Leadership Laboratory. (1 h)

Basic military skills instruction designed to technically and tactically qualify the student for assumption of an officer leadership position at the small-unit level. Students learn the skills necessary to operate in a military environment and practical application of the basic leadership tenant. Focus is on teamwork, communication skills and application of basic military principles. Either Military Science 117 (fall) or 118 (spring) is required each semester for contracted AROTC cadets (including those conditionally contracted), advance designee scholarship winners.

#### MIL 118. Leadership Laboratory. (1 h)

Basic military skills instruction designed to technically and tactically qualify the student for assumption of an officer leadership position at the small-unit level. Students learn the skills necessary to operate in a military environment and practical application of the basic leadership tenant. Focus is on teamwork, communication skills and application of basic military principles. Either Military Science 117 (fall) or 118 (spring) is required each semester for contracted AROTC cadets (including those conditionally contracted), advance designee scholarship winners.

#### MIL 119. Advanced Leadership Lab. (1 h)

Focuses on practical application of time management, small unit organization, communication, and other leadership concepts learned in class to accomplish assigned missions. Laboratory sessions can be tactical (conducting a small unit mission) or managerial (solving an organizational problem). Grading is based on performance in leadership positions, teamwork, and application of principles from class instruction. MIL 227 and 228 cadets are required to plan training scenarios conducted at lab, supervise sessions, and build teams and future leaders through assessment and feedback. MIL 225 and 226 cadets will conduct training and be evaluated on their application of tactical and managerial skills learned in military science classes to solve problems or complete tactical missions. MIL 119 and 120 may be repeated once for credit.

#### MIL 120. Advanced Leadership Lab. (1 h)

Focuses on practical application of time management, small unit organization, communication, and other leadership concepts learned in class to accomplish assigned missions. Laboratory sessions can be tactical (conducting a small unit mission) or managerial (solving an organizational problem). Grading is based on performance in leadership positions, teamwork, and application of principles from class instruction. MIL 227 and 228 cadets are required to plan training scenarios conducted at lab, supervise sessions, and build teams and future leaders through assessment and feedback. MIL 225 and 226 cadets will conduct training and be evaluated on their application of tactical and managerial skills learned in military science classes to solve problems or complete tactical missions. MIL 119 and 120 may be repeated once for credit.

#### MIL 121. Introduction to the Army. (3 h)

Introduction to the skills critical for effective leadership included effective communication, teamwork, ethics, and cultural awareness. Cadets learn how the personal development of life skills such as critical thinking, goal setting, time management, physical fitness, and stress management relate to leadership, Officership, and the Army profession.

#### MIL 122. Foundations of Leadership. (3 h)

Introduction to army terms, philosophies, and basic leadership concepts. Builds individual skills and knowledge applicable to Army operations, both tactical and organizational, in order to develop students into exceptional leaders.

#### MIL 123. Leadership and Ethics. (3 h)

Explores the dimensions of creative and innovative leadership strategies and styles by developing an understanding of team dynamics and an assessment of personal leadership traits in order to develop team leadership capabilities. Cadets practice aspects of personal motivation and team building in the context of planning, executing, and assessing team exercises and participating in leadership labs.

#### MIL 124. Army Doctrine and Decision Making. (3 h)

Examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). Highlights dimensions of terrain analysis, patrolling, and operation orders, cultural considerations, unit dynamics, interaction with the media and care for subordinate's physical and mental well-being. Places lessons learned from MIL 124 on the Army leadership framework and the dynamics of adaptive leadership in the context of military operations to prepare cadets for leadership roles as they enter the advanced courses.

**MIL 225. Training Management and the Warfighting Functions. (3 h)**

Challenges cadets to study, practice, and evaluate adaptive leaderships skills as they are presented with challenging scenarios related to squad tactical operations. Cadets receive systematic and specific feedback on their leadership attributes and actions. Based on such feedback, as well as their own self-evaluations, cadets continue to develop their leadership and critical thinking abilities. The focus is developing cadets' tactical leadership abilities to enable them to succeed at ROTC's summer Advanced Camp. P - MIL 121 through MIL 124 (or equivalent credit as determined by the professor of military science).

**MIL 226. Applied Leadership in Small Unit Operations. (3 h)**

Uses increasingly challenging leadership opportunities to build cadet confidence and skills in leading tactical and garrison operations up to platoon level. Cadets review aspects of the range of Army operations and specifics of different functional areas within the Army. They also conduct military briefings and develop proficiency in garrison operation orders. Focus is on exploring, evaluating, and developing skills in decision-making, persuading, and motivating team members in the contemporary operating environment. Cadets are evaluated on what they know and do as leaders as they prepare to attend the ROTC summer Advanced Camp. P - MIL 121 through MIL 225 (or equivalent credit as determined by the professor of military science)

**MIL 227. The Army Officer. (3 h)**

This course transitions the focus of from being trained, mentored and evaluated as a cadet to learning how to train, mentor and evaluate underclass cadets. Cadets will learn the duties and responsibilities of an Army staff officer and apply the Military Decision Making Process, Army writing style and the Army's principles of training and training management. Cadets will learn about the special trust proposed by the U.S. Constitution to Army Officers- a trust above and beyond other professions. Cadets will learn Army values and ethics and how to apply them to everyday life as well as in the Contemporary Operating Environment. The cadets will learn about the officer's role in the Uniform Code of Military Justice, counseling subordinates, administrative actions and methods on how to best manage their career as an Army officer. P- MIL 121 through MIL 226 (or equivalent credit as determined by the professor of military science).

**MIL 228. Company Grade Leadership. (3 h)**

Continuation of MIL 227 with emphasis on the transition from cadet to officer. Explores the dynamics of leading military operations in the complex environment facing military officers. Cadets examine differences in customs and courtesies, military law, principles of war, and Rules of Engagement in the face of international terrorism. They also explore aspects of interacting with non-government organizations, civilians on the battlefield, and host nation support. Cadets will gain a foundation of knowledge regarding government and military policy based on hands-on case study scenarios involving current and past events. P- MIL 121 through MIL 227 (or equivalent credit as determined by the professor of military science).

**MIL 229. American Military History. (3 h)**

The American military experience with emphasis on the ideas and activities contributing to the development of the United States' unique military establishment. Particular emphasis on civilian control of the military. Credit not allowed for both MIL 229 and HST 369. P - POI.

## Faculty

**Professor** Lieutenant Colonel Lawrence A. Rubal

**Assistant Professors** Major Ryan P. Durling, 1LT Paul Dinh, Mr. Anthony Bradley, Master Sergeant David Saint-Val, Master Sergeant Rachel Mandzak

## Music (MSC)

The Department of Music offers numerous courses in music theory, history, and culture, including studies of popular music, jazz, world music and Western art music. Performance courses include a wide variety of ensembles such as orchestra, chamber and concert choirs, wind and jazz ensembles, Collegium musicum, Balinese gamelan, and Chinese music ensemble. The department also offers individual instruction in all instruments typically employed in orchestra, wind and jazz ensembles, as well as piano, voice and guitar. Other rich musical opportunities for students include tours with the WFU Chamber Choir; involvement in the traveling WFU Marching Band; extensive faculty and guest concert offerings, including Wake Forest's renowned Secrest Series; and study abroad in Wake Forest residential study centers. Music majors choose either a performance concentration, which culminates in their giving a senior recital, or a liberal arts concentration, for which they complete a senior project. The music department requires a minimum GPA of 2.0 in the major for graduation.

## Contact Information

Department of Music (<http://college.wfu.edu/music/>)  
Scales Fine Arts Center M309, Box 7345  
Phone 336-758-5026

## Programs Majors

- Music, B.A.

## Minor

- Music, Minor

## Courses Music (MSC)

**MSC 100. Introduction to Western Music. (3 h)**

Survey of Western musical styles, composers, and selected works from the Middle Ages through the present day. (D)

**MSC 101. Introduction to the Music of World Cultures. (3 h)**

Survey of music, history, and culture from selected societies around the world. (CD, D)

**MSC 102. Introduction to Modern Popular Music. (3 h)**

Survey of the history of popular music, focusing on the United States. The course examines influential music genres and individual artists as well as situating their repertoires within sociocultural, political, economic, and technological contexts. (CD, D)

**MSC 103. Introduction to Jazz. (3 h)**

Survey of jazz music from its origins to the present in cultural and historical contexts. Also listed as AAS 103. (CD, D)

**MSC 104. Music of Latin America. (3 h)**

Survey of art, folk, and popular musical styles in Latin America. Develops critical listening skills and introduces music concepts and terminology. Studies the musical interactions among various ethnic groups and enables broader historical, social, and cultural discussions. (CD, D)

**MSC 105. Performing Arts of Asia. (3 h)**

Survey of classical, vernacular, and popular musical traditions in selected Asian cultural contexts, as well as their connections with dance, theater, puppetry, and film. (CD, D)

**MSC 106. Performing Arts of Bali. (3 h)**

Survey of performing arts of Indonesia in cultural and historical context, with a focus on Bali; includes playing and performing on the university's Balinese gamelan (percussion orchestra). (CD, D)

**MSC 108. American Music. (3 h)**

A study of the musical sources of American culture and the six streams of music in the United States: folk and ethnic musics, offsprings of the rural South (country music, blues, rock), jazz and its forerunners, popular sacred music, popular secular music, and art music. (CD, D)

**MSC 109. Gender, Sexuality, and Music. (3 h)**

A historical overview of gender and sexuality and its role in music. This includes both a study of specific musicians as well as a broader exploration of gender roles and stereotypes in music. (CD, D)

**MSC 110. History of the Wind Band. (3 h)**

A historical overview of the wind band from the 16th century to the 21st century. Topics include significant ensembles, compositions, composers, and new directions in the idiom. (D)

**MSC 111. History of Musical Theatre. (3 h)**

Survey of the musical from its origins to the present. (CD, D)

**MSC 112. Music and Film. (3 h)**

A study of the history of film music of multiple cultures from the silent era to modern times, including the analysis of landmark films and pertinent film music theories. (CD, D).

**MSC 113. Video Game Music. (3 h)**

Exploration of global video game music through its styles, trends, practitioners, history, and technological and industry developments. (CD, D)

**MSC 121. Music History and Culture I. (3 h)**

A survey of music history and culture primarily focusing on the period before 1825, with analysis of major musical works and an introduction to music research. Designed for music majors and minors but also fulfills the Division III requirement. P or C - MSC 131 or POI. (D)

**MSC 122. Music History and Culture II. (3 h)**

A survey of music history and culture from 1825 to the present, with analysis of major musical works and an introduction to music research. Designed for music majors and minors but also fulfills the Division III requirement. P or C - MSC 131 or POI. (D)

**MSC 123. Special Topics in Music History & Culture. (3 h)**

An intensive study of a selected topic in music history and culture. May be repeated if course content differs. (D)

**MSC 131. Music Theory I. (4 h)**

Reviews music fundamentals then studies diatonic harmony and phrase forms in Western classical and some American popular styles. Develops composition, analytic, aural, and keyboard skills. Designed for music majors and minors but also fulfills the Division III requirement. (D)

**MSC 132. Music Theory II. (4 h)**

A continuation of Music Theory I. Studies chromatic harmony and common formal structures in Western classical and some American popular styles. Further develops composition, analytic, aural, and keyboard skills. Offered in Spring only. P-MSC 131 or POI. (D)

**MSC 133. Music Theory for Western Classical Styles. (3 h)**

A survey of music theory topics and techniques for Western classical music from the Renaissance to present. P-MSC 132 or POI.

**MSC 134. Music Theory for Popular and Jazz Styles. (3 h)**

A detailed study of the musical characteristics (melody, harmony, form, rhythm and meter, texture, instrumentation, and text-music relationships) in American popular and jazz styles, primarily through song analysis and composition. P-MSC 131 or POI. (D)

**MSC 135. Advanced Aural and Keyboard Skills. (3 h)**

Extends aural and keyboard skills developed in Music Theory I and II. P-MSC 132 or POI.

**MSC 139. Special Topics in Music Theory. (3 h)**

An intensive study of a selected topic in music theory. May be repeated if course content differs. P-MSC 132 or POI. (D)

**MSC 140. Orchestra. (1 h)**

Study and performance of orchestral works from the classical and contemporary repertoire. May be repeated. P-Audition.

**MSC 141. Wind Ensemble. (1 h)**

Study and performance of music for mixed ensemble of winds, brass, and percussion. May be repeated. P-Audition.

**MSC 142. Jazz Ensemble. (1 h)**

Study and performance of written and improvised jazz for big band and combo ensembles. May be repeated.

**MSC 143. Athletic Band I. (1 h)**

Performs at football games, as well as men's and women's home basketball games and other on and off campus events. May be repeated. Offered in Fall.

**MSC 144. Athletic Band II. (0.5 h)**

Performs at men's and women's home basketball games, and at the spring football game. Meets from the beginning of the semester to spring break. May be repeated. Offered in Spring. P-MSC 143 or POI.

**MSC 145. Concert Choir. (1 h)**

Study and performance of accompanied and a cappella repertoire for beginning and intermediate singers. Rehearsal preparation and instruction may also include ringing 5-octaves of handbells for performances such as the Lovefeast. May be repeated.

**MSC 146. Chamber Choir. (1 h)**

Select mixed chorus performing standard choral repertoire; jazz, folk, multicultural, and pop-style compositions; and newly composed and commissioned choral literature. Tours domestically each year and internationally once every four years. May be repeated. P-Audition.

**MSC 147. Schola Cantorum. (0.5 h)**

An early music vocal chamber ensemble dedicated to the performance and practices of music from the Medieval, Renaissance, Baroque, and early Classical eras. May be repeated. C-MSC 146.

**MSC 150. Gamelan Ensemble. (1 h)**

Study and performance of traditional and new compositions for Balinese gamelan (percussion orchestra) and related performing art forms. May be repeated.

**MSC 151. Chinese Ensemble. (1 h)**

Performance of traditional and new Chinese music compositions. Experience on Chinese traditional instruments (dizi, erhu, guzheng, pipa, ruan, percussion, etc.) preferred, but instrumentalists and vocalists of all traditions welcome. May be repeated.

**MSC 152. Afro-Cuban Drumming. (1 h)**

Exploration of the music and history of West African drumming through hands-on experience. Students learn to play jembe, dunun, shekere, iron bell, and their New World descendants, the conga drum, bongo, claves, maracas, and agogo bells.



**MSC 159. Improvisation. (1 h)**

An introduction to the aesthetics and techniques of improvisation through listening and playing. Group improvisational work in styles such as jazz, world music genres, and Baroque music. Intermediate proficiency on an instrument or voice and basic knowledge of scales desirable.

**MSC 160. Basic Music Reading and Skills. (1.5 h)**

A study of the fundamentals of music theory including key signatures, scales, intervals, chords, and basic sight-singing and ear-training skills. Does not count toward the music major or minor.

**MSC 161. Class Guitar I. (0.5 h)**

Introduction to fingerstyle guitar techniques. Covers reading and playing from musical notation, strumming, accompanying songs, and basic theory concepts. Develops a versatile technique adequate for all styles of music. Acoustic guitar required.

**MSC 162. Class Piano. (1 h)**

Introduction to playing the piano and reading piano music in a variety of folk, popular, and classical styles. Designed for students with little or no keyboard experience.

**MSC 163. Class Voice I. (0.5 h)**

Introduction to the fundamental principles of singing, concepts of breath control, tone, and resonance. P-POI.

**MSC 164. Theatrical Singing I. (0.5 h)**

Basic techniques of singing, breath control, phonation, and resonance, with emphasis on theatrical projection. Study and performance of musical theater repertoire. P-POI.

**MSC 165. Music Production and Recording I. (1.5 h)**

Introduction to modern recording techniques with hands-on experience in an off-campus professional recording studio. Topics to be addressed include basic acoustics of music, microphone techniques, digital audio workstation operation, and basic production techniques. P - POI.

**MSC 166. Music Production and Recording II. (1.5 h)**

Advanced aspects of audio engineering and music production via hands-on experience in an off-campus professional recording studio. P or C – MSC 165.

**MSC 167. Alexander Technique for Musical Performers. (0.5 h)**

An introduction to the Alexander Technique, a method that teaches performers how to minimize physical effort and maximize musical expression through verbal and tactile feedback. Pass/Fail only.

**MSC 171. Class Guitar II. (0.5 h)**

Introduces slurs, harmonics and other advanced techniques. Covers sight-reading and performing across the full fretboard. Development of ensemble playing with emphasis on chord progressions and improvisation. Nylon-string guitar required. P-MSC 161 or POI.

**MSC 172. Class Piano II. (1 h)**

Continuation of foundational principles. Early intermediate repertoire, scales hands together, principles of fingering, musical approach to learning, chords, arpeggios and ensemble duets. P- MSC 162 or POI.

**MSC 173. Class Voice II. (0.5 h)**

Continuation of fundamental vocal techniques. P-MSC 163 or POI.

**MSC 174. Theatrical Singing II. (0.5 h)**

Continuation of theatrical singing techniques with increased study and performance of musical theater repertoire. P-MSC 164 or POI.

**MSC 175. Chamber Music. (1 h)**

Study and performance of chamber music. Performers are strongly urged to participate in a larger ensemble as well. May be repeated. P-POI.

**MSC 175A. Chamber Music Collegium Musicum Instrumental. (1 h)****MSC 175B. Chamber Music-String. (1 h)****MSC 175C. Chamber Music-Woodwind. (1 h)****MSC 175D. Chamber Music- Brass. (1 h)****MSC 175E. Chamber Music-Percussion. (1 h)****MSC 175F. Chamber Music-Keyboards. (1 h)****MSC 175G. Chamber Music-Guitar. (1 h)****MSC 175H. Chamber Music-Mixed. (1 h)****MSC 177. Music Theatre Practicum. (1 h)**

For musicians who perform in a departmentally-sponsored theatrical production. Course may be repeated for no more than four hours. Pass/Fail only. P-POI.

**MSC 181. Individual Instruction. (0.5 h)**

One half-hour voice, instrumental, or composition lesson per week. (See the fee section of this bulletin for specific information regarding additional costs.) May be repeated. P-POI.

**MSC 182. Individual Instruction. (1 h)**

One one-hour voice, instrumental, or composition lesson per week. (See the fee section of this bulletin for specific information regarding additional costs.) May be repeated. P-POI.

**MSC 183. Advanced Voice Class. (1 h)**

Development of advanced vocal technique and repertoire. May be repeated. P-MSC 173 or POI.

**MSC 184. Advanced Theatrical Singing. (1 h)**

Development of advanced theatrical singing technique and performance of musical theater repertoire. May be repeated. P-MSC 174 or POI.

**MSC 185. Opera Workshop. (1 h)**

Study, staging, and performance of standard and contemporary operatic works. May be repeated P-POI.

**MSC 186. Conducting. (3 h)**

A study of choral and instrumental conducting techniques. P-MSC 131 or POI.

**MSC 200. Music Events. (0 h)**

Attendance at music department events to satisfy requirements for the music major (two semesters) or minor (one semester). Specific attendance requirements will be established at the beginning of each semester. Pass/Fail only.

**MSC 240. Music of Italy. (3 h)**

Study the music of Italy, with special emphasis on composers associated with Venice. Offered only at Casa Artom in Venice. (D)

**MSC 241. Music in Vienna. (3 h)**

Study of the music and musical institutions of Vienna and Central Europe. Taught in English. Offered only at the Flow House in Vienna. (D)

**MSC 282. Individual Instruction for the Performance Concentration. (1 h)**

One one-hour voice or instrumental lesson per week. (See the fee section of this bulletin for specific information regarding additional costs). May be repeated. Requires passing of the audition for the Performance Concentration of the music major. P-2 hours total of MSC 181 and/or MSC 182, and POD.

**MSC 298. Independent Study. (1-3 h)**

Project in an area of study not otherwise available in the department. Intended for music majors and minors. P-POD.



**MSC 382. Senior Recital. (2 h)**

Individual instruction preparation and public performance of a senior recital for the performance concentration of the music major. A student may not receive credit for both MSC 382 and MSC 383 and may not enroll in MSC 282 and 382 in the same semester. P-Two semesters of MSC 282 and POI.

**MSC 383. Senior Honors Recital. (3 h)**

Individual instruction preparation and public performance of a senior honors recital for the performance concentration of the music major. A student may not receive credit for both MSC 382 and MSC 383 and may not enroll in MSC 282 and MSC 383 in the same semester. P-Two semesters of MSC 282 and POD.

**MSC 397. Senior Project. (2 h)**

Completion and public presentation of a senior project for the liberal arts concentration of the music major, to be carried out under the supervision of a departmental faculty member. A student may not receive credit for both MSC 397 and 398. P-POI.

**MSC 398. Senior Honors Project. (3 h)**

Completion and public presentation of a senior honors project for the liberal arts concentration of the music major, to be carried out under the supervision of a departmental faculty member. A student may not receive credit for both MSC 397 and 398. P-POD.

## Faculty

**Chair** Jacqui Carrasco

**Associate Chair** Elizabeth Clendinning

**Professors** Jacqui Carrasco, Stewart Carter, Peter Kairoff

**Composer-in-Residence and Professor** Dan Locklair

**Associate Professor** Elizabeth Clendinning

**Assistant Professors** Megan Francisco, Bryon Grohman, David Geary, Larry Weng

**Director of Choral Ensembles and Assistant Professor** Christopher Gilliam

**Director of Bands and Assistant Teaching Professor** Timothy Heath

**Assistant Director of Bands and Assistant Teaching Professor** Natalie Smith

**Director of Orchestra and Assistant Teaching Professor** J. Aaron Hardwick

**Professor of the Practice** Kathryn Levy

**Associate Teaching Professor** Joanne Inkman

**Assistant Teaching Professor** Marco Sartor

## Music, B.A.

### Requirements

Requires 36 hours in music and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
MSC 121	Music History and Culture I	3
MSC 122	Music History and Culture II	3
Additional Music History and Culture electives		3
MSC 131	Music Theory I	4
MSC 132	Music Theory II	4
Two Music Theory electives		6
MSC 200	Music Events (two semesters)	0
<b>Select one of the following options:</b>		
<i>Option 1: Liberal Arts Concentration</i>		

Select one additional Music History and Culture elective or Music Theory elective		3
Select three additional elective credits from the following:		3
Music History and Culture electives		
Music Theory electives		
Approved Music electives		
MSC 181	Individual Instruction	2
or MSC 182	Individual Instruction	
Music Ensembles *		2
One additional performance credit:		1
Music Ensembles *		
MSC 175	Chamber Music	
MSC 181	Individual Instruction	
or MSC 182	Individual Instruction	
MSC 397	Senior Project	
or MSC 398	Senior Honors Project	
<i>Option 2: Performance Concentration (audition required) **</i>		
MSC 382	Senior Recital	2-3
or MSC 383	Senior Honors Recital	
Music Ensembles *		4
MSC 181	Individual Instruction	2
or MSC 182	Individual Instruction	
MSC 282	Individual Instruction for the Performance Concentration	2
Three additional elective credits		3
Music History and Culture electives		
Music Theory electives		
Approved Music electives		
MSC 175	Chamber Music (Only 1 semester of MSC 175 credit will count towards electives)	

\*

The following ensembles satisfy the Music Ensembles requirement for the music major and minor: MSC 140 Orchestra; MSC 141 Wind Ensemble; MSC 142 Jazz Ensemble; MSC 145 Concert Choir; MSC 146 Chamber Choir; and MSC 150 Gamelan Ensemble. Pianists and guitarists are strongly encouraged to enroll in one of the above ensembles, but may also fulfill the ensemble requirement through participation in chamber music (MSC 175F, MSC 175G, MSC 175H).

Singers in the performance concentration must fulfill the ensemble requirement by enrolling in MSC 145 or MSC 146. Students in the performance concentration who play a band or orchestral instrument must fulfill the ensemble requirement by performing on their primary instrument in MSC 140, MSC 141 or MSC 142.

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To be admitted to the concentration in performance for the music major, a student must first successfully complete MSC 131 and at least 2 hrs. in MSC 181 and/or MSC 182 and then pass an audition before the music faculty. Students should consult their MSC 181/MSC 182 individual instructors as soon as possible about specific audition requirements. The audition should be taken by the end of the sophomore year in order to complete the MSC 282 individual instruction prerequisite for the senior recital.

## Music History and Culture Electives

Code	Title	Hours
MSC 101	Introduction to the Music of World Cultures	3
MSC 102	Introduction to Modern Popular Music	3
MSC 103	Introduction to Jazz	3
MSC 104	Music of Latin America	3
MSC 105	Performing Arts of Asia	3
MSC 106	Performing Arts of Bali	3
MSC 108	American Music	3
MSC 109	Gender, Sexuality, and Music	3
MSC 110	History of the Wind Band	3
MSC 111	History of Musical Theatre	3
MSC 112	Music and Film	3
MSC 113	Video Game Music	3
MSC 123	Special Topics in Music History & Culture	3

## Music Theory Electives

Code	Title	Hours
MSC 133	Music Theory for Western Classical Styles	3
MSC 134	Music Theory for Popular and Jazz Styles	3
MSC 135	Advanced Aural and Keyboard Skills	3
MSC 139	Special Topics in Music Theory	3

## Approved Music Electives

Code	Title	Hours
MSC 159	Improvisation	1
MSC 165	Music Production and Recording I	1.5
MSC 166	Music Production and Recording II	1.5
MSC 167	Alexander Technique for Musical Performers	0.5
MSC 186	Conducting	3

## Honors

Qualified majors (departmental GPA of 3.3, overall GPA of 3.0) are invited by the department to apply for admission to the honors program in music. To be graduated with the designation "Honors in Music," a student must successfully complete either a senior honors recital (MSC 383) or a senior honors project (MSC 398). For more information, students should consult any member of the departmental faculty.

## Music, Minor

### Requirements

Requires 19 hours:

Code	Title	Hours
MSC 131	Music Theory I	4
Select one course from:		3
MSC 100	Introduction to Western Music	
MSC 121	Music History and Culture I	
MSC 122	Music History and Culture II	
One Music History and Culture elective		3
Select one liberal arts elective:		3-4

MSC 121	Music History and Culture I	
MSC 122	Music History and Culture II	
Music History and Culture elective		
MSC 132	Music Theory II	
Music Theory elective		
Music Ensembles *		1
Individual Instruction **		1-2
MSC 181	Individual Instruction	
MSC 182	Individual Instruction	
MSC 200	Music Events (one semester)	0
Additional electives:		2-4
MSC 121	Music History and Culture I	
MSC 122	Music History and Culture II	
Music History and Culture elective		
MSC 132	Music Theory II	
Music Theory elective		
Music Ensembles *		
MSC 175	Chamber Music (one semester of any section)	
MSC 181	Individual Instruction	
or MSC 182 Individual Instruction		
Approved Music elective		

\*

The following ensembles satisfy the Music Ensembles requirement for the music major and minor: MSC 140 Orchestra; MSC 141 Wind Ensemble; MSC 142 Jazz Ensemble; MSC 145 Concert Choir; MSC 146 Chamber Choir; and MSC 150 Gamelan Ensemble. Pianists and guitarists are strongly encouraged to enroll in one of the above ensembles, but may also fulfill the ensemble requirement through participation in chamber music (MSC 175F, MSC 175G, MSC 175H).

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Minors must complete a total of two semesters of MSC 181 and/or MSC 182.

## Neuroscience (NEU)

Interdisciplinary Minor

The neuroscience minor provides an interdisciplinary approach to the study of the nervous system. Neuroscientists study how we learn, process and remember information from the molecular to the philosophical level, and examine subjects ranging from the molecular pharmacology of brain function to the mind-body problem.

Neuroscience offers a five-year dual degree program jointly sponsored by the Wake Forest University College of Arts and Sciences and the Graduate School of Arts and Science. Wake Forest University undergraduates pursuing a B.S. or B.A. degree in Wake Forest College of Arts and Sciences with a minor in Neuroscience have the opportunity to earn a research-oriented M.S. degree with concentration in Neuroscience with one additional year of study. Interested students can get more information here (<http://neuroscience.wfu.edu/5-year-neuroscience-masters-program/>).

## Contact Information

Neuroscience (<http://neuroscience.wfu.edu/>)

## Programs

### Minor

- Neuroscience, Minor

## Courses

### Neuroscience (NEU)

#### NEU 200. Introduction to Neuroscience. (3 h)

An interdisciplinary course taught by faculty representing several fields. Topics include neurophysiology, sensory biology, motor mechanisms, psychopharmacology, cognitive neuroscience, perception, and developmental neuroscience. P-BIO 150 or PSY 151, C-NEU 201 and sophomore standing. Fall only.

#### NEU 201. Neuroscience Laboratory. (1 h)

Examines principles of neuroscience ranging from the molecular and cellular to the behavioral and cognitive. Lab-3 hours. C-NEU 200. Fall only.

#### NEU 300. Neuroscience Seminars. (3 h)

Consideration of current neuroscience topics. Presentations of current research by faculty on the Reynolda Campus or the Wake Forest University School of Medicine. Readings from the primary literature will accompany the presentations. P-NEU 200 or POI. Spring only.

#### NEU 301. Topics in Neuroscience. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### NEU 302. Topics in Neuroscience. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### NEU 303. Topics in Neuroscience. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### NEU 304. Topics in Neuroscience. (1-4 h)

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated if the course title differs.

#### NEU 391. Research in Neuroscience. (2 h)

Supervised independent laboratory investigation in neuroscience. P-POI.

#### NEU 392. Research in Neuroscience. (2 h)

Continued supervised independent laboratory investigation in Neuroscience. Not to be counted toward the minor. P-NEU 391 and POI.

#### NEU 393. Research in Neuroscience. (2 h)

Continued supervised independent laboratory investigation in Neuroscience. Not to be counted toward the minor. P-NEU 392 and POI.

#### NEU 394. Research in Neuroscience. (2 h)

Continued supervised independent laboratory investigation in Neuroscience. Not to be counted toward the minor. P-NEU 393 and POI.

## Faculty

Coordinator, Associate Teaching Professor of Biology and Neuroscience Katy Lack

## Neuroscience, Minor Requirements

The minor requires a minimum of 17 hours:

Code	Title	Hours
NEU 200	Introduction to Neuroscience	3
NEU 201	Neuroscience Laboratory	1
NEU 300	Neuroscience Seminars	3
NEU 391	Research in Neuroscience *	2
Electives **		8

\*

At least one semester of research in neuroscience is required for the minor (NEU 391). The research can be conducted on the Reynolda Campus or with investigators at the Wake Forest University School of Medicine. The research project must be approved by a member of the neuroscience minor faculty.

\*\*

One of the elective courses must come from outside the student's major department.

Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this publication.

## Electives for Neuroscience

Code	Title	Hours
BIO 323 & 323L	Animal Behavior and Animal Behavior Lab	4
BIO 324	Hormones and Behavior	3
BIO 346 & 346L	Neurobiology and Neurobiology Lab	4
BIO 352	Developmental Neuroscience	4
BIO 353	Functional Neuroanatomy	3
BIO 363 & 363L	Sensory Biology and Sensory Biology Lab	4
BIO 374	Neuropharmacology	3
EDU 311	Learning and Cognitive Science	3
HES 312	Exercise and Health Psychology	3
HES 350	Human Physiology	3
LIN 330	Introduction to Psycholinguistics and Language Acquisition	3
NEU 301	Topics in Neuroscience	1-4
NEU 302	Topics in Neuroscience	1-4
NEU 303	Topics in Neuroscience	1-4
NEU 304	Topics in Neuroscience	1-4
PHI 374	Philosophy of Mind	3
PSY 243	Biopsychology	3
PSY 248	Cognitive Psychology	3
PSY 320	Physiological Psychology	3
PSY 322	Psychopharmacology	3
PSY 323	Animal Behavior	3
PSY 326	Learning Theory and Research	3
PSY 329	Perception	3
PSY 331	Research in Cognitive Psychology	3
PSY 333	Motivation of Behavior	3
PSY 338	Emotion	3
PSY 348	Clinical Neuroscience	3

Note that many of these courses have prerequisites, in some cases including introductory biology, psychology, or chemistry.

## Philosophy (PHI)

Philosophy examines such topics as consciousness, knowledge, justice, free will, good and evil, and the nature of religious experience and belief. Engagement with the central questions of philosophy is valuable in itself; it is also valuable as a means of developing analytical, critical, and imaginative skills useful in the study of most other subjects, in the pursuit of careers as varied as law, business, medicine, science, education, and the arts, and in effective participation in civic life. A liberal arts education should introduce students to rigorous thinking and writing about philosophical issues and to the reading of great philosophical texts. We help to realize this goal through the courses we offer, through one-on-one discussion with students, and by presenting lectures, colloquia, and debates open to the University and the public.

Any 3-hour philosophy course numbered PHI 220 or lower counts towards satisfying the Division I requirement. Courses taken elsewhere after a student has enrolled at Wake Forest University will not count towards satisfying the Division I requirement in philosophy.

## Contact Information

D (<http://college.wfu.edu/philosophy/>) department of Philosophy (<http://college.wfu.edu/philosophy/>)  
Tribble Hall B301, Box 7332  
Phone 336-758-5359

## Programs

### Major

- Philosophy, B.A.

### Minor

- Philosophy, Minor

## Courses

### Philosophy (PHI)

#### PHI 111. Problems of Philosophy. (3 h)

Examines the basic concepts of several representative philosophers, including their accounts of the nature of knowledge, persons, God, mind, and matter. (D)

#### PHI 112. Introduction to Philosophical Ideas. (3 h)

How and why does philosophy engage religious belief and common sense? Why is the purposive world of pre-modern life abandoned by modern naturalism, skepticism, and existentialism? How are our contemporary ideas of self and world expressions of these opposing conceptions of life, love, and meaning? (D)

#### PHI 113. Knowledge and Reality. (3 h)

Examination of three interconnected philosophic problems: the nature of existence; the distinction between truth and falsity; and the question of what it means to know. (D)

#### PHI 114. Philosophy of Human Nature. (3 h)

A study of selected topics bearing on human nature, such as free will and determinism, the relation of mind and body, personal identity and personhood, and immortality. (D)

#### PHI 115. Introduction to Philosophy of Religion. (3 h)

A study of some central issues in the philosophy of religion, such as arguments for and against the existence of God; faith and reason; the divine attributes; the nature and existence of the soul; the possibility of immortality; and religious diversity. (D)

#### PHI 116. Meaning and Happiness. (3 h)

Examines the nature of happiness and meaning and the epistemic, ethical, and political issues surrounding their pursuit. Focus varies by instructor. (D)

#### PHI 160. Introduction to Political Philosophy. (3 h)

Examines basic concepts and problems in political thought, including social and economic issues, individual rights, equality, justice, and the common good. (D)

#### PHI 161. Introduction to Bioethics. (3 h)

A study of ethical issues that arise in health care and the life sciences such as informed consent, experimentation on human subjects, truth-telling, confidentiality, abortion, and the allocation of scarce medical resources. (D)

#### PHI 163. Environmental Ethics. (3 h)

An examination of ethical issues concerning the environment as they arise in individual lives and public policy. (D)

#### PHI 164. Contemporary Moral Problems. (3 h)

A study of pressing ethical issues in contemporary life, such as abortion, euthanasia, animal rights, affirmative action, marriage, cloning, pornography, and capital punishment. (D)

#### PHI 165. Introduction to Philosophy of Law. (3 h)

An examination of prominent legal cases and their underlying principles, with an emphasis on philosophical analysis and moral evaluation. Topics include the rule of law, constitutional interpretation, judicial review, legal enforcement of morality, punishment, and freedom of speech and of religion. (D)

#### PHI 220. Logic. (3 h)

Elementary study of the laws of valid inference, recognition of fallacies, and logical analysis. (D)

#### PHI 221. Symbolic Logic. (3 h)

Introduces propositional and predicate logic, including identity and functions. Construction of proofs. Use of models to demonstrate consistency and invalidity. Application of these techniques to the assessment of arguments expressed in ordinary language.

#### PHI 232. Ancient Greek Philosophy. (3 h)

A study of the central figures in early Greek philosophy, beginning with the Presocratics, focusing primarily on Plato and Aristotle, and concluding with a brief survey of some Hellenistic philosophers. P - One PHI course or POI.

#### PHI 235. Main Streams of Chinese Philosophy. (3 h)

Survey of the main streams of Chinese philosophical thought from their ancient beginnings to their development and influence on one another in later eras.

#### PHI 237. Medieval Philosophy. (3 h)

A survey of some major philosophers from Augustine to Suarez, including Anselm, Averroes, Maimonides, Avicenna, Aquinas, Scotus and Ockham. P-One PHI course or POI.

#### PHI 239. Latin American & Latinx Philosophy. (3 h)

Surveys important texts and figures in these two related philosophical traditions, addressing issues such as colonization, liberation, identity, and immigration. P-one course in PHI. (CD)

**PHI 241. Modern Philosophy. (3 h)**

A study of the works of influential 17th and 18th century European philosophers such as Descartes, Locke, Leibniz, Berkeley, and Hume, with a concentration on theories of knowledge and metaphysics. P-One PHI course or POI.

**PHI 280. Topics in Philosophy. (1-3 h)**

Seminar and/or lecture course in selected topics. May be repeated if course title differs. P—One PHI course or POI.

**PHI 331. Plato. (3 h)**

Detailed analysis of selected dialogues, covering Plato's most important contributions to moral and political philosophy, theory of knowledge, metaphysics, and theology. P-One PHI course or POI.

**PHI 332. Aristotle. (3 h)**

Study of the major texts, with emphasis on metaphysics, ethics, and theory of knowledge. P-One PHI course (232 or 331 strongly recommended) or POI.

**PHI 333. Hellenistic Philosophy. (3 h)**

Study of the Ancient Greek and Roman philosophical schools of the Hellenistic Period, focusing on the Stoics, Sceptics, and Epicureans. P-One PHI course or POI.

**PHI 337. Thomas Aquinas. (3 h)**

Study of some major texts, with a focus on metaphysics and philosophical theology. P—One PHI course (232 strongly recommended) or POI.

**PHI 341. Kant: Theoretical Philosophy. (3 h)**

A study of Kant's principal contributions to metaphysics and the theory of knowledge. P-One PHI course (241 strongly recommended) or POI.

**PHI 342. Topics in Modern Philosophy. (3 h)**

Treatment of selected figures and/or themes in 17th and 18th century European philosophy. P-One PHI course (241 strongly recommended) or POI.

**PHI 343. Kant: Practical Philosophy. (3 h)**

Study of Kant's principal contributions to theory of action, theory of value, and moral and political philosophy. PHI 341 is not a prerequisite for this course. P-One PHI course or POI.

**PHI 352. 19th-Century European Philosophy. (3 h)**

Surveys the work of important figures in this period, such as G. W. F. Hegel, Soren Kierkegaard, Karl Marx, Rosa Luxemburg, Friedrich Nietzsche, and Edith Stein, addressing issues such as the nature of history, society, nihilism, alienation, and authenticity. P – One PHI course or POI.

**PHI 353. Heidegger. (3 h)**

Heidegger early and late. Early Heidegger: the contrast between conformism and authenticity achieved through 'being-towards-death'; meaning through communal tradition. Late Heidegger: critique of modernity's reduction of everything to 'resource'; the ethics of 'dwelling' as our proper way of being in the world. P—One PHI course or POI.

**PHI 354. Wittgenstein. (3 h)**

A study of the work of Ludwig Wittgenstein on such topics as the picture theory of meaning, truth, skepticism, private languages, thinking, feeling, the mystical, and the ethical. P-One PHI course (221 strongly recommended) or POI.

**PHI 355. Contemporary Philosophy. (3 h)**

Study of the principal works of several representative 20th century philosophers. P-One PHI course (221 strongly recommended) or POI.

**PHI 356. 20th-Century European Philosophy. (3 h)**

Surveys the work of important figures in this period, such as Max Weber, Martin Heidegger, Herbert Marcuse, Hannah Arendt, Michel Foucault, Jurgen Habermas, and Angela Davis, addressing issues such as the 'disenchantment' and technological 'rationalization' of modernity and the challenges of multiculturalism. P-One PHI course or POI.

**PHI 359. Environmental Ethics. (3 h)**

Examines the source and content of moral obligations and ethical virtues concerning our relationship to the natural world. Also listed as ENV 305. P-one course in PHI.

**PHI 360. Ethics. (3 h)**

Systematic examination of central ethical theories in the Western philosophical tradition. Such theories include Kantian deontology, utilitarianism, Aristotelian virtue ethics, and divine command theory. P-One PHI course or POI.

**PHI 361. Topics in Ethics. (3 h)**

One PHI course or POI.

**PHI 362. Social and Political Philosophy. (3 h)**

A systematic examination of the work of selected contemporary and traditional philosophers on topics such as the state, the family, distributive justice, property, liberty, and the common good. P-One PHI course or POI.

**PHI 363. Philosophy of Law. (3 h)**

Inquiry into the nature of law and its relation to morality. Classroom discussions of readings from the works of classical and modern authors focus on issues of contemporary concern involving questions of legal principle, personal liberty, human rights, responsibility, justice, and punishment. P-One PHI course or POI.

**PHI 364. Freedom, Action, and Responsibility. (3 h)**

Study of the nature of human freedom and related matters in the philosophy of action, metaphysics, and moral philosophy. P-One PHI course or POI.

**PHI 365. Philosophy of Love and Friendship. (3 h)**

Study of the historical and contemporary philosophical investigations of love and friendship. P - One PHI course or POI.

**PHI 366. Global Justice. (3 h)**

Does justice transcend national boundaries? Topics include citizenship, national sovereignty, war, human rights, humanitarian concerns, distribution of resources and burdens, and international law. P-One PHI course or POI.

**PHI 367. Philosophical Theories in Bioethics. (3 h)**

A study of the main philosophical approaches to contemporary bioethics. Each approach is examined critically and students explore how each approach informs analysis of contemporary issues in bioethics. P—One PHI course or POI.

**PHI 368. Concepts of Health & Disease. (3 h)**

Concepts of health, disease, and disability shape discussions in bioethics and health policy. This course examines and critically evaluates competing conceptions of health and disease. The implications of adopting different understandings of health and disease for bioethics and health policy are explored. P—One PHI course or POI.

**PHI 369. Philosophy and Psychology. (3 h)**

Examines philosophical issues relating to moral, social, behavioral, and/or cognitive psychology. Topics may include the existence and nature of moral character; bias, self deception, and denial; reasoning, intuition, and deliberation; and perception and consciousness. P - One PHI course or POI.



**PHI 370. Philosophy and Christianity. (3 h)**

Examination of the philosophical foundations of Christian thought and belief. Christian concepts of God and life everlasting, trinity, incarnation, atonement, prayer, sin, evil and obligation. P-One PHI course or POI.

**PHI 371. Aesthetics and the Philosophy of Art. (3 h)**

Covers such questions as: What is beauty? What is taste? What is art? Must art be beautiful? Can immoral art be good art? Readings may cover historical figures such as Plato or Kant, or may focus on contemporary writers. P-One PHI course or POI.

**PHI 372. Philosophy of Religion. (3 h)**

What is religion? Are the gods dead? Is God dead? Is religious belief a symptom of an underlying human weakness or biological process, or could it be a response to the sacred? Must believers rely on something less than knowledge? Are philosophical proofs the way to knowledge of God? What sort of problem is the “problem of evil” and what is its significance? How are religious beliefs like and unlike metaphysical, moral, and modern scientific beliefs? P – One PHI course or POI.

**PHI 373. Philosophy of Science. (3 h)**

Systematic and critical examination of major views concerning the methods of scientific inquiry, and the bases, goals, and implications of the scientific conclusions which result from such inquiry. P-One PHI course or POI.

**PHI 374. Philosophy of Mind. (3 h)**

Selection from the following topics: the mind-body problem; personal identity; the unity of consciousness; minds and machines; the nature of experience; action, intention, and the will. P-One PHI course or POI.

**PHI 375. Philosophy of Language. (3 h)**

Study of such philosophical issues about language as truth and meaning, reference and description, proper names, indexicals, modality, tense, the semantical paradoxes, and the differences between languages and other sorts of sign-systems. Also listed as LIN 375. P-One PHI course (221 strongly recommended) or POI.

**PHI 376. Epistemology. (3 h)**

The sources, scope and structure of human knowledge. Topics include: skepticism; perception, memory, and reason; the definition of knowledge; the nature of justification; theories of truth. P-One PHI course or POI.

**PHI 377. Metaphysics. (3 h)**

A survey of such issues as the nature and existence of properties, possibility and necessity, time and persistence, causation, freedom and determinism, and dualism versus materialism about the human person. P-One PHI course or POI.

**PHI 378. Philosophy of Space and Time. (3 h)**

Philosophical thought about space and time, from the Presocratics to the present. Topics may include the reality of the passage of time, paradoxes of change and motion, puzzles and the awareness of time, spacetime and relativity, and the possibility of time-travel. P-One PHI course or POI.

**PHI 379. Feminist Philosophy. (3 h)**

Examination of feminist approaches to philosophical theorizing. Topics may include feminist critiques of the scope and methods of mainstream philosophy, feminist approaches to ethics, epistemology and philosophy of language, and feminist conceptions of the self, sexuality, and moral agency. Also listed as WGS 240. P-one PHI course or POI.

**PHI 380. Philosophy of Emotion. (3 h)**

Examines the nature of emotions and their relationship to mind, knowledge, ethics, meaning, and politics. Focus varies by instructor. P-one course in PHI.

**PHI 382. Seminar in Public Philosophy. (3 h)**

Examines the role of philosophers and the contributions of philosophy in addressing substantive matters of public importance or concern. Focus varies by instructor. P-one course in Philosophy.

**PHI 385. Seminar. (3 h)**

Offered by members of the faculty on specialized topics of their choice. With permission, may be repeated for credit. P-POI.

**PHI 391. Honors I. (1.5 h)**

Directed study and research in preparation for writing an honors thesis. P- Admission to the honors program in philosophy.

**PHI 392. Honors II. (1.5 h)**

Completion of the honors thesis begun in PHI 391. Graduation with honors in philosophy requires successful defense of the honors thesis in an oral examination conducted by at least two members of the department. P-PHI 391.

**PHI 395. Independent Study. (1-3 h)**

**Faculty**

**Chair** Stavroula Glezakos

**Associate Chair** Patrick Toner

**Kenan Professor of the Humanities and Professor of Philosophy** Julian Young

**A.C. Reid Professor** Christian Miller

**Professors** Emily Austin, Adrian Bardon, Ana S. Iltis, Ralph Kennedy, Winchiat Lee

**Associate Professors** Stavroula Glezakos, Patrick Toner

**Assistant Professors** Amanda Beth Corris, Matthew Shields

**Associate Teaching Professors** Adam J. Kadlac, Clark Thompson

**Part-time Associate Teaching Professor** Hannah M. Hardgrave

**Visiting Assistant Professors** Tyron Goldschmidt, Justin Jennings

**Philosophy, B.A.**

**Requirements**

Requires 27 hours. These must include:

Code	Title	Hours
One course from each of the following groups		15
I. Ancient Greek Philosophy		
II. Modern Philosophy		
III. Value Theory		
IV. Metaphysics and Epistemology		
V. Electives		

No more than six hours of 100-level courses may be counted towards the major.

No more than 3 hours of independent study may be counted towards the major.

Only one of PHI 220 or PHI 221 (Logic and Symbolic Logic) may be counted towards the major.

No senior philosophy major may take a 100-level course.

At least 21 hours of the major must be completed at Wake Forest; exceptions require approval by the department chair. A minimum GPA of 2.0 in all courses completed in philosophy at Wake Forest is required for graduation with the major.

Students who plan to major in philosophy are strongly encouraged to complete their courses in ancient Greek philosophy and modern philosophy prior to their senior year.

Majors intending to do graduate study in philosophy are strongly advised to take the following courses:

Code	Title	Hours
PHI 221	Symbolic Logic	3
PHI 360	Ethics	3
At least one of the following:		
PHI 376	Epistemology	3
or PHI 377	Metaphysics	

Such majors should work closely with their major adviser as they consider their additional course choices.

## I. Ancient Greek Philosophy

Code	Title	Hours
PHI 232	Ancient Greek Philosophy	3
PHI 331	Plato	3
PHI 332	Aristotle	3
PHI 333	Hellenistic Philosophy	3

## II. Modern Philosophy

Code	Title	Hours
PHI 241	Modern Philosophy	3
PHI 341	Kant: Theoretical Philosophy	3
PHI 342	Topics in Modern Philosophy	3
PHI 343	Kant: Practical Philosophy	3

## III. Value Theory

Code	Title	Hours
PHI 359	Environmental Ethics	3
PHI 360	Ethics	3
PHI 361	Topics in Ethics	3
PHI 362	Social and Political Philosophy	3
PHI 364	Freedom, Action, and Responsibility	3
PHI 366	Global Justice	3
PHI 367	Philosophical Theories in Bioethics	3

## IV. Metaphysics and Epistemology

Code	Title	Hours
PHI 373	Philosophy of Science	3
PHI 374	Philosophy of Mind	3
PHI 375	Philosophy of Language	3
PHI 376	Epistemology	3
PHI 377	Metaphysics	3
PHI 378	Philosophy of Space and Time	3

## V. Electives

Code	Title	Hours
PHI 221	Symbolic Logic	3
PHI 235	Main Streams of Chinese Philosophy	3

PHI 237	Medieval Philosophy	3
PHI 239	Latin American & Latinx Philosophy	3
PHI 337	Thomas Aquinas	3
PHI 352	19th-Century European Philosophy	3
PHI 353	Heidegger	3
PHI 354	Wittgenstein	3
PHI 355	Contemporary Philosophy	3
PHI 356	20th-Century European Philosophy	3
PHI 363	Philosophy of Law	3
PHI 365	Philosophy of Love and Friendship	3
PHI 368	Concepts of Health & Disease	3
PHI 369	Philosophy and Psychology	3
PHI 370	Philosophy and Christianity	3
PHI 371	Aesthetics and the Philosophy of Art	3
PHI 372	Philosophy of Religion	3
PHI 379	Feminist Philosophy	3
PHI 380	Philosophy of Emotion	3
PHI 382	Seminar in Public Philosophy	3

## Honors

Majors with a GPA of at least 3.3 overall and at least 3.7 in philosophy are eligible to apply for entrance into the honors program in philosophy. Majors interested in applying should consult with the department chair in the second semester of their junior year. The departmental honors committee will consider all applications and notify successful candidates during the summer prior to their senior year. Completion of 15 hours in philosophy courses is prerequisite to beginning work in the honors program. Graduation with "Honors in Philosophy" requires successful completion of PHI 391 and PHI 392, a GPA at the time of graduation of at least 3.7 in philosophy and 3.3 overall, and completion and successful defense of an honors thesis in an oral examination conducted by at least two members of the department. The hours earned in PHI 391 and PHI 392 do not count towards the 27 hours required of all majors.

## Philosophy, Minor

### Requirements

The minor in Philosophy requires 15 hours. At least 9 of these hours must be earned in courses taken at Wake Forest at the 200-level or higher. Only one of PHI 220 and PHI 221 may be counted towards the minor. Students interested in minoring in philosophy should consult with the department about choosing an appropriate sequence of courses.

## Physics (PHY)

The program for each student majoring in physics is developed through consultation with the student's major adviser and may lead to either a bachelor of arts or a bachelor of science degree. The bachelor of arts degree requires a minimum of basic physics courses and allows a wide selection of electives related to the student's interests in other disciplines, such as medicine, law, and business. The bachelor of science degree is designed for students planning careers in physics.

While the physics major can be started in the sophomore year, students are encouraged to take PHY 123 (or PHY 113) and PHY 124 (or PHY 114) and MTH 111 and MTH 112 in the first year. If this sequence is followed, the physics major may be completed with considerable flexibility in exercising various options, such as the five-year BS/MS program. If

physics is not taken in the first year, the degree requirements in physics may still be completed by the end of the senior year if a beginning course is taken in the sophomore year. A candidate for the 3-2 engineering program would also complete three years of the bachelor of science physics major program prior to transfer. (Consult the chair of the department for additional information on these five-year programs.)

No student may be a candidate for a degree with a major in physics with a grade less than C in General Physics without special permission of the department. Students must achieve a minimum GPA of 2.0 in physics courses for graduation. In addition, all major students, except BS Engineering, must take the ETS Major Field Test in Physics during their senior year, or as determined by the department and communicated by the major adviser(s).

Physics courses satisfying Division V requirements must be taken at Wake Forest. Satisfactory completion of the laboratory work is required for a passing grade in all courses with a laboratory.

## Contact Information

Physics Department (<http://www.physics.wfu.edu/>)  
Olin Physical Laboratory 100, Box 7507  
Phone 336-758-5337

## Programs Majors

- Biophysics, B.S.
- Physics, B.A.
- Physics, B.S.

## Minor

- Physics, Minor

## Courses Physics (PHY)

### PHY 105. Descriptive Astronomy. (4 h)

Introductory study of the universe, from the solar system to the galaxies. No lab.

### PHY 109. Astronomy. (4 h)

An introductory study of the universe consisting of descriptive astronomy, the historical development of astronomical theories, and astrophysics. Knowledge of basic algebra and trigonometry is required. Lab-2 hours. (D)

### PHY 109L. Astronomy Lab. (0-1 h)

### PHY 110. Introductory Physics. (4 h)

A conceptual, non-calculus one-semester survey of the essentials of physics, including mechanics, wave motion, heat, sound, electricity, magnetism, optics, and modern physics. Not recommended for premedical, mathematics, or science students. A student who has credit for PHY 111, 113, 114, 123 or 124 or who is currently taking PHY 113, 114, 123 or 124 is not allowed to register for PHY 110. Lab-2 hours. (D, QR)

### PHY 110L. Introductory Physics Lab. (0 h)

### PHY 111. Mechanics Waves and Heat. (4 h)

Introduction to mechanics, wave motion, thermodynamics, and sound. Extensive use of algebra and trigonometry. Credit allowed for either PHY 111, 113 or 123 but not for more than one. Lab-2 hours. Available for transfer, AP, IB, or A-levels credit only; not approved for summer school elsewhere. (QR)

### PHY 113. General Physics I. (4 h)

Essentials of mechanics, wave motion, heat, and sound treated with some use of calculus. Recommended for science, mathematics, and premedical students. Credit allowed for either PHY 111, 113 or 123 but not for more than one. Lab-2 hours. C-MTH 111 or 112 or equivalent. (D, QR)

### PHY 113L. General Physics Lab. (0 h)

### PHY 114. General Physics II. (4 h)

Essentials of electricity, magnetism, optics, and modern physics treated with some use of calculus. Recommended for science, mathematics, and premedical students. Credit allowed for either PHY 114 or 124, but not both. Lab-2 hours. P-MTH 111 or 112 or equivalent and PHY 111, 113, or 123. (D, QR)

### PHY 114L. General Physics II Lab. (0 h)

### PHY 115. The Physics of Music. (4 h)

Introduction to the physics of music, using algebra and trigonometry. Basic physical concepts associated with motion, force and energy are applied to ideal vibrating systems, resonant systems, strings, and sound waves. Uses of these concepts are explored in relation to musical instruments the human voice, signal processing and room acoustics (D, QR).

### PHY 120. Physics and Chemistry of Environment. (4 h)

Covers the basic physical and chemical processes in the earth's atmosphere, biosphere and the oceans. Also listed as CHM 120. (D, QR)

### PHY 120L. Physics and Chemistry of the Environment Lab. (0 h)

C-PHY 120.

### PHY 123. General Physics I - Studio Format. (4 h)

In-depth introduction to mechanics, wave motion, heat, and sound treated with use of calculus and employing advanced techniques and interactive learning. Recommended for potential physics majors. Credit allowed for either PHY 111 or 113 or 123, but not more than one. Lab - 2 hours. C-MTH 111 or 112 or equivalent. (D, QR)

### PHY 123L. General Physics I - Studio Format Lab. (0 h)

### PHY 124. General Physics II - Studio Format. (4 h)

In-depth introduction to electricity, magnetism, optics, and modern physics treated with use of calculus and employing advanced techniques and interactive learning. Recommended for potential physics majors. Credit allowed for either PHY 114 or 124, but not both. Lab - 2 hours. P-MTH 111 or 112 or equivalent and PHY 111 or 113 or 123. (D, QR)

### PHY 124L. General Physics II - Studio Format Lab. (0 h)

### PHY 131. Fintech Through Physics. (4 h)

Study of basic financial technology ("fintech") topics from a statistical physics and mathematics perspective. Models will be constructed using programming and some familiarity with calculus. Lab-2 hours. C-MTH 111 or 112 or equivalent. (D,QR)

**PHY 215. Elementary Modern Physics. (3 h)**

Development of 20th-century physics and an introduction to quantum ideas. The physics department recommends that PHY 215 be taken concurrently with PHY 265. P-PHY 114 or 124 and MTH 111 or MTH 112. (D, QR)

**PHY 230. Electronics. (3 h)**

Introduction to the theory and application of transistors and electronic circuits. Credit not allowed for PHY 230 and EGR 311. Lab-three hours. P-PHY 114 or 124. (D, QR)

**PHY 262. Mechanics. (3 h)**

Study of the equations of motion describing several kinds of physical systems: velocity-dependent forces; damped and forced simple harmonic motion; orbital motion; inertial and non-inertial reference frames. Includes extensive use of computers. P-PHY 113 or 123, and MTH 205 or MTH 251, and P or C-MTH 113. (D, QR)

**PHY 265. Intermediate Laboratory I. (1 h)**

Experiments on modern physics. P or C-PHY 215.

**PHY 266. Intermediate Laboratory II. (1 h)**

Experiments on mechanics, electronics, and computer simulations. P or C-PHY 262.

**PHY 301. Physics Seminar. (0.5 h)**

Discussion of contemporary research, usually with visiting scientists. Attendance required of junior and senior physics majors. Does not count toward the six hours of electives required for the BA major. Pass/Fail only.

**PHY 303. Physics Internship. (0 h)**

Independent study in Physics under faculty mentorship. P-POI.

**PHY 307. Biophysics. (3 h)**

Introduction to macromolecules with studies of important biophysical tools, such as sedimentation, centrifugation, electrophoresis, X-ray crystallography, absorption and emission light spectroscopy, fluorescence, single molecule techniques and a survey of membrane biophysics. Also listed as BIO 307. P-BIO 150, PHY 113 or 123, PHY 114 or 124, or POI.

**PHY 310. Extragalactic Astronomy and Cosmology. (3 h)**

Topics covered include galactic structure, models for galaxies and galaxy formation, the large scale structure of the universe, the big bang model of the universe, physical processes such as nucleosynthesis in the early universe, and observational cosmology. P-PHY 262 and MTH 205 or 251. (D)

**PHY 320. Physics of Biological Macromolecules. (3 h)**

The physics of large biologically important molecules, especially proteins and nucleic acids. Topics covered include the physical basis of biomolecular structure, the energetics and statistical mechanics of biomolecular dynamics, and the electrostatics and solvation of biomolecules. Designed for students with biochemistry, chemistry, or physics backgrounds. P-PHY 113 or 123, 114 or 124. (D)

**PHY 325. Biophysical Methods Laboratory. (1.5 h)**

Experiments using various biophysical techniques such as electron paramagnetic resonance, atomic force microscopy, stopped-flow absorption spectroscopy, X-ray diffraction, and gel electrophoresis. C-PHY 307.

**PHY 335. Computational Physics. (3 h)**

An introduction to finding numerical solutions to scientific problems. Topics include understanding computational errors, differentiation, integration, interpolation, root finding, random numbers, linear systems, Fourier methods, and the solution of ODEs and PDEs. There is no computer programming prerequisite. Credit will not be given for both PHY 335 and CSC 355/MTH 355. P-MTH 113 and 205 (or instead of MTH 205, P-MTH 121 and 251), or POI.

**PHY 337. Analytical Mechanics. (1.5 h)**

The Lagrangian and Hamiltonian formulations of mechanics with applications. Taught in the first half of the fall semester. P-PHY 262, MTH 113 and 205 (or instead of MTH 205, P-MTH 121 and 251).

**PHY 339. Electricity and Magnetism. (1.5 h)**

Electrostatics, magnetostatics, dielectric and magnetic materials, Maxwell's equations and applications to radiation, relativistic formulation. PHY 339 is taught in the second half of the fall semester, following PHY 337. These should be taken in sequence. P-PHY 114 or 124, MTH 113 and MTH 205 or 251. (D)

**PHY 340. Electricity and Magnetism. (3 h)**

Electrostatics, magnetostatics, dielectric and magnetic materials, Maxwell's equations and applications to radiation, relativistic formulation. PHY 340 is taught in the spring semester after PHY 339. These should be taken in sequence. P-PHY 339. (D)

**PHY 341. Thermodynamics and Statistical Mechanics. (3 h)**

Introduction to classical and statistical thermodynamics and distribution functions. Also listed as CHM 341. Also offered in Salamanca. P-PHY 215 and MTH 113. (D)

**PHY 343. Quantum Physics. (3 h)**

Basic quantum theory and applications including the time-independent Schrodinger equation, formalism and Dirac notation, the hydrogen atom, spin, identical particles, and approximation methods. P-PHY 215, MTH 113 and 205 (or instead of MTH 205, P-MTH 121 and 251). (D)

**PHY 344. Quantum Physics. (3 h)**

Basic quantum theory and applications including the time-independent Schrodinger equation, formalism and Dirac notation, the hydrogen atom, spin, identical particles, and approximation methods. P-PHY 343. (D)

**PHY 345. Introduction to Quantum Computing. (3 h)**

Introduction to the physics of quantum information sciences and quantum computing. Lab-two hours. C-PHY 343.

**PHY 347. Intellectual Property in Science and Engineering. (1 h)**

Introduction to the process of creating and protecting intellectual property, with discussion of economic impact of IP rulings and concept of a non-disclosure agreement. Working with representative examples from physics, engineering, and biotechnology, the students, working in small teams, will analyze and create invention disclosures, patent applications, and issued patents. Recommended background: three courses from the major tracks in physics, chemistry, biology, or computer science.

**PHY 352. Physical Optics and Optical Design. (4 h)**

Interaction of light with materials; diffraction and coherent optics; ray trace methods of optical design. Lab-3 hours. P-PHY 114 or 214 and PHY 215. (D)

**PHY 352L. Physical Optics Lab. (0 h)****PHY 354. Introduction to Solid State Physics. (3 h)**

A survey of the structure, composition, physical properties, and technological applications of condensed matter. P-PHY 343. (D)



**PHY 355. Exotic Materials. (1.5 h)**

Study of materials that express exotic properties that are derived from some aspect of the system’s dimensionality, introduces the thermal, electrical, optical and magnetic properties of exotic materials systems. Discusses simple models for the structure-property relationships for a wide range of of nanoscale and low-dimensional systems. C - PHY 343.

**PHY 356. Electron-Imaging Sciences. (1.5 h)**

Introduces the theory and application of the elctron imaging systems: transmission electron microscopy (TEM) and scanning electron microscopy (SEM). Focuses on basic materials science though some biological materials will be covered. Taught as a series of lectures followed by laboratories. P - PHY 215.

**PHY 357. Scanning Probes. (1.5 h)**

Examines the theory and application of scanning tunneling microscopy and atomic force microscopy (STM/AFM). Introduces how each type of imaging works, how to model spectroscopic data, and how to use each microscope. Students will image using the STM and AFM as well as take and reduce spectroscopy data using models built in Maple or Mathematica. P - PHY 215.

**PHY 358. Kinetics of Materials. (1.5 h)**

Study of driving forces for atomic and ionic motion within solids leading to a range of materials properties from work hardening to phase transformations and formation. Atomic-level models for diffusion will be introduced as well as techniques and examples of the solution to the diffusion equation. Complements the traditional themodynamics course. C - PHY 341 and 354 or POI.

**PHY 361. Biophysics Seminar. (1 h)**

Seminal and current publications in biophysics will be studied. Each week a member of the class will make an oral presentation on a chosen publication and will lead the ensuing discussion. Pass-fail only.

**PHY 363. Condensed Matter Seminar. (1 h)**

Seminal and current publications in condensed matter physics are studies. Each week a member of the class makes an oral presentation on a chosen publication and leads the ensuing discussion. Pass-fail only.

**PHY 381. Research. (1.5-3 h)**

Library, conference, computation, and laboratory work performed on an individual basis. May be repeated for credit. P-POI.

**PHY 385. Bioinformatics. (3 h)**

Introduction to computational approaches essential to modern biological inquiry. Approaches may include large biological dataset analyses, sequence similarity and motif searches, and analysis of high-throughput genomic technologies. Emphasizes interdisciplinary interaction and communication. Also listed as CSC 385 and BIO 385. P-CSC 201 or 221 (and BIO 150, 150L, 160, and 160L if taken as BIO 385) or POI.

**PHY 391. Special Topics in Physics. (1-4 h)**

Courses in selected topics in physics. May be repeated if course content differs.

**PHY 392. Special Topics in Physics. (1-4 h)**

Courses in selected topics in physics. May be repeated if course content differs.

**Faculty**

**Chair** Daniel Kim-Shapiro  
**Professor and Harbert Family Distinguished Chair for Excellence in Teaching and Scholarship** Daniel Kim-Shapiro  
**Professor and Baker Family Endowed Chair in Physics** Oana D. Jurchescu  
**Professor and Wright Family Endowed Chair in Physics** Timo Thonhauser

**Kulynych Family Faculty Fellow, Professor and Associate Chair** Martin Guthold  
**Professor and Vice Provost for Research and Scholarly Activities** Keith Bonin  
**Professors** David L. Carroll, Natalie A. W. Holzwarth, Jed Macosko, Freddie Salsbury  
**MacDonough Family Faculty Fellow and Professor** Paul R. Anderson  
**Research Professors** George Holzwarth, George Eric Matthews, William Kerr  
**Emeritus Professor** Howard Shields  
**Associate Professors** Eric D. Carlson, Samuel S. Cho, Gregory B. Cook  
**Assistant Professors** Ajay Ram Srimath Kandada, Stephen M. Winter  
**Teaching Professor** Jack Dostal  
**Visiting Assistant Professors** Melissa Pashayan  
**Research Associate Professors** Swati Basu, Kamil Burak Ücer  
**Adjunct Professor** John D. Bourland, Michael Munley, Mark W. Roberson, Peter Santago  
**Adjunct Assistant Professor** Adam Hall  
**Affiliate Assistant Professor** Erin Henslee, Lauren Lowman

**Biophysics, B.S.  
Requirements**

Requires 23.5 hours in physics and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
PHY 123	General Physics I - Studio Format	4
or PHY 113	General Physics I	
or PHY 111	Mechanics Waves and Heat	
PHY 124	General Physics II - Studio Format	4
or PHY 114	General Physics II	
PHY 215	Elementary Modern Physics	3
PHY 230	Electronics	3-4
or EGR 311	Control Systems and Instrumentation	
PHY 262	Mechanics ****	3
PHY 265	Intermediate Laboratory I	1
PHY 266	Intermediate Laboratory II ****	1
PHY 381	Research (for a minimum of 1.5 hours) **,*	1.5-3
PHY 325	Biophysical Methods Laboratory	1-1.5
or CHM 370L	Biochemistry Lab	
or BIO 370L	Biochemistry Lab	
Select two of the following:		6
PHY 307	Biophysics	
PHY 320	Physics of Biological Macromolecules	
PHY 341	Thermodynamics and Statistical Mechanics *	
or CHM 341	Physical Chemistry I	
PHY 385	Bioinformatics	
CSC 387	Computational Systems Biology	

In addition, Graduate courses in BME or medical physics may also be substituted with permission of the instructor, office of academic advising, advisor and chair

<b>Co-Requirements</b>		
MTH 113	Multivariable Calculus	4



MTH 205	Introduction to Linear Algebra and Differential Equations	4
or MTH 121 & MTH 251	Linear Algebra I and Ordinary Differential Equations	
CHM 111 & 111L	College Chemistry I and College Chemistry I Lab	4
CHM 122 & 122L	Organic Chemistry I and Organic Chemistry I Lab	4
CHM 280	College Chemistry II	3
BIO 150 & 150L	Biology I and Biology I Lab	4
BIO 160 & 160L	Biology II and Biology II Lab	4
BIO/CHM 370	Biochemistry I: Macromolecules and Metabolism	3

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*Substitutions for PHY 341 and PHY 381 will count toward the required hours in physics.*

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*Students may substitute CHM 391/ CHM 392 or BIO 391/ BIO 392/BIO 393/ BIO 394 for PHY 381 in consultation with their adviser. Substitutions for PHY 341 and PHY 381 will count toward the required hours in physics.*

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*Students must earn a minimum C grade in MTH 113 as well as MTH 205 or MTH 121/MTH 251.*

\*\*\*\*

*Students may substitute EGR 211 for the combination of PHY 262 and PHY 266.*

Students are advised to complete math requirements as early as possible. Students are strongly encouraged to take either CSC 102 or CSC 111; early in their curriculum if possible. CSC 111 would be appropriate for majors who are interested in further study in computer science, such as through a double major or minor in Computer Science. Otherwise, we encourage our majors to take CSC 102.

No student may be a candidate for a degree with a major in biophysics with a grade less than C in General Physics without special permission of the department. Students must achieve a minimum GPA of 2.0 in physics courses for graduation.

## Honors

Highly qualified majors are invited by the department to apply for admission to the honors program in physics through the major adviser. To be graduated with the designation "Honors in Physics," students must:

- pass PHY 381
- write a paper on the results of the research in that course
- pass an oral exam on the research and related topics given by a committee of three physics faculty members
- obtain a GPA of at least 3.3 in physics and 3.0 overall

## Physics, B.A. Requirements

Requires 25 hours in physics and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
PHY 123	General Physics I - Studio Format	4
or PHY 113	General Physics I	
or PHY 111	Mechanics Waves and Heat	
PHY 124	General Physics II - Studio Format	4
or PHY 114	General Physics II	
PHY 215	Elementary Modern Physics	3
PHY 230	Electronics	3-4
or EGR 311	Control Systems and Instrumentation	
PHY 262	Mechanics ***	3
PHY 265	Intermediate Laboratory I	1
PHY 266	Intermediate Laboratory II ***	1
Select 6 hours of any other 300-level courses in the department *		6
<b>Co-Requirement</b>		
MTH 113	Multivariable Calculus	4
MTH 205	Introduction to Linear Algebra and Differential Equations	4
or MTH 205	Introduction to Linear Algebra and Differential Equations	

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*Except PHY 381. Students may substitute CHM 341 for PHY 341.*

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*Students must earn a minimum C grade in MTH 113, MTH 205 or MTH 251.*

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*Students may substitute EGR 211 for the combination of PHY 262 and PHY 266.*

MTH 251 can substitute for MTH 205 for the MTH requirement for the BA degree, but not for specific course pre- or co-requirements, unless already specified in the course description. Students are strongly encouraged to take either CSC 102 or CSC 111; early in their curriculum if possible. CSC 111 would be appropriate for majors who are interested in further study in computer science, such as through a double major or minor in Computer Science. Otherwise, we encourage our majors to take CSC 102.

No student may be a candidate for a degree with a major in physics with a grade less than C in General Physics without special permission of the department. Students must achieve a minimum GPA of 2.0 in physics courses for graduation.

## Honors

Highly qualified majors are invited by the department to apply for admission to the honors program in physics through the major adviser. To be graduated with the designation "Honors in Physics," students must:

- pass PHY 381
- write a paper on the results of the research in that course
- pass an oral exam on the research and related topics given by a committee of three physics faculty members
- obtain a GPA of at least 3.3 in physics and 3.0 overall

# Physics, B.S.

## Requirements

Requires 38 hours in physics and must include the following courses:

Code	Title	Hours
<b>Required Major Courses</b>		
PHY 123	General Physics I - Studio Format	4
or PHY 113	General Physics I	
or PHY 111	Mechanics Waves and Heat	
PHY 124	General Physics II - Studio Format	4
or PHY 114	General Physics II	
PHY 215	Elementary Modern Physics	3
PHY 230	Electronics	3
PHY 262	Mechanics	3
PHY 265	Intermediate Laboratory I	1
PHY 266	Intermediate Laboratory II	1
PHY 301	Physics Seminar (at least twice)	1
PHY 337	Analytical Mechanics	1.5
PHY 339	Electricity and Magnetism	1.5
PHY 340	Electricity and Magnetism	3
PHY 341	Thermodynamics and Statistical Mechanics *	3
PHY 343	Quantum Physics	3
PHY 344	Quantum Physics	3
The remaining hours may be satisfied with any other 300-level course in the department except PHY 381.		
<b>Co-Requirements</b>		
MTH 113	Multivariable Calculus	4
MTH 205	Introduction to Linear Algebra and Differential Equations	4
or MTH 121	Linear Algebra I	
& MTH 251	and Ordinary Differential Equations	
One additional course at the 200 level or above in statistics, mathematics, or computer science other than independent study courses is required		3-4

\*  
Students may substitute CHM 341 for PHY 341.

\*\*  
Students must earn a minimum C grade in MTH 113, MTH 205 or MTH 121/MTH 251.

Students are advised to complete math requirements as early as possible. Students are strongly encouraged to take either CSC 102 or CSC 111; early in their curriculum if possible. CSC 111 would be appropriate for majors who are interested in further study in computer science, such as through a double major or minor in Computer Science. Otherwise, we encourage our majors to take CSC 102.

No student may be a candidate for a degree with a major in physics with a grade less than C in General Physics without special permission of the department. Students must achieve a minimum GPA of 2.0 in physics courses for graduation.

## Honors

Highly qualified majors are invited by the department to apply for admission to the honors program in physics through the major adviser. To be graduated with the designation “Honors in Physics,” students must:

- pass PHY 381
- write a paper on the results of the research in that course
- pass an oral exam on the research and related topics given by a committee of three physics faculty members
- obtain a GPA of at least 3.3 in physics and 3.0 overall

## Physics, Minor

### Requirements

Requires a total of at least 17 hours, which must include:

Code	Title	Hours
PHY 111	Mechanics Waves and Heat	4
or PHY 113	General Physics I	
or PHY 123	General Physics I - Studio Format	
PHY 114	General Physics II	4
or PHY 124	General Physics II - Studio Format	
PHY 215	Elementary Modern Physics	3
PHY 262	Mechanics	3
One additional 3+ hours Physics course or one of the following:		3-4
CHM 341	Physical Chemistry I	
EGR 211	Materials and Mechanics	
EGR 311	Control Systems and Instrumentation	
Pre- or Co-requisite Courses:		
MTH 113	Multivariable Calculus	4
MTH 205	Introduction to Linear Algebra and Differential Equations	4
or MTH 251	Ordinary Differential Equations	

MTH 251 can substitute for MTH 205 for the MST requirement for the minor, but not for specific course pre- or co-requirements, unless already specified in the course description.

Students interested in the minor should contact the faculty member responsible for advising physics majors. (Inquire in Olin Physical Laboratory, Room 100.)

## Politics and International Affairs (POL)

In its broadest conception, the aim of the study of politics is to understand the way in which policy for a society is formulated and executed and to understand the moral standards by which policy is or ought to be set. This center of interest is often described alternatively as the study of power, of government, of the state, or of human relations in their political context. For teaching purposes, the study of politics has been divided by the department into the following fields:

1. American politics
2. Comparative politics

3. Political theory
4. International politics

Introductory courses in these fields provide broad and flexible approaches to studying political life.

## Divisional Credit

Only courses designated by a (D) receive divisional credit. The only exception to this rule is the following: students who have already received credit for two 100-level POL courses (6 credit hours) either through AP or transfer credit may take any 200-level course for divisional credit, with the exception of POL 280, POL 287, POL 288 or POL 289.

## Five-Year BA/MA Degree

Politics and international affairs majors who minor in Latin-American studies also have the opportunity to pursue a five-year cooperative BA/MA degree program at Georgetown University in Washington, D.C.

A student who selects politics and international affairs to fulfill the Division IV requirement must take one of the following courses:

Code	Title	Hours
Select one of the following:		
POL 113	American Government and Politics	
POL 114	Comparative Government and Politics	
POL 115	Political Theory	
POL 116	International Politics	

Students who are not majors may take upper-level courses as electives without having had lower-level courses, unless a prerequisite is specified.

## Contact Information

Department of Politics and International Affairs (<http://college.wfu.edu/politics/>)  
Kirby Hall 314A, Box 7568  
Phone 336-758-5449

## Programs

### Major

- Politics and International Affairs, B.A.

### Minor

- Politics and International Affairs, Minor

## Courses

### Politics and International Affairs (POL)

#### POL 113. American Government and Politics. (3 h)

The nature of politics, political principles, and political institutions, with emphasis on their application to the United States. (D)

#### POL 114. Comparative Government and Politics. (3 h)

An analysis of political institutions, processes, and policy issues in selected countries. Case studies will be drawn from Africa, Asia, Europe, and Latin America. (CD, D)

#### POL 115. Political Theory. (3 h)

Introduces the major concepts, questions, and ideas from across the history of political thought, to examine the nature of politics and the moral and ethical aspects of political life. (D)

#### POL 116. International Politics. (3 h)

Surveys the forces which shape relations among states and some of the major problems of contemporary international politics. (CD, D)

#### POL 201. America's First Ladies. (3 h)

Exploring American First Ladies as political and social actors.

#### POL 202. Political Structures of Present-day Spain. (3 h)

A study of the various political elements which affect the modern Spanish state. Counts as an elective for the Spanish major.

#### POL 203. Girls' Stories: Race, Politics, Pedagogy. (3 h)

Study of American politics through investigation of stories written by and about American girls in the 20th and 21st centuries.

#### POL 205. Politics of Consumer Finance. (3 h)

Examines the politics of credit and debt in the United States with an emphasis on the consumer experience, racial politics, and interview research. (CD)

#### POL 206. Public Opinion and Pro Humanitate. (3 h)

Examines how individuals develop opinions and the strengths, weaknesses of surveys. Students' final project is a survey research project which assesses the extent that the university is fulfilling its Pro Humanitate motto. Service-learning course. (QR)

#### POL 208. Race in America. (3 h)

Analyzes American racial politics using critical and historical approaches coupled with discussion of contemporary issues. (CD)

#### POL 209. US Environmental Policy and Politics. (3 h)

Explores the origins and current state of United States policies on the environment, the politics that have produced those policies, and how both continue to evolve. Attention to the policy formation process, the institutions and groups that influence American policy concerning the environment, and the major environmental laws and controversies surrounding them, with particular attention to the role and functioning of the US Environmental Protection Agency. While focusing on the American experience, recognizes the impacts of US policies on the rest of the world.

#### POL 210. Topics In United States Politics and Policy. (1-3 h)

An intensive study of one or more major problems in contemporary United States politics and policy. Course may be retaken for credit if topic varies.

#### POL 211. Political Parties, Voters, and Elections. (3 h)

An examination of party competition, party organizations, the electorate and electoral activities of parties, and the responsibilities of parties for governing.

#### POL 212. U.S. Policymaking in the Twenty-first Century. (3 h)

Examines the contemporary United States policymaking process. Special attention to ways issues become important and contributions of different political actors, institutions, and ideologies in the passage or rejection of policy proposals. Considers a range of social, economic, and regulatory policies.

#### POL 213. Economic Inequality and American Politics. (3 h)

Examines patterns of economic inequality in the United States, weighs competing causal explanations for changing distributions of income and wealth, and investigates the effects of this inequality on American democracy.

**POL 214. Latina/o/x Politics. (3 h)**

Examines the contemporary role of Latinas/os/xs as a U.S. minority group with emphasis on Latina/o/x immigration to the U.S. and North Carolina, immigration attitudes, Latina/o/x representation, political identity, political participation, education and interracial coalition formations. Service-learning course.

**POL 215. Citizen and Community. (3 h)**

An examination of the role and responsibilities of citizens in democratic policymaking. Includes discussion of democratic theory, emphasis on a policy issue of national importance (i.e. poverty, crime, environment), and involvement of students in projects that examine the dimension of the issue in their community. Service Learning.

**POL 216. Black Women in US Politics and Media. (3 h)**

Black women's participation in American politics and media.

**POL 217. Politics and the Mass Media. (3 h)**

Exploration of the relationship between the political system and the mass media. Two broad concerns will be the regulation of the mass media and the impact of media on political processes and events.

**POL 218. Congress and Policymaking. (3 h)**

An examination of the composition, authority structures, external influences, and procedures of Congress with emphasis on their implications for policymaking in the United States.

**POL 219. Political Participation. (3 h)**

Examines political participation in the United States, with emphasis on electoral and non-electoral avenues through which individuals and groups wield influence in politics and government, including voting, interest groups, and social movements. Service-learning course.

**POL 220. The American Presidency. (3 h)**

Explores the interaction of the presidential office and the individual contemporary presidents in an evolving political context.

**POL 221. State Politics. (3 h)**

An examination of institutions, processes, and policies at the state level, with emphasis on the different patterns of governance in the various states and the consequences of the recent revitalization of state governments.

**POL 222. Urban Politics. (3 h)**

Examines the political structures and processes in American cities and suburbs as they relate to the social, economic, and political problems of the metropolis. Service-learning Course. (CD)

**POL 223. African American Politics. (3 h)**

A survey of selected topics, including African American political participation, political organizations, political leadership, and political issues. It will also show the relationship of these phenomena to American political institutions and processes as a whole.

**POL 225. American Constitutional Law: Separation of Powers and the Federal System. (3 h)**

Analysis of Supreme Court decisions affecting the three branches of the national government and federal/state relations.

**POL 226. American Constitutional Law: Civil Rights and Liberties. (3 h)**

Analysis of Supreme Court decisions involving the Bill of Rights and the Fourteenth Amendment of the U.S. Constitution.

**POL 227. Politics, Law, and Courts. (3 h)**

Analysis of the intersection of law and democratic politics through consideration of judicial selection, judicial decision making, and the roles of various legal actors, including judges, lawyers, and juries.

**POL 228. Politics of Public Education. (3 h)**

Introduces students to some of the most popular and contentious contemporary education policy debates and discusses what the U.S. school system tells us about the country's fundamental political commitments.

**POL 230. Political and Economic Development of Western Europe. (3 h)**

Analyzes the historical antecedents of Western European regime outcomes in the interwar period in order to explain the survival or collapse of democracy in the 1920s and 1930s in Great Britain, France, Germany, and Italy. Explores contrasting responses to economic, social, and political challenges since the middle ages, including the commercialization of agriculture, national unification, revolution, and the timing and strength of industrialization.

**POL 231. Western European Politics. (3 h)**

Comparative analysis of political institutions, processes, and policy issues in selected West European countries. Special attention will be given to case studies involving Great Britain, France, Germany, Italy and to the process of European integration.

**POL 232. Politics in Russia and Eastern Europe. (3 h)**

Analysis of the political, economic, and social patterns of the region, emphasizing the dynamics and divergent outcomes of the regime transitions after the fall of communism in Central and Eastern Europe and the former Soviet Union.

**POL 233. The Politics of Modern Germany. (3 h)**

Study of the historical legacy, political behavior, and governmental institutions of contemporary Germany.

**POL 234. United Kingdom Politics in a Global Age. (3 h)**

Introduces the nature and content of contemporary United Kingdom politics by placing those politics in a wider analysis of United Kingdom history, society, and international positions. (CD)

**POL 235. European Integration. (3 h)**

Combines different approaches to the study of Europe by examining European integration-as highlighted by the development of the European Union-through the lenses of history, politics, culture, and economics.

**POL 236. Government and Politics in Latin America. (3 h)**

Comparative analysis of the institutions and processes of politics in the Latin American region. (CD)

**POL 237. The Comparative Politics of Welfare States. (3 h)**

Examines the historical development and cross-national variation of welfare states in advanced industrial societies, including the United States and Western European democracies. Assesses characteristic policy challenges and responses across a number of shared domains, including pensions, health care, anti-poverty programs, family benefits, and labor-market policy.

**POL 238. Comparative Economic and Political Development. (3 h)**

Overview of the relationship among economic development, socio-structural change, and politics since the creation of the international capitalist system in the sixteenth century. Explores classic debates and paradigms in political economy and applies them to particular policy and institutional domains, including macroeconomic policy, finance, globalization, the challenges of late development, and the welfare state.

**POL 239. State, Economy, and International Competitiveness. (3 h)**

Introduces a range of important case studies of national economic performance to illustrate the role of public policy in economic performance in a number of leading industrial economies (the U.S., United Kingdom, Germany, Sweden, China, and Japan).

**POL 240. Politics of Human Rights. (3 h)**

Looks at the policy of dilemmas that both restored and new democracies face when dealing with past human rights violations and how they engage in structuring the domain of human rights in a changed global environment. (CD)

**POL 241. Contemporary India. (3 h)**

Examines the opportunities and constraints facing modern India across a range of issues including politics, international relations, economics, religion, caste and the environment.

**POL 242. Topics in Comparative Politics. (1-3 h)**

An intensive study of one or more major problems in contemporary comparative politics. Course may be retaken for credit if topic varies.

**POL 243. Corruption. (3 h)**

This course addresses the politics of appropriation of public resources for private gain, with a focus on why corruption levels vary across countries, why people choose to participate in corruption, and the effects of corruption on politics and the economy.

**POL 244. Contemporary Southeast Asia. (3 h)**

Surveys major issues related to politics and governance in Southeast Asia, with examples drawn from Malaysia, Singapore, Indonesia, Philippines, and Thailand.

**POL 245. Ethnonationalism. (3 h)**

This course is concerned with the role of ethnicity in world politics. It focuses on both theoretical and substantive issues relating to: (a) the nature of ethnicity and ethnic group identity; (b) the sources of ethnic conflict; (c) the politics of ethnic conflict; (d) the policy management of ethnic conflict; and (e) international intervention in ethnic conflict.

**POL 246. Politics and Policies in South Asia. (3 h)**

A survey of major issues relevant to politics and policy in India, Pakistan, Bangladesh, and Sri Lanka. (CD)

**POL 247. Identity and Inclusion in the Global South. (3 h)**

Explores major issues related to the political construction and mobilization of identity, and the production of pathological outcomes including violence, discrimination, and marginalization of the ethnic, religious, national, and sexual "other".

**POL 248. Chinese Politics. (3 h)**

A survey of the political institutions and processes in China (People's Republic of China and Republic of China). Emphasis on group conflict, elites, ideology, as well as current policy changes in the process of modernization.

**POL 249. Humanitarian Action in a Political World. (3 h)**

Examines ethical dilemmas of providing humanitarian assistance during conflict, including Afghanistan, Bosnia, Nigeria, and the Holocaust. Debates political and moral reasoning that underpins international laws of war.

**POL 250. Afghanistan, Pakistan, Iraq and U.S. Policy since 2001. (3 h)**

Broadly addresses the phenomena of U.S. involvement in two ongoing conflicts-the Afghanistan war and the Iraq war. Focuses on the respective domestic and international politics and policies of the four main actors relevant to the conflicts: U.S., Afghanistan, Pakistan, and Iraq.

**POL 251. Politics of Forced Migration. (3 h)**

Addresses major questions about forced migration in international politics, such as: What causes people to flee their homes? What are the effects of forced displacement on the host communities? How should considerations of human rights and international law affect our understanding of forced migration?

**POL 252. Topics in International Politics. (1-3 h)**

An intensive study of one or more major problems of contemporary international politics. Course may be retaken for credit if topic varies.

**POL 253. International Political Economy. (3 h)**

Analyzes major issues in the global political economy including theoretical approaches to understanding the tension between politics and economics, monetary and trade policy, North-South relations, environmentalism, human rights and democratization.

**POL 254. U.S. Foreign Policy. (3 h)**

Analyzes the historical and theoretical perspectives shaping U.S. engagement with the world past and present. Applies this understanding to current problems in U.S. foreign policy.

**POL 255. Terrorism and Political Violence. (3 h)**

A historical survey and analysis of terrorism and other forms of political violence, such as insurgency and guerrilla warfare involving state and non-state actors. Focuses on a variety of cases along with and examination of the challenges of counter-terrorism and counter-insurgency in the contemporary global system.

**POL 256. International Security. (3 h)**

Explores various theoretical approaches to security studies and contemporary security issues, with special attention to domestic variables, the use of force, strategic culture, weapons of mass destruction, the political economy of national security, and terrorism.

**POL 257. Politics of International Development. (3 h)**

Examines why some nations develop at a quite fast pace while others - even when rich in natural resources - don't. Explores the impact of colonial history, state-formation, civil conflicts, governance issues, and rising powers on economic growth and development.

**POL 258. International Relations of South Asia. (3 h)**

Examines the foreign policy decision making in India, Pakistan, Bangladesh and Sri Lanka vis-a-vis each other and major powers such as the U.S., Russia, and China.

**POL 259. Palestine and the Arab-Israeli Conflict. (3 h)**

Explores the nature and scope of the conflict with particular emphasis on the time period post-1967 and the respective policies of the three most significant actors in the conflict: the U.S., Israel and Palestine.

**POL 260. United States and East Asia. (3 h)**

An analytical survey of United States interaction with East Asia, with special emphasis on the strategic security and the political economy of the region. (CD)

**POL 261. International Law. (3 h)**

Analyzes major issues in public international law including sources of international law, state sovereignty, territorial jurisdiction, treaties, peaceful settlement of disputes, human rights, and the relationship between international law and domestic law.

**POL 262. International Organizations. (3 h)**

A survey of the philosophy, principles, organizational structure, and decision-making procedures of international organizations. In addition to the United Nations system, this course will analyze various international organizations in issues such as collective security, trade, economic development, human rights protection, and the environment.

**POL 263. U.S. Foreign Policy in the Middle East. (3 h)**

A critical analysis of U.S. foreign policy with respect to the Middle East since the Second World War. This course utilizes a case study method of instruction.



**POL 264. Moral Dilemmas in International Politics. (3 h)**

Examines moral dilemmas in international politics with reference to theories and cases. Topics include just war doctrine, responsibility of rich countries toward poor countries, exportability of capitalism and democracy, and legitimacy of humanitarian intervention.

**POL 265. Postcolonial International Relations. (3 h)**

Explores alternative ways of thinking about the “international” other than through mainstream (Eurocentric) International Relations (IR) theories and frameworks. (CD)

**POL 266. Modern Civil Wars. (3 h)**

Examines and assesses competing theories of civil war, including economic, ethnic, religious, and ideological explanations. It also addresses dilemmas raised by civil war such as the spread of HIV/AIDS, the proliferation of private security companies, and the abuse of humanitarian aid.

**POL 267. Intelligence and International Politics. (3 h)**

Explores various facets of the world of intelligence and espionage in international politics, including intelligence collection and analysis, covert action, counterintelligence, the role of foreign intelligence agencies the relationship of the intelligence community to other political institutions, and important ethical issues and controversies in the field of intelligence today.

**POL 268. International Conflict Resolution. (3 h)**

Explores various approaches to conflict resolution through readings, case studies, and simulations. Issues include: negotiation and mediation, dealing with war criminals, tradeoffs between justice and peace, and the role of the international community.

**POL 269. Topics in Political Theory. (1-3 h)**

An intensive study of one or more major topics in political theory. Course may be retaken for credit if topic varies.

**POL 270. Ethics and Agency. (3 h)**

Explores the question of agency in relation to ethics with attention to practices of ethics that focus on judgment. Selected writings from Aristotle, Arendt, and Foucault.

**POL 271. Classical Political Thought. (3 h)**

Examination of the nature and goals of classical political theorizing, which may include thinkers from the ancient civilizations of the Mediterranean—such as the Greek city-states and the Roman Republic—as well as China, the Middle East, and indigenous societies.

**POL 272. Democratic Theory. (3 h)**

Examination of the theoretical underpinnings of democracy and some of the critiques of those foundations. Focus will be on understanding some of the major theories of democracy and on how key democratic concepts are defined differently within these various traditions.

**POL 273. Marx, Marxism and Post-Marxism. (3 h)**

Examines Marx's early humanistic writings, his later philosophy, the vicissitudes of 20th-century Marxism and attempts to reorient Marx's theory in light of developments in contemporary political thought and practice.

**POL 274. Arab and Islamic Political Thought. (3 h)**

Examines the history, basic concepts, central questions and preoccupations of political thought in the Arab region, while critically analyzing what it means to engage political theory comparatively. (CD)

**POL 275. American Political Thought. (3 h)**

Examines texts from the founding to the present that consider debates over the Constitution and the power of government; liberal and republican theories of citizenship; race, class and gender inequality; tensions between diversity and national identity; theories of justice; and the development of progressive, conservative, and libertarian political ideologies in the United States.

**POL 276. Modern Political Thought. (3 h)**

Examines political thought from the 19th century to the present with a focus on the relationship between ethics and politics. Topics include the nature of the good life, freedom, and the political society that makes them possible.

**POL 277. Feminist Political Thought. (3 h)**

Introduction to feminist thought and its implications for the study and practice of political theory. Topics include feminist critiques of the Western political tradition and schools of feminist political theory. Also listed as WGS 301. (CD)

**POL 280. Research Methods. (3 h)**

Overview of the qualitative and quantitative methods prominent in studying political science. Attention is given to the relationships between theory, method, and findings by focusing on the need to make systematic empirical observations. P-STA 111 must be taken before or concurrently with this course.

**POL 281. Environmental Political Thought. (3 h)**

Explores the human relationship to the natural world and the implications of this relationship to political issues, such as the preservation of wilderness, industrialization, consumerism, public and private ownership, and social justice.

**POL 282. Gandhi. (3 h)**

Explores the life, political philosophy, and the method of non-violent coercion (satyagraha) of Gandhi. Students define and implement group projects designed to promote change within the context of Gandhian methodology. Service-learning course.

**POL 283. Advanced Quantitative Methods for Social Research. (3 h)**

Prepares students for the quantitative analysis of social data, including causal inference techniques, using R and RStudio. P-POL 280. (QR)

**POL 286. Topics in Political Science. (1-3 h)**

Intensive study of one or more topics in the discipline. May not be used to meet one of the four area requirements. May be repeated for credit. Up to 6 hours may be counted toward the major.

**POL 287. Individual Study. (2, 3 h)**

Intensive research leading to the completion of an analytical paper conducted under the direction of a faculty member. Students initiate the project and secure the permission of an appropriate instructor. May be repeated for a maximum of six hours, only three of which may count toward the major. P-POI.

**POL 288. Directed Reading. (2, 3 h)**

Concentrated reading in an area of study not otherwise available. Students initiate the project and secure the permission of an appropriate instructor. P-POI.

**POL 289. Internship in Politics. (2, 3 h)**

Field work in a public or private setting with related readings and an analytical paper under the direction of a faculty member. Students initiate the project and secure the permission of an appropriate instructor. Normally one course in an appropriate subfield is taken prior to the internship. P-POI.

**POL 300. Senior Seminar in Political Science. (4 h)**  
Readings and research on selected topics. P-POL 280 and STA 111.

## Faculty

**Chair** John Dinan  
**Associate Chair** Betina Cutaia Wilkinson  
**Presidential Endowed Professor** Melissa Harris-Perry  
**Professors** Michaelle Browers, Neil DeVotta, John Dinan, Katy J. Harriger, Charles H. Kennedy, Wei-chin Lee, Peter M. Siavelis, Will Walldorf  
**Worrell Professor** Mark Vail  
**Associate Professors** Lina Benabdallah, Sara Dahill-Brown, Justin Esarey, Andrius Galisanka, Sarah Lischer, Betina Cutaia Wilkinson  
**Assistant Professors** Claire Crawford, Victor Hernandez-Huerta, Adam Lenton, Risa Toha, Tess Wise  
**Teaching Professor** Tom Brister  
**Associate Teaching Professor** Jack Amoureux  
**Visiting Assistant Professor** Adrian Halliez, Gentry Jenkins, James Morone  
**Adjunct Lecturer** Stan Meiburg

## Politics and International Affairs, B.A.

### Requirements

Consists of 31 hours, of which, in all but exceptional cases, at least 21 hours must be completed at Wake Forest. Where students take politics courses abroad, they have to be in Wake Forest approved programs and/or must have been certified by the department chair. The required courses for the major include the following:

Code	Title	Hours
<b>Required Major Courses</b>		
Complete at least three credit hours of coursework in each of the following four fields of Politics:		12
I. American Politics		
II. Comparative Politics		
III. Political Theory		
IV. International Politics		
POL 280	Research Methods *	3
POL 300	Senior Seminar in Political Science (normally taken in the senior year)	4
<b>Co-Requirements</b>		
STA 111	Elementary Probability and Statistics	4
Select no more than six hours of 100-level Introductory Courses ***		6
No more than three hours for any one or any combination of the following courses:		3
POL 287	Individual Study	
POL 288	Directed Reading	
POL 289	Internship in Politics	

\*  
*The methods course is a prerequisite for the senior seminar and students are expected to take the methods course prior to the end of their junior year and, in any case, prior to the senior seminar.*

\*\*  
*Must be completed prior to or in concurrence with POL 280.*

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*Majors may not take the introductory courses during their senior year.*

Highly motivated students who would like to further expand or apply their study beyond the normal course of offerings can undertake internships, individual studies, or directed readings if they fulfill the minimum overall GPA requirements of 3.0.

No course taken on a pass/fail basis can count towards the major. Transfer hours toward the major are awarded on an individual case-by-case basis at the discretion of the department chair. Students who receive a score of 5 on political science Advanced Placement (AP) exams may count the hours towards major credit. These credits may not be used to satisfy sub-field requirements. A minimum GPA of 2.0 in all courses completed in politics and international affairs at Wake Forest is required for graduation with the major.

The senior seminar provides an opportunity for majors to experience something comparable to a graduate seminar. As such, it is conducted more by discussion than by lecture and enables students to read and reflect upon advanced scholarly material. The seminar also offers students the opportunity in their final year to create a research paper of greater length and sophistication than is customary and to develop the research and writing skills appropriate to the task.

### I. American Politics

Code	Title	Hours
POL 113	American Government and Politics	3
POL 201	America's First Ladies	3
POL 203	Girls' Stories: Race, Politics, Pedagogy	3
POL 205	Politics of Consumer Finance	3
POL 206	Public Opinion and Pro Humanitate	3
POL 208	Race in America	3
POL 209	US Environmental Policy and Politics	3
POL 210	Topics In United States Politics and Policy	3
POL 211	Political Parties, Voters, and Elections	3
POL 212	U.S. Policymaking in the Twenty-first Century	3
POL 213	Economic Inequality and American Politics	3
POL 214	Latina/o/x Politics	3
POL 215	Citizen and Community	3
POL 216	Black Women in US Politics and Media	3
POL 217	Politics and the Mass Media	3
POL 218	Congress and Policymaking	3
POL 219	Political Participation	3
POL 220	The American Presidency	3
POL 221	State Politics	3
POL 222	Urban Politics	3
POL 223	African American Politics	3
POL 225	American Constitutional Law: Separation of Powers and the Federal System	3
POL 226	American Constitutional Law: Civil Rights and Liberties	3
POL 227	Politics, Law, and Courts	3
POL 228	Politics of Public Education	3

## II. Comparative Politics

Code	Title	Hours
POL 114	Comparative Government and Politics	3
POL 230	Political and Economic Development of Western Europe	3
POL 231	Western European Politics	3
POL 232	Politics in Russia and Eastern Europe	3
POL 233	The Politics of Modern Germany	3
POL 234	United Kingdom Politics in a Global Age	3
POL 235	European Integration	3
POL 236	Government and Politics in Latin America	3
POL 237	The Comparative Politics of Welfare States	3
POL 238	Comparative Economic and Political Development	3
POL 239	State, Economy, and International Competitiveness	3
POL 240	Politics of Human Rights	3
POL 241	Contemporary India	3
POL 242	Topics in Comparative Politics	3
POL 243	Corruption	3
POL 244	Contemporary Southeast Asia	3
POL 245	Ethnonationalism	3
POL 246	Politics and Policies in South Asia	3
POL 247	Identity and Inclusion in the Global South	3
POL 248	Chinese Politics	3

## III. Political Theory

Code	Title	Hours
POL 115	Political Theory	3
POL 269	Topics in Political Theory	3
POL 270	Ethics and Agency	3
POL 271	Classical Political Thought	3
POL 272	Democratic Theory	3
POL 273	Marx, Marxism and Post-Marxism	3
POL 274	Arab and Islamic Political Thought	3
POL 275	American Political Thought	3
POL 276	Modern Political Thought	3
POL 277	Feminist Political Thought	3
POL 281	Environmental Political Thought	3

## IV. International Politics

Code	Title	Hours
POL 116	International Politics	3
POL 249	Humanitarian Action in a Political World	3
POL 250	Afghanistan, Pakistan, Iraq and U.S. Policy since 2001	3
POL 251	Politics of Forced Migration	3
POL 252	Topics in International Politics	3
POL 253	International Political Economy	3
POL 254	U.S. Foreign Policy	3
POL 255	Terrorism and Political Violence	3
POL 256	International Security	3

POL 257	Politics of International Development	3
POL 258	International Relations of South Asia	3
POL 259	Palestine and the Arab-Israeli Conflict	3
POL 260	United States and East Asia	3
POL 261	International Law	3
POL 262	International Organizations	3
POL 263	U.S. Foreign Policy in the Middle East	3
POL 264	Moral Dilemmas in International Politics	3
POL 266	Modern Civil Wars	3
POL 267	Intelligence and International Politics	3
POL 268	International Conflict Resolution	3

## Honors

Students who are interested in the requirements for honors in the major should consult the honors guidelines, which are available at [www.wfu.edu/politics](http://www.wfu.edu/politics). Students who meet these requirements will graduate with “Honors in Politics and International Affairs.”

## Politics and International Affairs, Minor

### Requirements

Consists of 18 hours. Fifteen of the hours must be taken at Wake Forest.

Code	Title	Hours
Select no more than six hours of 100-level Introductory Courses*		6
Select no more than three hours of any one or any combination of the following courses:		3
POL 287	Individual Study	
POL 288	Directed Reading	
POL 289	Internship in Politics	

\*

*Minors are not allowed to take 100-level courses in their senior year.*

Highly motivated students who would like to further expand or apply their study beyond the normal course of offerings can undertake internships, individual studies, or Directed readings if they fulfill the minimum GPA requirements of 3.0.

No course taken on a pass/fail basis can count towards the minor. Transfer hours toward the minor are awarded on an individual case-by-case basis at the discretion of the chair. A minimum GPA of 2.0 in all courses completed in politics and international affairs at Wake Forest is required for graduation with the minor.

## Psychology (PSY)

The psychology department's goal is to provide majors with broad exposure to basic areas of psychology, along with an in-depth understanding of the methods by which psychological research is conducted. Regardless of whether your ultimate career goal is to become an applied psychologist (e.g., clinical psychologist, counselor, social worker, or consultant), to conduct behavioral research, to become a college professor, or to enter another profession altogether (e.g., law, business, medicine), a psychology major can be useful. This is because

it provides in-depth knowledge about human thought, emotion, and behavior, which is

- relevant to any career; and
- through learning how psychologists research human thought, emotion, and behavior,
- students develop intellectual skills that allow them to generate and evaluate knowledge in many areas, including but not limited to psychology.

Thus, the Wake Forest psychology department aims to provide a rigorous and stimulating undergraduate education in both content and methods of psychology. Our department, like most undergraduate liberal arts departments, emphasizes research over applied work and research is a central component of many courses. A research emphasis in an undergraduate program provides the best preparation for applied graduate work as well as a strong foundation for a wide array of jobs.

PSY 151 is a prerequisite to all courses of a higher number. Courses numbered below 151 do not count toward Division IV requirements or toward the major in psychology. PSY 310, PSY 311, PSY 312, or special permission of the instructor is prerequisite for some 300-level courses. See individual course descriptions for specific information. A minimum GPA of 2.0 or higher in psychology courses is required to graduate with a major or minor in psychology.

## Contact Information

Department of Psychology (<http://college.wfu.edu/psychology/>)  
Greene Hall 415, Box 7778  
Phone 336-758-5424

## Programs

### Major

- Psychology, B.A.

### Minor

- Psychology, Minor

## Courses

### Psychology (PSY)

#### PSY 100. Learning to Learn. (3 h)

A course designed for first and second year students who wish to improve their academic performance through the application of learning, study, memory, and time management strategies. By permission of the instructor only. Pass/Fail only.

#### PSY 151. Introductory Psychology. (3 h)

A systematic survey of psychology as the scientific study of behavior. Prerequisite to all courses of a higher number. (D)

#### PSY 241. Developmental Psychology. (3 h)

Surveys physical, emotional, cognitive, and social development in humans from conception to death. P-PSY 151. (D)

#### PSY 243. Biopsychology. (3 h)

An introduction to the biological substrates and processes that govern behavior. P- PSY 151. (D)

#### PSY 245. Survey of Abnormal Behavior. (3 h)

Study of problem behaviors such as depression, alcoholism, antisocial personality, the schizophrenias, and pathogenic personality patterns, with emphasis on causes, prevention, and the relationships of these disorders to normal lifestyles. P-PSY 151. (D)

#### PSY 248. Cognitive Psychology. (3 h)

Surveys theory and research on cognitive processes. Emphasizes memory, attention, visual and auditory information processing, concept identification/formation, and language. P- PSY 151. (D)

#### PSY 255. Personality. (3 h)

Survey of theory and research on the structure and function of human personality, with attention to the relationship to cognition, emotion, motivation, and behavior. P-PSY 151. (D)

#### PSY 260. Social Psychology. (3 h)

A survey of the field, including theories of social behavior, interpersonal attraction, attitudes and attitude change, and group behavior. P-PSY 151. (D)

#### PSY 265. Human Sexuality. (3 h)

Explores the psychological and physiological aspects of human sexuality, with attention to sexual mores, sexual deviances, sexual dysfunction, and sex-related roles. P-PSY 151. (D)

#### PSY 267. Stress and Coping. (3 h)

A cross-disciplinary survey of theory and research on the social, biological, cognitive, and developmental mechanisms underlying stress and coping with stress. P-PSY 151. (D)

#### PSY 268. Industrial/Organization Psychology. (3 h)

Psychological principles and methods applied to problems commonly encountered in business and industry. P-PSY 151. (D)

#### PSY 270. Topics in Psychology. (1.5 h)

Focused in-depth review of current theory and research on a selected topic in the field. P-PSY 151.

#### PSY 275. Internship in Psychology. (0-3 h)

Field work in pre-approved settings under the supervision of qualified professionals. Related readings and a term paper required. Students must apply and secure permission from designated Psychology Department faculty member who will assign final grade. Students desiring to propose internship that has not been pre-approved must do so at least 1 month before the proposed start of the internship, following standard department procedures. Internships will not be approved for credit after the internship has already begun. Credits cannot count toward minimum required for major or minor. Pass/Fail only. Open only to declared psychology majors or minors with a minimum GPA of 2.75. Maximum 3 hours. P-PSY 310 or 311 and Permission of the Department (POD).

#### PSY 278. Psychology of Memory. (3 h)

A study of specialized knowledge regarding the most relevant aspects of memory function and important investigative techniques in this field. (D)

#### PSY 280. Directed Study. (1-3 h)

Student research performed under faculty supervision. P-PSY 151 and approval of faculty member prior to registration.

#### PSY 310. Methods in Psychological Research. (3 h)

Introduces statistics and research design for students minoring in psychology. P-PSY 151 (D, QR)

#### PSY 311. Research Methods I. (4 h)

Design and statistical analysis of correlational research. Lab-twice weekly. P-At least one course in addition to PSY 151. (QR, D)



**PSY 312. Research Methods II. (4 h)**

Design and statistical analysis of experimental methods. Lab-twice weekly. P-PSY 311. (QR)

**PSY 313. History and Systems of Psychology. (3 h)**

The development of psychological thought and research from ancient Greece to the present. Normally offered only fall semester. Senior major standing only. P-Two psychology courses beyond PSY 151 or POI. (D)

**PSY 314. Special Topics in Social Psychology. (3 h)**

Theoretical and empirical examination of specialized areas within social psychology. May be repeated for credit if topic varies. P-PSY 151. (D)

**PSY 315. Special Topics in Personality Psychology. (3 h)**

Theoretical and empirical examination of specialized areas within personality psychology. May be repeated for credit if topic varies. P-PSY 151. (D)

**PSY 316. Special Topics in Developmental Psychology. (3 h)**

Theoretical and empirical examination of specialized areas within developmental psychology. May be repeated for credit if topic varies. P-PSY 151. (D)

**PSY 317. Special Topics in Experimental Psychology. (3 h)**

Theoretical and empirical examination of specialized areas within experimental psychology. May be repeated for credit if topic varies. P-PSY 151. (D)

**PSY 320. Physiological Psychology. (3 h)**

Provides an in-depth examination of the nervous system and the physiological processes that underlie sensation, motor control, thinking, and emotion. P-PSY 310 or 311 or POI.

**PSY 322. Psychopharmacology. (3 h)**

A survey of the influences of a wide range of psychoactive drugs, both legal and illegal, on human physiology, cognition, and behavior. P-PSY 151. (D)

**PSY 323. Animal Behavior. (3 h)**

A survey of laboratory and field research on animal behavior. P-PSY 310 or 311 or POI.

**PSY 326. Learning Theory and Research. (3 h)**

Theory and current research in learning, with emphasis on applications of learning principles for behavior modification and comparisons across species. P-PSY 310 or 311. P or C-PSY 312.

**PSY 329. Perception. (3 h)**

Survey of theory and research findings on various sensory systems (vision, hearing, touch, taste). P-310 or 311.

**PSY 331. Research in Cognitive Psychology. (3 h)**

In-depth examination of research in a selected area of cognitive psychology such as memory, attention, or executive function. Research projects required. P-PSY 310 or 311. P or C-PSY 312.

**PSY 333. Motivation of Behavior. (3 h)**

Surveys basic motivational concepts and related evidence. P-PSY 310 or 311. P or C-PSY 312.

**PSY 338. Emotion. (3 h)**

Survey of theory methods and research in the area of emotion. Developmental, cultural, social-psychological, physiological, personality, and clinical perspectives on emotions are given. P-PSY 310 or 311.

**PSY 341. Research in Developmental Psychology. (3 h)**

Methodological issues and selected research in developmental psychology. Research projects required. P-PSY 310 or 311. P or C-PSY 312.

**PSY 344. Abnormal Psychology. (3 h)**

Descriptive analysis of the major types of abnormal behavior with attention to organic, psychological, and cultural causes and major modes of therapy. Offered in the summer. P-PSY 151. (D)

**PSY 345. Positive Psychology: The Science of Well-Being. (3 h)**

A cross- and inter-disciplinary survey of theory and research on the conceptualization and measurement of well-being, the mechanisms that cause and maintain it, and the applicability of this research for improving the quality of lives. P-PSY 151. (D)

**PSY 346. Psychological Disorders of Childhood. (3 h)**

Survey of problems including conduct disorders, attention deficits disorders, depression, and autism. Emphasis on causes, prevention, treatment, and the relationships of disorders to normal child development and family life. P-PSY 245 or 344 or POI. (D)

**PSY 348. Clinical Neuroscience. (3 h)**

Surveys connections between abnormal neurological processes and clinical abnormalities. This implies already having an understanding of normal brain function and anatomy. P-PSY 243 or PSY 320 or PSY 322.

**PSY 351. Personality Research. (3 h)**

The application of a variety of research procedures to the study of human personality. Research projects required. P-PSY 310 or 311.

**PSY 355. Research in Social Psychology. (3 h)**

Methodological issues and selected research in the study of the human as a social animal. Research projects required. P-PSY 310 or 311.

**PSY 357. Cross-Cultural Psychology. (3 h)**

An examination of differences in psychological processes (e.g., attitudes, perception, mental health, organizational behavior) associated with cultural variation. P-PSY 151. (CD, D)

**PSY 359. Psychology of Gender. (3 h)**

An exploration of the psychological similarities and differences between human males and females, including consideration of social, cognitive, motivational, biological, and developmental determinants of behavior. P-PSY 151. (CD, D)

**PSY 362. Psychological Testing. (3 h)**

An overview of the nature of psychological assessment, emphasizing the construction and evaluation of psychological tests and the data analytic techniques underlying those processes. P-PSY 310 or 311.

**PSY 363. Survey of Clinical Psychology. (3 h)**

Overview of the field of clinical psychology. P-Psychology senior majors only or POI. (D)

**PSY 364. Stereotyping and Prejudice. (3 h)**

Theoretical and empirical examination of the processes underlying prejudice, discrimination and racism. P-PSY 151. (CD, D)

**PSY 367. Parenting and Parent-Child Relationships. (3 h)**

Surveys characteristics and issues of parenting and parent-child relationships as related to a variety of factors, including developmental changes of parent and child, family structure, and sociocultural context. P-PSY 151. (D)

**PSY 374. Research in Judgment and Decision Making. (3 h)**

A theoretical and empirical examination of how people make decisions and judgments about their lives and the world, and how these processes can be improved. P-PSY 310 or 311.

**PSY 381. Honors Seminar. (3 h)**

Seminar on selected problems in psychology. Intended primarily for students in the departmental honors program. P-PSY 311 and POI.



**PSY 383. Honors Research. (3 h)**

Seminar in selected issues in research design, followed by independent empirical research under the supervision of a member of the departmental faculty. P-PSY 311 and POI.

**PSY 392. Contemporary Issues in Psychology. (1.5 h)**

Seminar treatment of current theory and research in several areas of psychology. Required for senior majors. P-PSY 312, and senior major standing. May be repeated for credit with a different topic of content.

## Faculty

**Chair** Christy M. Buchanan

**Professors** Terry D. Blumenthal, Christy M. Buchanan, Dale Dagenbach, William W. Fleeson, R. Michael Furr, Eranda Jayawickreme, Lisa Kiang, John V. Petrocelli, Wayne E. Pratt, Eric R. Stone, Christian E. Waugh

**Research Professors** Deborah L. Best, Catherine E. Seta

**Associate Professors** Janine M. Jennings, Lara K. Kammrath, E.J. Masicampo

**Assistant Professors** Shannon T. Brady, Veronica T. Cole, S. Mason Garrison, Anthony W. Sali, Katherine E. Scott

**Associate Teaching Professors** Heath L. Greene, Melissa L. Maffeo

**Adjunct Associate Professor** Alan S. Cameron

**Adjunct Assistant Professors** Kate R. Allman, Phillip G. Batten, M. Patrick Gallagher

**Visiting Assistant Professors** Kathleen Bettencourt, Sara E. Mendonça, Leigh D. Watson

**Teacher-Scholar Postdoctoral Fellow** Emily Oor

## Psychology, B.A.

### Requirements

It is recommended that students who are considering Psychology as a major take PSY 151 in their first year.

In order to declare a Psychology major, a student must have completed at least one Psychology course for a grade at Wake Forest (excluding PSY 100), and must have a GPA of 2.0 or higher in all graded Psychology courses. The major in Psychology requires the completion of a minimum of 32 hours in Psychology, including at least 13.5 hours of electives, as well as the following required courses (with the exception of PSY 151, these required courses must be taken at Wake Forest):

Code	Title	Hours
PSY 151	Introductory Psychology	3
PSY 311	Research Methods I	4
PSY 312	Research Methods II	4
PSY 392	Contemporary Issues in Psychology	1.5

Select at least one course from each of the following groups:

Group A

Group B

Students must take at least one Psychology course in addition to PSY 151 (or AP or IB Psychology) before taking PSY 311. No more than 3 hours of Directed Study (PSY 280) may be counted toward the 32 hours required for the major, and a maximum of 5 hours of PSY 280 may be counted toward the graduation requirement of 120 hours. A maximum of 3 hours of internship credit can be taken. No more than 50 hours in Psychology may be counted toward the graduation requirement of 120 hours.

Courses that are taught by another department at Wake Forest and can be counted toward the 32 hours required for the major are BEM 211, EDU 311, HES 312, and LIN 330. However, a student may not take both BEM 211 and PSY 268 for Psychology credit. If a student completes 32-34 hours in the major, a maximum of six hours of these outside-department courses or transfer credits can be counted toward the major; a maximum of three of those six hours may come from online courses. If a student completes 35 or more hours in the major, then a maximum of nine hours of these outside-department courses or transfer credits can be counted towards the major. AP or IB credit may be accepted for PSY 151, but other high school courses, dual enrollment courses, or community college courses taken after enrollment at Wake Forest are not accepted for transfer credit. The guidelines regarding credit approval for outside-department courses and transfer courses may be modified in rare and special circumstances at the discretion of the Psychology Department Chair.

## Group A

Code	Title	Hours
PSY 320	Physiological Psychology	3
PSY 326	Learning Theory and Research	3
PSY 329	Perception	3
PSY 331	Research in Cognitive Psychology	3
PSY 333	Motivation of Behavior	3
PSY 338	Emotion	3

## Group B

Code	Title	Hours
PSY 341	Research in Developmental Psychology	3
PSY 351	Personality Research	3
PSY 355	Research in Social Psychology	3
PSY 362	Psychological Testing	3
PSY 374	Research in Judgment and Decision Making	3

## Honors

Highly qualified majors are invited by the department to participate in the honors program in psychology. Students must take PSY 311 no later than fall of the junior year in order to be considered for the honors program. To be graduated with the designation "Honors in Psychology," the student must:

- complete satisfactorily a special sequence of courses (PSY 381, PSY 383)
- pass an oral or written examination
- earn an overall GPA of 3.2 with an average of 3.5 on work in psychology

In addition, the honors student normally has a non-credit research apprenticeship with a faculty member. For more detailed information, members of the departmental faculty should be consulted. (Students satisfactorily completing PSY 383 are not required to complete PSY 392.)

## Psychology, Minor Requirements

Requires 15 hours in psychology including:

Code	Title	Hours
PSY 151	Introductory Psychology	3
PSY 310	Methods in Psychological Research *	3
Select at least two of the following:		6
PSY 241	Developmental Psychology	
PSY 243	Biopsychology	
PSY 245	Survey of Abnormal Behavior	
PSY 248	Cognitive Psychology	
PSY 255	Personality	
PSY 260	Social Psychology	
PSY 268	Industrial/Organization Psychology	
PSY 320	Physiological Psychology	
PSY 323	Animal Behavior	
PSY 326	Learning Theory and Research	
PSY 329	Perception	
PSY 331	Research in Cognitive Psychology	
PSY 333	Motivation of Behavior	
PSY 338	Emotion	
PSY 362	Psychological Testing	
PSY 374	Research in Judgment and Decision Making	
Select one other PSY course		3

\*

*The PSY 310 requirement may be waived if the student takes either: one of the following courses: PSY 311, ECN 209, ECN 215, HES 262; or one of the following pairs of courses: BEM 201 and BEM 202, BEM 201 and FIN 203, BEM 201 and STA 112, POL 280 and STA 111, SOC 271 and SOC 272. If the PSY 310 course requirement is waived by replacement, a student will then be required to take an additional course for the Minor.*

No more than six hours will be accepted for courses taken at other schools and courses taught by another Wake Forest department to be counted toward the 15 hours required for the minor. A maximum of three of those six hours may come from online courses. The courses taught by another Wake Forest department that may be accepted are: BEM 211, EDU 311, HES 312, LIN 330. A student may not take both BEM 211 and PSY 268 for psychology credit.

## Religions, Study of (REL)

The study of religion is a way of organizing academic inquiry into how human beings and human cultures express and experience their religious needs, beliefs, and values. It involves the study of both specific religious traditions and the general nature of religion as a phenomenon of human life. Using cross-cultural and interdisciplinary approaches, religious studies investigates and interprets systems of religious belief, the history of religious traditions, the function of religion in society, and forms of religious expression such as ritual, symbols, sacred narrative, scripture, practices, theological and philosophical reflection. Students of religious studies, whether adherents of a religion or of no religion, gain tools to understand, compare, and engage the phenomenon of religion and its role in human life and culture.

## Contact Information

Department for the Study of Religions (<http://college.wfu.edu/religion/>)  
Divinity and Religious Studies Building 118, Box 7212

Phone 336-758-4830

## Programs Major

- Religious Studies, B.A.

## Minor

- Religious Studies, Minor

## Courses

### Near Eastern Languages and Literature (NLL)

#### NLL 111. Elementary Hebrew. (3 h)

A course for beginners in the classical Hebrew of the Bible, with emphasis on the basic principles of grammar and the reading of biblical texts. Both semesters must be completed.

#### NLL 112. Elementary Hebrew. (3 h)

A course for beginners in the classical Hebrew of the Bible, with emphasis on the basic principles of grammar and the reading of biblical texts. Both semesters must be completed.

#### NLL 153. Intermediate Hebrew. (3 h)

Intensive work in Hebrew grammar and syntax. Based upon the reading of selected texts. Readings emphasize post-biblical Hebrew. P-NLL 111 and NLL 112 or the equivalent.

#### NLL 211. Hebrew Literature. (3 h)

The reading and discussion of significant Biblical Hebrew texts. P-NLL 153.

#### NLL 212. Hebrew Literature II. (3 h)

The reading and discussion of significant Biblical and post-Biblical texts. On request. P-NLL 153.

#### NLL 213. Studies in Modern Hebrew. (3 h)

Intended for students with a working knowledge of Classical Hebrew, this course will explore some of the primary differences between the linguistic groups and will introduce students to the formal study of Modern Hebrew. POI required.

#### NLL 301. Introduction to Semitic Languages. (3 h)

A comparative study of the history and structure of the languages of the Semitic family. On request.

#### NLL 302. Akkadian I. (3 h)

An analysis of the phonology, morphology, and syntax of the East Semitic languages of the ancient Near East as they relate to the larger family of Semitic languages. On request.

#### NLL 303. Akkadian II. (3 h)

A continuation of Akkadian I (NLL 302) with further emphasis on building expertise in vocabulary and syntax through the reading of texts from the Middle Babylonian period. On request.

#### NLL 310. Intermediate Readings in Classical Hebrew. (1 h)

Analysis of selected texts designed to expand the student's facility with Hebrew. May be repeated for credit.

#### NLL 311. Aramaic. (3 h)

The principles of Aramaic morphology, grammar, and syntax based on readings from the Bible and other ancient Near Eastern texts. P-NLL 112 or POI. On request.

**NLL 314. Readings from the Rabbis. (3 h)**

Selected texts in Hebrew and Aramaic from the Mishna and Midrash. On request. P-NLL 211 or POI.

**NLL 321. Introduction to Middle Egyptian I. (3 h)**

The phonology, morphology, and grammar of Middle Egyptian. On request.

**NLL 322. Introduction to Middle Egyptian II. (3 h)**

The phonology, morphology, and grammar of Middle Egyptian. On request.

## Religions, Study of (REL)

**REL 101. Introduction to Religion. (3 h)**

A study of meaning and value as expressed in religious thought, experience, and practice. Focus varies with instructor. (D)

**REL 102. Introduction to the Bible. (3 h)**

A study of the forms, settings, contents, and themes of the Old and New Testaments. Focus varies with instructor. (D)

**REL 103A. Introduction to Christian Traditions. (3 h)**

Study of Christian experience, thought, and practice. Focus varies with instructor. (D)

**REL 103B. Introduction to Latin American Christian Traditions. (3 h)**

Study of the origins, practices, experiences, and thought of Christian traditions in Latin America. Focus varies with instructor. (CD, D)

**REL 104A. Introduction to Asian Religions. (3 h)**

Study of the thought and practices within the major religious traditions of South, Southeast, and East Asia. Focus, region, and traditions may vary with instructor. (CD, D)

**REL 104B. Introduction to South Asian Religions. (3 h)**

Study of the thought and practices within the major religious traditions of South Asia (Indian subcontinent). Focus and traditions may vary with instructor (CD, D)

**REL 104C. Introduction to East Asian Religions. (3 h)**

Study of the thought and practices within the major religious traditions of East Asia (China, Korea, and Japan). Focus, regions, and traditions may vary with instructor. (CD, D)

**REL 105. Monotheisms: Judaism, Christianity, and Islam. (3 h)**

Examines the history, thought, and practices of these three monotheistic traditions in global perspective. Focus varies by instructor. (D)

**REL 106. The Bible in America. (3 h)**

Critical examination of the ways in which various individuals and groups have interpreted, appropriated and used the Bible in America. Focus varies with instructor. (D)

**REL 107. Introduction to African Religions. (3 h)**

A study of the basic features of African religious systems and institutions, with focus on the cultural, economic and political factors that have informed global preservations of an African worldview. (CD, D)

**REL 108. Introduction to Hindu Traditions. (3 h)**

An examination of historical, political, and cultural developments of various traditions placed under the heading "Hinduism" in South Asia and abroad, with focus on ritual, myths, literature, and imagery that reflect their diverse beliefs and practices. (CD, D)

**REL 109. Introduction to Buddhist Traditions. (3 h)**

A study of the thought, history, and practices of Buddhist traditions in Asia. (CD, D)

**REL 110. Introduction to Islamic Traditions. (3 h)**

Examination of the origins and development of Islam. Attention is given to the formation of Islamic faith and practice. (CD, D)

**REL 111. American Indian and First People's Traditions. (3 h)**

Multi-disciplinary study of thought and practice in past and present American Indian and other indigenous communities. (CD, D)

**REL 113. Introduction to Jewish Traditions. (3 h)**

Examines the history, thought, and practices of Jewish traditions in global perspective. (D)

**REL 200. Approaches to the Study of Religion. (3 h)**

Explores the history of and methodological resources for the study of religion. Focus may vary with instructor, but the emphasis is on the ways religion has been defined, studied, and interpreted over the last several centuries.

**REL 210. Jerusalem in History and Tradition. (3 h)**

An examination of the ways meaning and religious significance have been imparted to Jerusalem far beyond its significance in world history.

**REL 214. Excavating the Sacred. (3 h)**

Explores what archaeology can (and can't) tell us about religious behaviors in the past as well as examine our ethical obligations surrounding the excavation, interpretation, and display of sacred material, including human remains. (D)

**REL 230. Religion and the U.S. Constitution. (3 h)**

Introduces the complex relationship between religion and the U.S. government through an in-depth analysis of the nation's founding documents and the subsequent series of First Amendment church-state decisions rendered by the United States Supreme Court.

**REL 231. Against God: Atheism, Secular Humanism, & the Problem of Belief. (3 h)**

Examines atheism, secular humanism, and the problems with conceiving of religion as fundamentally related to individual beliefs. (D)

**REL 232. Trauma Tourism and Religion. (3 h)**

Examines the intersection of religion and popular tourism to historical sites of trauma or death. (D, CD)

**REL 233. Religious Ethics and Moral Problems. (3 h)**

A comparative examination of religious approaches to ethics and contemporary moral problems. (D, CD)

**REL 242. Sex, Death and Salvation. (3 h)**

Examines how various religious traditions, past and present, have understood the overlapping notions of sexuality, human destiny, and the afterlife. (CD, D)

**REL 244. Religion, Terrorism, and Violence. (3 h)**

Investigates definitions of terrorism and examines religious motivations, justifications and legitimation of the use of violence in a number of belief systems. (CD, D)

**REL 246. Religion and Race. (3 h)**

Explores the relationship between religion and race, two categories that describe identity and that intersect in the lives of individuals and groups. Focus varies with instructor. (CD)

**REL 261. Foundations of Traditional Judaism. (1.5 h)**

A study of rabbinic and medieval Judaism, emphasizing the post-biblical codification of Jewish thought in the Mishnah, Talmud, and Midrash.

**REL 263. The Religions of Japan. (3 h)**

A study of the central religious traditions of Japan from pre-history to the present, including Shinto, Buddhism, Zen Buddhism, Christianity, and Confucianism. (CD, D)

**REL 264. Jesus and Buddha. (3 h)**

Examines the lives of Jesus and the Buddha and engages in comparative study of Christianity and Buddhism. (D, CD)

**REL 265. Culture and Religion in Contemporary Native America. (3 h)**

Interdisciplinary survey of American Indian culture, including the arts and literature, religions, and historical changes. Emphasizes the impact of the Conquista, encounters with Northern Atlantic societies, and contemporary developments. Also listed as AES 265. (CD)

**REL 266. Religious Sects and Cults. (3 h)**

Examines historical and contemporary issues in the study of new religious movements by analyzing media coverage of "cults" and investigating the history of specific groups.

**REL 267. Religion and Popular Culture. (3 h)**

Examination of the relationship between religion and popular culture, focusing on a variety of popular culture forms and interpretive skills. Focus varies with instructor.

**REL 280. God, Gods, and the Ultimate. (3 h)**

Comparative study of the way religious traditions—both Eastern and Western—conceptualize "Ultimate Reality" or "the Absolute" (e.g., God, Allah, Brahman, the Dao, Emptiness). Particular attention will be given to the historical evolution and the socio-religious implications of the various conceptualizations studied. (CD)

**REL 282. Religion and Culture in China. (3 h)**

A thematic study of Chinese religious culture focusing on history, ritual, scripture, and popular practice. Additional topics will include cosmology, ancestor veneration, shamanism, divination, and the role of women. (CD, D)

**REL 286. Directed Reading. (1-3 h)**

A project in an area of study not otherwise available in the department. May be repeated for credit. (Group I-III with department approval) P-POI.

**REL 287. Directed Reading. (1-3 h)**

A project in an area of study not otherwise available in the department. May be repeated for credit. (Group I-III with department approval) P-POI.

**REL 288. Field Program in Religion and Public Engagement. (1-3 h)**

Integrated study of major themes in religion and public engagement carried out in partnership with one or more communities off campus. May be repeated for credit. Focus varies with instructor. P- POI. On request.

**REL 290. Special Topics in Religion. (1.5-3 h)**

Religion topics of special interest. Group I-III with department approval. May be repeated for credit if topic varies.

**REL 291. Crossing Divides: Dialogues Across Faith and Culture. (1.5-3 h)**

Examines methods and practices of inter-religious dialogue with special attention to contemporary challenges. Focus varies with instructor. (CD)

**REL 292. Crossing Divides: Crossing Back: Peacemaking. (1.5-3 h)**

Examines methods and practices of inter-religious peacemaking with special attention to contemporary challenges. Focus varies with instructor. (CD)

**REL 304. Myth, Ritual & Symbolism. (3 h)**

Explores how people envision and manipulate the supernatural in cross-cultural perspective. Emphasizes functional aspects of religious beliefs and practices. Also listed as ANT 336. (CD) P-ANT 111 or 112 or 113 or 114 or POI.

**REL 305. Ethnography of Religion. (3 h)**

Study of theory and method in ethnography of religion where students closely read ethnographies from a variety of cultures and discuss the practical, methodological and ethical issues related to ethnography. Course culminates with students researching and writing their own ethnographies. (CD)

**REL 306. Ritual Studies. (3 h)**

Introduction to the various methods and theories employed in the field of ritual studies, while examining comparative rituals and ritualized practices from around the world. (CD)

**REL 307. Magic, Science and Religion. (3 h)**

Explores concepts of magic, science and religion that emerged in Western thought and culture from late antiquity through the European Enlightenment and analyzes connections between religious traditions and Western, Modern Science. (CD)

**REL 308. Sacred Scripture in the Traditions of Abraham. (3 h)**

A comparative study of sacred texts in Judaism, Christianity, and Islam with attention to the issues of authority, function and interpretation.

**REL 310. The Prophetic Literature. (3 h)**

An examination of the development and theological contents of the literary products of Israel's prophetic movement.

**REL 312. The Critical Study of the Pentateuch. (3 h)**

A study of the five traditional books of Moses (the Torah) and the various lines of analysis that modern Biblical critics have used to interpret their composition and role in the development of Israelite theological thought.

**REL 313. Near Eastern Archeology. (3 h)**

Survey of archaeological work in the Near East with attention to the ways in which interest in the Bible has shaped research questions, interpretation of materials, and museum exhibits.

**REL 315. Field Research in Biblical Archeology. (3 h)**

A study of the religion and culture of the ancient Near East through the excavation and interpretation of an ancient site.

**REL 316. Field Research in Biblical Archeology. (3 h)**

A study of the religion and culture of the ancient Near East through the excavation and interpretation of an ancient site.

**REL 317. Wisdom Literature. (3 h)**

An examination of the development, literary characteristics, and theological contents of the works of ancient Israel's sages.

**REL 318. Feminist and Contemporary Interpretations of the New Testament. (3 h)**

A study of feminist and contemporary approaches to the New Testament in light of the history of New Testament interpretation and a range of contemporary concerns and interpretive contexts.

**REL 320. The Search for Jesus. (3 h)**

A study of issues, assumptions, evidence, and debate that shapes the continuing quest for the historical Jesus.

**REL 323. Jesus Traditions. (3 h)**

Examines ancient Christian and other religious representations of Jesus in historical, social, cultural, and theological context.

**REL 324. Early Christian Literature. (3 h)**

An examination of various literatures and perspectives of the first three centuries of the Christian movement.

**REL 328. Jewish-Christian Relations and the New Testament. (3 h)**

Study of Jewish-Christian relations and selected writings of the New Testament in the historical, social, religious and political contexts of ancient Judaism and emerging Christianity. Focus varies with instructor.



**REL 329. Chinese Medicine. (3 h)**

An interdisciplinary exploration and analysis of Chinese medicine, its fundamental theories, and its range of health-oriented and religious applications. (CD)

**REL 330. Pope, Jefferson and Imam: A Study in Comparative Ethics. (3 h)**

A comparative study of the moral values and socio-ethical positions in the major religious traditions of the world, with particular focus on their various methods of reasoning and sources of authority.

**REL 331. Religion and Law. (3 h)**

A study of religion and law as distinct yet interdependent spheres that influence cultural negotiations about authority, power, identity and the regulation of society. Geographic and tradition-specific focus may vary with instructor.

**REL 332. Religion and Public Engagement. (3 h)**

Examines the interface between religious communities and the public sphere, and the potential for social change in contemporary global and local contexts through a range of readings, guest lectures, field trips, and films. Traditions and emphasis may vary with instructor.

**REL 335. Religious Ethics and the Problem of War. (3 h)**

An examination of the causes and characteristics of war, various religious responses to it, and approaches to peacemaking, with attention to selected contemporary issues.

**REL 336. Religious Traditions and Human Rights. (3 h)**

A study of relationships and tensions between religious traditions and human rights, with illustrations from historical and contemporary issues and movements.

**REL 338. Religion, Ethics, and Politics. (3 h)**

An examination of ethical issues in religion and politics using materials from a variety of sources and historical periods.

**REL 339. Religion, Power, and Society in Modern Africa. (3 h)**

An interdisciplinary study of the growth transformations of Africa's major religious traditions (Christianity, Islam, and the indigenous religions), and of their relations with secular social changes. (CD)

**REL 340. Holy Chow! Food and Religion. (3 h)**

Explores the roles food and eating play in religious behavior and the ways in which religious practices and experiences impact our eating habits and food choices. (CD)

**REL 341. Religion and Ecology. (3 h)**

Cross-cultural examination of the relationships among human beings, their diverse cultures, habitats, and religions, including social and political understandings of the environment. (CD)

**REL 342. Religious Intolerance in the U.S. (3 h)**

Study of the various manifestations of religious intolerance in the United States from the colonial period until the present.

**REL 343. Religion, Culture, and the Body. (3 h)**

A cross-cultural, multi-disciplinary-exploration of the body as a malleable locus of contested ideals that informs personal, social, and religious identity formation. (CD)

**REL 344. Religion, Poverty, and Social Entrepreneurship. (3 h)**

Interdisciplinary study of major themes in religion, poverty reduction, and social entrepreneurship. Focus and community emphasis may vary with instructor. Also listed as ENT 322.

**REL 345. The African-American Religious Experience. (3 h)**

Exploration of the religious dimensions of African-American life from its African antecedents to contemporary figures and movements. (CD)

**REL 346. Religious Utopias and the American Experience. (3 h)**

Surveys a range of such 18th- and 19th-century utopian communities, including Moravians, Rappites, Shakers, and the Oneida and Amana colonies. Also listed as HST 381.

**REL 347. Religion, Gender, & Sexuality. (3 h)**

Explores how "religion" regulates and normalizes gender and sexuality.

**REL 348. Race, Memory, and Identity. (3 h)**

Explores the collective memory and identity of American-Indian and African-American communities and their response to historical trauma in their cultural imagination, spirituality, and political and social activism. Also listed as AAS 378, HST 378. (CD)

**REL 349. Asian Meditation Practices. (3 h)**

Introduces and examines theoretical and practical aspects of various forms of Eastern meditation (concentration, mindfulness, Zen, visualization, and moving energy work) from both practitioner and modern scientific perspectives. (CD)

**REL 351. Sociology of Religion. (3 h)**

Introduction to the sociological analysis of religion, including religious beliefs and experiences, the cultural context of religion, varieties of religious organization, religious change and social change. Also listed as SOC 301.

**REL 355. Jewish Identities: Religion, Race, and Rights. (3 h)**

Examines how evolving definitions of race, religion, and Jewishness have correlated and conflicted in varied and sometimes surprising ways and how these shifts have been tied to legal rights and social privileges. (CD)

**REL 356. Faces of Modern Judaism. (3 h)**

Examines contemporary expressions of Judaism and its historical roots. (CD)

**REL 357. Jews in the United States. (3 h)**

Examines Jewish American histories, experiences, and identities and their impact on American society as a whole.

**REL 359. Hinduism in America. (3 h)**

A study of the meanings, values, and practices associated with the religions of Hinduism in dialogue with the dominant culture of America. (CD)

**REL 360. Hindus, Muslims, & Sikhs in North America. (3 h)**

Examines the racialization of Hinduism, Islam, and Sikhism in North America using a postcolonial and intersectional approach. (CD)

**REL 361. Topics in Buddhism. (3 h)**

Variable topics in Buddhist history, thought, and/or practice. May be repeated for credit if topic varies. (CD)

**REL 362. Topics in Islam. (3 h)**

Variable topics in Islamic history, thought, and/or practice. May be repeated for credit if topic varies. (CD)

**REL 364. Topics in U.S. Religious History. (1.5-3 h)**

Variable topics in U.S. religious history, thought, and/or practice. May be repeated for credit if topic varies.

**REL 365. History of Religions in America. (3 h)**

A study of American religions from colonial times until the present.

**REL 367. Christian Mysticism. (3 h)**

Study of Christian mysticism and contemplation (spirit possession, visions, dreams, and meditation) and their relation to contemporary issues.

**REL 368. Protestant and Catholic Reformations. (3 h)**

A study of the origin and development of Reformation theology and ecclesiology.



**REL 369. Radical Christian Movements. (3 h)**

A study of selected radical movements in the Christian tradition and their relation to contemporary issues.

**REL 372. History of Christian Thought. (3 h)**

A study of recurring patterns in Christian thought across time and cultures and some of the implications of those patterns in representative ancient and modern Christian figures.

**REL 373. Special Topics in African-American Religious Traditions. (3 h)**

Variable topics in African-American religious traditions. May be repeatable for credit if topic varies. (CD)

**REL 374. Black Messiahs and Uncle Toms. (3 h)**

Examines the cultural and religious history of black leadership in the United States. (CD)

**REL 375. Race, Myth, and the American Imagination. (3 h)**

A study of myth and mythology in relation to the racial imaginary in America. (CD)

**REL 376. Race, Religion, and Film. (3 h)**

Examines past and contemporary filmmakers who couple religious themes with racial concerns. (CD)

**REL 378. Latin American Liberation Theologies. (3 h)**

Historical, contextual, and theoretical survey of various forms of Latin American liberation theology, a school of Christian thought that both critiques systems of oppression and offers proposals for a more just and peaceful future.

**REL 379. Muslim Youth. (3 h)**

Explores the lived experiences of young Muslims around the world through the intersecting lenses of religion, power and protest. (CD)

**REL 381. Zen Buddhism. (3 h)**

Examines the origins and development of Zen Buddhism from China (Ch'an) to Japan and contemporary America. Attention is given to Zen doctrine and practice in the context of the broader Buddhist tradition. (CD)

**REL 383. The Quran and the Prophet. (3 h)**

Examines the history, content, and main approaches to the sacred book of Islam. Explores the influence and interaction between the holy word and its transmitter the Prophet Muhammad. (CD)

**REL 384. Islam and Law: Varieties in Interpretation and Expression. (3 h)**

Explores main tenets of the Islamic law (Shari'ah) and how this law has been applied in past and present Islamic societies. Looks at legal issues through the lens of gender, ethics, non-Muslim minorities, rights, and duties. (CD)

**REL 385. Topics in South Asian Religions. (3 h)**

Variable topics in the religions of South Asia. May be repeated for credit if topic varies. (CD)

**REL 386. Indian Epics. (3 h)**

Examines one or both Indian epics, the Mahabharata and Ramayana, while paying attention to either epic's religious, social, and political contexts, performance, and development in Indian history. (CD)

**REL 387. Priests, Warriors and Ascetics in Ancient India. (3 h)**

Introduces students to the history, culture, and ritual traditions of ancient India by examining the overlapping practices, beliefs, ideologies, and gendered representations of priests, warriors, kings, and ascetics. (CD)

**REL 388. South Asian Women: Religion, Culture and Politics. (3 h)**

Examines the intersection of religion, race and gender of South Asian women from a feminist and postcolonial perspective. (CD)

**REL 389. Islam in the West: Changes and Challenges. (3 h)**

Explores issues of identity, ethnicity and religion within various Muslim communities living in western countries. A central goal is to understand how these communities negotiate the new environment and the challenges they face.

**REL 390. Special Topics in Religion. (1.5-3 h)**

Religion topics of special interest. May be repeated for credit. Group I-III with department approval. P-POI.

**REL 391. Topics in East Asian Religions. (3 h)**

Variable topics in the religions of China, Korea, and Japan. May be repeated for credit if topic varies. (CD)

**REL 392. Topics in First Peoples' Traditions. (3 h)**

Variable topics in the religions of American Indian and Canadian First Nations. May be repeated for credit if topic varies. (CD)

**REL 393. Topics in Religions of Africa. (3 h)**

Variable topics in the religions of Africa or African diaspora. May be repeated for credit if topic varies. (CD)

**REL 395. Exploring Interfaith Practice and Leadership. (3 h)**

This online course on interfaith leadership invites students to consider how they might engage most effectively with people from a variety of religious backgrounds. POI.

**REL 396. Interreligious Encounters & Engagements. (3 h)**

Surveys the history of dialogue activities among various religious communities and introduces the methods and theories of interreligious dialogue. Part of this class is interaction with local interfaith projects.

**REL 398. Honors in Religion. (3 h)**

Directed study and research in preparation for writing and completing an honors thesis. P - Admission to the honors program in the Study of Religions.

**REL 399. What's Next? Religious Studies Beyond WFU. (1.5 h)**

This course explores how religious studies can be relevant to your life and career after you graduate from Wake Forest. Intended primarily for minors and majors in religious studies, the course is structured around writing and reflection on class readings, discussions, and portfolio development.

## Sanskrit Language and Literature (SKT)

**SKT 111. Intro to Sanskrit. (3 h)**

Two-semester sequence designed to introduce students to classical Sanskrit with emphasis on the basic principles of grammar, syntax, historical linguistics, and the reading of classical Indian texts. On Request.

**SKT 112. Intro to Sanskrit. (3 h)**

Two-semester sequence designed to introduce students to classical Sanskrit with emphasis on the basic principles of grammar, syntax, historical linguistics, and the reading of classical Indian texts. On Request.

## Faculty

Chair Mary Foscett

**Wake Forest University Distinguished Professor of Religious Studies** Simeon O. Ilesanmi

**Wake Forest Kahle Professor of Religious Studies and Albritton Fellow** Mary Foscett

**John Allen Easley Professor of Religious Studies** Lynn S. Neal

**Professors** Kenneth G. Hoglund, Nelly van Doorn-Harder, Jarrod L. Whitaker

**Associate Professors** Annalise Glauz-Todrank, Lucas F. Johnston, Ronald B. Neal

**Assistant Professors** Michael R. Grigoni, Emily B. Simpson, Kimberly T. Wortmann

**Associate Teaching Professors** Leann Pace, Tanisha Ramachandran

## Religious Studies, B.A.

### Requirements

Requires a minimum of 27 hours, of which 18 must be in courses above the 100-level:

Code	Title	Hours
Select courses above the 100-level		18
REL 200	Approaches to the Study of Religion	3
Select one three hour course (or two 1.5 hour courses) from each of the three groups designated:		9
I. Biblical Studies		
II. Religion, History and Society		
III. World Religions		

A minimum GPA of 2.0 in all courses completed in religious studies at Wake Forest is required for graduation with the major. Up to 3 hours from NLL courses 200 or above may be counted toward the major. Up to 9 hours of coursework completed outside the department and no more than 6 hours of directed reading may be counted toward the major. Majors may not take 100-level courses during their senior year.

**A concentration in religion and public engagement for declared majors and minors in religious studies** requires 15 hours and provides an opportunity for students to undertake a community-based study of educational, economic, cultural and political development strategies, and action.

Code	Title	Hours
REL 332	Religion and Public Engagement	3
Select one of the following:		3
REL 200	Approaches to the Study of Religion	
REL 305	Ethnography of Religion	
REL 336	Religious Traditions and Human Rights	
REL 338	Religion, Ethics, and Politics	
REL 288	Field Program in Religion and Public Engagement (an internship)	3

Select two Elective Courses related to the community partner's context, history, and values \*

\*

*Elective courses may be chosen from other departments and programs with approval from the RPE committee.*

### I: Biblical Studies

Code	Title	Hours
REL 261	Foundations of Traditional Judaism	1.5
REL 308	Sacred Scripture in the Traditions of Abraham	3
REL 310	The Prophetic Literature	3
REL 312	The Critical Study of the Pentateuch	3
REL 313	Near Eastern Archeology	3

REL 315	Field Research in Biblical Archeology	3
REL 316	Field Research in Biblical Archeology	3
REL 317	Wisdom Literature	3
REL 318	Feminist and Contemporary Interpretations of the New Testament	3
REL 320	The Search for Jesus	3
REL 323	Jesus Traditions	3
REL 324	Early Christian Literature	3
REL 328	Jewish-Christian Relations and the New Testament	3

### II: Religion, History, and Society

Code	Title	Hours
REL 210	Jerusalem in History and Tradition	3
REL 214	Excavating the Sacred	3
REL 230	Religion and the U.S. Constitution	3
REL 242	Sex, Death and Salvation	3
REL 244	Religion, Terrorism, and Violence	3
REL 246	Religion and Race	3
REL 266	Religious Sects and Cults	3
REL 267	Religion and Popular Culture	3
REL 330	Pope, Jefferson and Imam: A Study in Comparative Ethics	3
REL 331	Religion and Law	3
REL 332	Religion and Public Engagement	3
REL 335	Religious Ethics and the Problem of War	3
REL 336	Religious Traditions and Human Rights	3
REL 338	Religion, Ethics, and Politics	3
REL 340	Holy Chow! Food and Religion	3
REL 341	Religion and Ecology	3
REL 342	Religious Intolerance in the U.S	3
REL 344	Religion, Poverty, and Social Entrepreneurship	3
REL 345	The African-American Religious Experience	3
REL 346	Religious Utopias and the American Experience	3
REL 347	Religion, Gender, & Sexuality	3
REL 348	Race, Memory, and Identity	3
REL 355	Jewish Identities: Religion, Race, and Rights	3
REL 356	Faces of Modern Judaism	3
REL 357	Jews in the United States	3
REL 364	Topics in U.S. Religious History	1.5-3
REL 365	History of Religions in America	3
REL 367	Christian Mysticism	3
REL 368	Protestant and Catholic Reformations	3
REL 369	Radical Christian Movements	3
REL 372	History of Christian Thought	3
REL 373	Special Topics in African-American Religious Traditions	3
REL 374	Black Messiahs and Uncle Toms	3
REL 375	Race, Myth, and the American Imagination	3

REL 376	Race, Religion, and Film	3
REL 378	Latin American Liberation Theologies	3

### III: World Religions

Code	Title	Hours
REL 263	The Religions of Japan	3
REL 265	Culture and Religion in Contemporary Native America	3
REL 280	God, Gods, and the Ultimate	3
REL 282	Religion and Culture in China	3
REL 306	Ritual Studies	3
REL 329	Chinese Medicine	3
REL 339	Religion, Power, and Society in Modern Africa	3
REL 343	Religion, Culture, and the Body	3
REL 349	Asian Meditation Practices	3
REL 359	Hinduism in America	3
REL 360	Hindus, Muslims, & Sikhs in North America	3
REL 361	Topics in Buddhism	3
REL 362	Topics in Islam	3
REL 379	Muslim Youth	3
REL 381	Zen Buddhism	3
REL 383	The Quran and the Prophet	3
REL 384	Islam and Law: Varieties in Interpretation and Expression	3
REL 385	Topics in South Asian Religions	3
REL 386	Indian Epics	3
REL 387	Priests, Warriors and Ascetics in Ancient India	3
REL 388	South Asian Women: Religion, Culture and Politics	3
REL 389	Islam in the West: Changes and Challenges	3
REL 391	Topics in East Asian Religions	3
REL 392	Topics in First Peoples' Traditions	3
REL 393	Topics in Religions of Africa	3

### Honors

Highly qualified majors are encouraged to apply for admission to the honors program. Students who wish to pursue this option should refer to the honors guidelines, available on the Department website, for an overview of requirements and procedures. Upon completion of all requirements, a recommendation of honors at graduation will be made by the department based upon the student's overall academic record and the quality of the final project.

## Religious Studies, Minor

### Requirements

Requires 15 hours:

Code	Title	Hours
Select nine hours of courses above the 100-level		9
Select one upper-level course from Group III. World Religions		3

The department provides advisers for students pursuing a minor. Up to 3 hours of coursework completed outside the department may be counted toward the minor and no more than 3 hours of directed reading may be counted toward the minor. No NLL course may count toward the minor.

**A concentration in religion and public engagement for declared majors and minors in religious studies** requires 15 hours and provides an opportunity for students to undertake a community-based study of educational, economic, cultural and political development strategies, and action.

Code	Title	Hours
REL 332	Religion and Public Engagement	3
Select one of the following:		3
REL 200	Approaches to the Study of Religion	
REL 305	Ethnography of Religion	
REL 336	Religious Traditions and Human Rights	
REL 338	Religion, Ethics, and Politics	
REL 288	Field Program in Religion and Public Engagement (an internship)	3
Select two Elective Courses related to the community partner's context, history, and values *		

\*

*Elective courses may be chosen from other departments and programs with approval from the RPE committee.*

### III: World Religions

Code	Title	Hours
REL 263	The Religions of Japan	3
REL 265	Culture and Religion in Contemporary Native America	3
REL 280	God, Gods, and the Ultimate	3
REL 282	Religion and Culture in China	3
REL 306	Ritual Studies	3
REL 329	Chinese Medicine	3
REL 339	Religion, Power, and Society in Modern Africa	3
REL 343	Religion, Culture, and the Body	3
REL 349	Asian Meditation Practices	3
REL 359	Hinduism in America	3
REL 360	Hindus, Muslims, & Sikhs in North America	3
REL 361	Topics in Buddhism	3
REL 362	Topics in Islam	3
REL 379	Muslim Youth	3
REL 381	Zen Buddhism	3
REL 383	The Quran and the Prophet	3
REL 384	Islam and Law: Varieties in Interpretation and Expression	3
REL 385	Topics in South Asian Religions	3
REL 386	Indian Epics	3
REL 387	Priests, Warriors and Ascetics in Ancient India	3
REL 388	South Asian Women: Religion, Culture and Politics	3
REL 389	Islam in the West: Changes and Challenges	3

REL 391	Topics in East Asian Religions	3
REL 392	Topics in First Peoples' Traditions	3
REL 393	Topics in Religions of Africa	3

## Russian and East European Studies (REE)

### Interdisciplinary Minor

The minor in Russian and East European Studies provides students with an opportunity to undertake a multidisciplinary study of the culture, economics, history, and politics of Russia and East Europe.

Appropriate credit in various fields of Russian and East European Studies also may be obtained by study abroad in programs approved by the Office of Global Programs and Studies and the coordinator. Students are strongly encouraged to study abroad as part of fulfilling the minor. Interested students are encouraged, preferably in their sophomore year, to consult with the coordinator or an affiliated faculty member to discuss their interests and structure a coherent course of study.

### Contact Information

Russian and East European Studies (<https://global.wfu.edu/global-campus/international-minors/russian-east-european-studies/>)

### Programs Minor

- Russian and East European Studies, Minor

### Courses

#### Russian and East European Studies (REE)

**REE 200. Introduction to Russian and East European Studies. (3 h)**

An interdisciplinary survey of Russia and the Soviet Union, including an examination of society, polity, economy and culture over time. Also listed as HST 232. Students taking REE 200/HST 232 cannot receive credit for HST 230 or 231. (CD).

### Faculty

**Coordinator, Associate Professor of History** Susan Z. Rupp

## Russian and East European Studies, Minor

### Requirements

The minor requires a total of 18 hours; six of these may also count toward the student's major. Candidates for the minor are required to take:

Code	Title	Hours
REE 200	Introduction to Russian and East European Studies (sophomore or junior year)	3
Electives for Russian and East European Studies *		15

\*

*No more than six of these 15 hours may be in a single discipline.*

Courses may be chosen from among the list of approved courses provided. Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. Course descriptions may be found in the relevant department's listings in this bulletin.

## Electives for Russian and East European Studies

Additional elective courses may have been approved since publication of this bulletin. The program coordinator maintains a complete list of all approved elective courses. For course descriptions, see the relevant department's listings in this publication.

Code	Title	Hours
COM 351B	Comparative Communication: Russia	1.5,3
ECN 352	International Finance	3
HST 230	Russia: Origins to 1865	3
HST 231	Russia and Soviet Union: 1865 to Present	3
HST 310	20th Century Eastern Europe	3
POL 232	Politics in Russia and Eastern Europe	3

Any RUS courses at or above the 200-level

Students may apply all relevant seminars, colloquia, or independent studies in any of the above departments to the minor.

## Self-Instructional Languages (SIL)

Self-Instructional Languages is a program for students who would like to study a language not offered by the University. Interested students are responsible for finding appropriate textbooks and an evaluator who:

1. Is fluent in the chosen language.
2. Holds an advanced degree.
3. Is a faculty member affiliated with an accredited college or university.

SIL 101, SIL 102 may count towards the minor in linguistics only with approval from the coordinator of linguistics. Any student interested in self-instructional language learning should submit an application to the SIL program coordinator by August 5 for the fall semester and by January 5 for the spring semester.

### Courses

#### Self-Instructional Languages (SIL)

**SIL 101. Self Instructional Language. (3 h)**

A course in which students wishing to learn a language not offered at Wake Forest may arrange to study the language in consultation with a native speaker. This course does not count toward the linguistics minor without approval from the coordinator. Pass/Fail only. P-POI.

**SIL 102. Self Instructional Language. (3 h)**

A course in which students wishing to learn a language not offered at Wake Forest may arrange to study the language in consultation with a native speaker. This course does not count toward the linguistics minor without approval from the coordinator. Pass/Fail only. P-POI.

### Faculty

**Coordinator, Associate Professor** Tina Boyer/Department of German and Russian

## Sociology (SOC)

The Department of Sociology at Wake Forest University is a thriving community of teacher-scholars and students devoted to the scientific study and improvement of society. We provide students with an understanding of how communities have dynamic properties that exist independently of, and that structure the beliefs and actions of, any particular individuals. The basic idea behind this perspective is that the larger social context in which we live influences our social institutions, the social groups of which we are apart, our educational and occupational opportunities as well as our most private and personal experiences. Studying sociology is a critical part of a liberal arts education that prepares students for careers in law, medicine, education, public health, social work, business, criminal justice, non-profit organizations, and many other fields.

Our faculty conduct research and teach courses on a range of compelling topics, including the sociology of business, criminal justice, culture, education, emotions, family, gender, health, immigration, law, politics, race and ethnicity, religion, sport, and work. Our courses offer students the opportunity to examine the complex causes and consequences of stratification by socioeconomic status, gender, race, and sexual orientation. Students can earn certification for concentrations in three areas: crime and criminal justice; business and society; the social determinants of health and well-being.

**Study abroad and transfer credit** that can be applied to the sociology major/minor are limited to two courses (6h). For both study abroad and transfer credit, there is a bias against approval of theory, methods, and statistics courses, but these courses will be evaluated on a case-by-case basis. Where students take sociology courses abroad, they must be in Wake Forest approved programs and/or must have been certified by the department. Courses to be considered for transfer credit must be taught at an accredited college/university that offers a 4-year degree, by a faculty member who has a PhD in sociology, and the syllabus for the course must be provided for inspection. In addition, no divisional credit is given for sociology courses taken abroad or at other institutions. The sociology courses of students who are transferring to Wake Forest from other institutions will be considered on a case-by-case basis.

A student who selects sociology to fulfill the Division IV requirement must take one of the following courses:

Code	Title	Hours
SOC 150	Analyzing the Social World	3
SOC 151	Principles of Sociology	3
SOC 152	Social Problems	3
SOC 153	Contemporary Families	3
SOC 154	Social Deviance	3
SOC 155	Public Engagement in USA and Other Post-industrial Societies	3

No introductory-level course is required for students taking a sociology course as an elective unless specified in the course description.

## Contact Information

Department of Sociology (<http://college.wfu.edu/sociology/>)  
Kirby Hall 02A  
Phone 336-758-5495

## Programs

### Major

- Sociology, B.A.

### Minor

- Sociology, Minor

## Courses

### Sociology (SOC)

#### SOC 150. Analyzing the Social World. (3 h)

Introduction to key findings and explanatory concepts in sociology through exploring large-scale data sets. Topics may include stratification by socio-economic status, gender, race, and sexual identity. (D, QR)

#### SOC 151. Principles of Sociology. (3 h)

General introduction to the field; social organization and disorganization, socialization, culture, social change, social inequality, and other aspects. (D)

#### SOC 152. Social Problems. (3 h)

Survey of contemporary American social problems such as domestic and international poverty, education, immigration, crime and mass incarceration. (D)

#### SOC 153. Contemporary Families. (3 h)

Introduction of how sociologists understand families and their relationship to social structures and individual agency. Topics include the family as a social construct, the role of the family in the reproduction and/or resistance of privilege and inequality, and the social forces shaping everyday family life (D).

#### SOC 154. Social Deviance. (3 h)

Study of the origins, development, and social construction of deviant categories in contemporary society. Examines the process of rulemaking, rule enforcing, and societal reactions to deviance and their consequences for people defined as deviant (D).

#### SOC 155. Public Engagement in USA and Other Post-industrial Societies. (3 h)

An introduction to core concepts and explanations in social science for differences between the US and other nations on civic engagement, social mobility, educational attainments, public health, and leisure pursuits. (CD, D)

#### SOC 270. Sociological Theory. (3 h)

Introduction to classic and contemporary works of social theory, illustrating and exploring how sociologists analyze social forces, evaluate explanatory hypotheses, and prescribe social remedies. Authors explored range from the 19th century founding figures of Karl Marx, Max Weber, and Emile Durkheim, to contemporary theorists such as Ervin Goffman, Patricia Collins, Judith Butler, Michel Foucault, and Pierre Bourdieu. P - Any 100 level SOC course or POI.

#### SOC 271. Social Statistics. (4 h)

Computer-based survey of basic statistics utilized in sociological research. STA 111 (Elementary Probability and Statistics) or higher is strongly recommended as a prior course. Lab-1 hour. P-Any 100 level SOC course or POI. (QR)

#### SOC 272. Research Methods in Sociology. (3 h)

Overview of both quantitative and qualitative research methods. Research projects required. P - Any 100 level SOC courses or POI.



**SOC 301. Sociology of Religion. (3 h)**

Introduction to the sociological analysis of religion, including religious beliefs and experiences, the cultural context of religion, varieties of religious organization, religious change and social change. Also listed as REL 351.

**SOC 303. Business and Society. (3 h)**

Historical development, organization, and current problems of business enterprises in American society.

**SOC 305. Gender in Society. (3 h)**

The significance of gender in society for individuals and institutions. An examination of differential gender experiences based on race, class, and sexual orientation. Consideration of feminism as a social movement and the possibility for social change. (CD)

**SOC 309. Sexuality and Society. (3 h)**

Study of the societal forces that impinge on human sexual behavior, emphasizing the effects of social change, the implications of changing gender roles, cross-cultural and subcultural variations, and the influence of the mass media.

**SOC 316. Conflict Management in Organizations. (3 h)**

An examination of conflict management and social control in organizations, focusing on power structures, management styles and processes of dispute resolution.

**SOC 320. Sociology of Sports and Art Worlds. (1.5 h)**

Seminar on social forces that structure the production and consumption of sports and the arts. Topics may include differences between American and world football; how culture capital determines engagement with the arts.

**SOC 321. Sociology of Contested Past. (1.5 h)**

Seminar on how societies remember their past and why it matters to contemporary social relations. Topics include case studies of commemorative practices on the Nazi Holocaust, America's Civil War, and the relationship of American universities to slavery.

**SOC 325. The Individual and Society. (3 h)**

Introduces students to the field of sociological social psychology. Examines (1) how membership in social groups shape experiences; (2) the development of the self in social interaction; and (3) the creation of small group culture and structure. Also covers a range of substantive topics such as socialization, identity, emotions, prejudice, deviance, mental health and social change.

**SOC 327. Sociology of Emotion. (3 h)**

Exploration of the social side of emotion, including how emotions are socially learned, shaped, regulated, controlled and distributed in the population as well as the consequences of emotion norms, emotion management, emotional labor, and emotional deviance for individuals, social groups and society. P-one SOC course or POI.

**SOC 328. The Sociology of Food. (3 h)**

Examines systems of food production and their health consequences for workers and consumers; how social identities shape consumption choices and family food responsibilities; and analyzes food insecurity, food policy, and food-focused social movements from a sociological perspective.

**SOC 329. Health Inequalities. (3 h)**

Introduction to current sociological perspectives on the health and well-being of individuals, families, communities, and societies by examining the social determinants of inequalities in both mental and physical health (including reproductive health) based on socioeconomic status, gender, and race/ethnicity in the U.S. P-one SOC course or POI.

**SOC 330. Gender, Social Relationships, and Well-Being. (3 h)**

Examines how and why gender continues to shape men's and women's social relationships, including their social and economic well-being, their emotions and identities, as well as their mental and physical health over the life course. P-one SOC course or POI.

**SOC 331. The Social and Legal Contexts of Medicine. (3 h)**

Examines student socialization, the social structure of medicine and the social and legal contexts in which the medical profession exists and changes.

**SOC 334. Sociology of Education. (3 h)**

An evaluation of the major theories and significant empirical literature, both historical and statistical, on the structure and effects of educational institutions.

**SOC 335. Sociology of Health and Illness. (3 h)**

Examines processes of medicalization, the social experience of illness, cultural influences on the practice of medicine, and inequalities in access to care and resources to support health.

**SOC 336. Money, Markets and Medicine. (3 h)**

Examines the entanglement of financial interest with care for the sick and dying, interrogating how power and profit shape what health is and who has access to it.

**SOC 337. Opioids in American Society. (3 h)**

Explores the ambivalent role of opioids in American society. Students will interrogate the narratives around different social groups and their encounters with drugs.

**SOC 338. Courts and Criminal Procedure in the Era of Mass Incarceration. (3 h)**

An overview of the socio-organization of criminal courts and procedure in the US. The course examines the structure of courts, and questions how conceptualizations of justice and relationships of power have developed over time.

**SOC 339. Family Violence. (3 h)**

Examines family violence including child abuse, intimate partner violence, and elder abuse as well as the criminal justice response to these forms of violence.

**SOC 340. Corrections. (3 h)**

Surveys the political, economic and social factors influencing the historical development of the corrections system. Institutional corrections such as jails, boot camps and prisons will be examined as well as community-based approaches such as probation and parole.

**SOC 341. Criminology. (3 h)**

Introduction to the study of crime, including the development of criminal law, how crime is defined and measured, the patterns and trends of crime, and a review of theories explaining where, when, by whom and against whom crime happens.

**SOC 342. Juvenile Delinquency. (3 h)**

Examines the development of the juvenile justice system. Topics include the concept of childhood and delinquency, measurement of delinquent behavior, gender differences, the impact of relationships within the family, school, and peer groups, and an assessment of policies for control and prevention.

**SOC 343. Law and Society. (3 h)**

Study of the social and cultural factors in the development, maintenance, and change of legal structures and processes. Topics include law as a vehicle and agent of social change, the role of law in social control and dispute resolution, the structure and organization of the legal profession, and the images of law in popular culture.

**SOC 344. Social Justice in Theory, Method, and Practice. (3 h)**

Explores relationships between knowledge production, academic research, and social activism by surveying social science and humanities theory, research methods, and practice oriented toward social justice. Topics include critical theory, community-based research, and contemporary social movements.

**SOC 345. Advanced Seminar on Criminal Homicide. (3 h)**

Examines the various cultural and structural forces that have been identified as major factors in understanding criminal homicide.

**SOC 346. Sociology of Guns. (3 h)**

Examines the multifaceted roles guns play in the U.S. from a sociological perspective. Topics include the history and technology of firearms, origins and development of the 2nd Amendment to the U.S. Constitution, prevalence and distribution of guns, lawful possession and use of firearms, illegal gun markets, gun crime and injuries, gun politics and the efficacy of gun control.

**SOC 347. Society, Culture, and Sport. (3 h)**

An examination of the interrelationship of sport and other social institutions. Emphasis on the study of both the structure of sport and the functions of sport for society.

**SOC 348. Sociology of the Family. (3 h)**

The family as a field of sociological study. Assessment of significant historical and contemporary writings. An analysis of the structure, organization, and function of the family in America.

**SOC 351. Management and Organizations. (3 h)**

A study of macro-organizational processes and changes in contemporary industrial societies and their effects upon managerial systems, managerial ideologies and managers in firms.

**SOC 352. White-collar Crime. (3 h)**

Study of criminal activity committed in the course of legitimate occupations including workplace crime, graft, and business crime.

**SOC 355. Social Psychology of Inequality. (3 h)**

Introduction to social psychological perspectives on social inequality with a focus on microlevel structures and processes underlying inequality including gender, age, race/ethnicity, as well as socioeconomic and sexual minority status. P-one SOC course or POI.

**SOC 356. Sociology of Immigration. (3 h)**

Traces the waves of immigration historically and examines current policies and debates, with an emphasis on the political, economic, and social consequences of immigration in the post 1965 era. The focus will be on the United States, but will also consider cross-national comparisons. (CD)

**SOC 357. Crime, Law, and Immigration. (3 h)**

Examines the role of law in the production of the U.S. Immigration Detention System, specifically the incarceration, deportation, and surveillance of immigrants and asylum seekers, and the consequences for immigrants, nonimmigrants, and their communities.

**SOC 358. Racial Capitalism. (3 h)**

Examines the historical and contemporary relationship between race and capitalism. Covers both the origins and operations of racial capitalism as well as global movements that challenge it.

**SOC 359. Race and Racism. (3 h)**

Examines the origins and effects of racial inequality and relationships between race and ethnic groups with a focus on the United States. (CD)

**SOC 360. Social Inequality. (3 h)**

The study of structured social inequality with particular emphasis on economic class, social status, and political power. (CD)

**SOC 362. Work, Conflict, and Change. (3 h)**

Changing trends in the United States labor force. The individual's view of work and the effect of large organizations on white- and blue-collar workers. Use of some cross-cultural data.

**SOC 363. Global Capitalism. (3 h)**

An analysis of industrial organization, including discussion of market relations and the behavior of firms, the structure of industrial development, and labor relations and the growth of trade unions. Also listed as CGS 363.

**SOC 364. Power, Politics, and Protest. (3 h)**

Analyzes the interactions between politics, the state and society. Topics include public and social policies, political engagement and social movements, and social change.

**SOC 365. Technology, Culture, and Change. (3 h)**

Examines the interrelated forces that shape change in organizations and societies; from the emergence of capitalist markets to the systems, controls, and information revolution of the 21st century. Also listed as CGS 365.

**SOC 366. Sociological Analysis of Film. (3 h)**

Examines the intersection of economic, organizational, and cultural sociology using films and the film industry as focal examples.

**SOC 367. Sociology of Culture. (3 h)**

Examines the most powerful explanatory schools in sociology in the fields of cultural production and consumption. Topics include: stylistic change and the consumption of visual and performance arts; musical tastes; the production and consumption of literature; museum attendance; education and culture; and architecture and design.

**SOC 368. Death and Dying. (1.5 h)**

Analyzes how the experience of physical decline is socially and medically managed, and the role social rituals play in the aftermath of death and grief.

**SOC 369. Social Movements. (3 h)**

Examines social movements and public protest with a focus on why movements arise, how they operate, and what effects they have on participants and on society.

**SOC 380. Special Topics Seminar in Social Institutions. (3 h)**

Intensive investigation of current scientific research on issues involving family, religion, education, politics, and sport.

**SOC 381. Special Topics Seminar in Social Inequality. (3 h)**

Intensive investigation of current scientific research on issues involving gender, class, race, poverty, and sexuality.

**SOC 382. Special Topics Seminar in Social Psychology. (3 h)**

Intensive investigation of current scientific research on issues in the areas of social psychology, the individual, and the social self.

**SOC 383. Special Topics Seminar in Medicine and Health Care. (3 h)**

Intensive investigation of current scientific research on issues in medicine, illness, and health care.

**SOC 384. Special Topics Seminar in Crime and Criminal Justice. (3 h)**

Intensive investigation of current scientific research on issues about crime, police, courts, and corrections.

**SOC 385. Special Topics Seminar in Business and Society. (3 h)**

Intensive investigation of current scientific research on issues in business, work markets, and management.

**SOC 386. Special Topics Seminar in Culture and Social Movements. (3 h)**

Intensive investigation of current scientific research on issues involving, culture, social change, and social movements.

**SOC 390. Special Topics Seminar in Sociology. (1.5-3 h)**

Survey of a selected area in sociology not covered in the regular course offerings. Prospective students should contact the professor before enrolling as topics will vary.

**SOC 391. Special Topics Seminar in Sociology. (1.5-3 h)**

Survey of a selected area in sociology not covered in the regular course offerings. Prospective students should contact the professor before enrolling as topics will vary.

**SOC 394. Research with Faculty. (0.5-3 h)**

Awards credit to students assisting with a research project led by a faculty member. Students can earn a maximum of six credits (pass/fail) between SOC 394 and 395, but only three credits can be counted toward the major or minor. P-POI.

**SOC 395. Research with Faculty. (0.5-3 h)**

Awards credit to students assisting with a research project led by a faculty member. Students can earn a maximum of six credits (pass/fail) between SOC 394 and 395, but only three credits can be counted toward the major or minor. P-POI.

**SOC 398. Individual Study. (1-3 h)**

Reading, research, or internship courses designed to meet the needs and interests of selected students, to be carried out under the supervision of a departmental faculty member.

**SOC 399. Individual Study. (1-3 h)**

Reading, research, or internship courses designed to meet the needs and interests of selected students, to be carried out under the supervision of a departmental faculty member.

## Faculty

**Chair** Joseph Soares

**Professors** Catherine Harnois, Joseph Soares, Ian M. Taplin, David Yamane

**Associate Professors** H. Kenneth Bechtel, Hana E. Brown, R. Saylor Breckenridge, Amanda Gengler, Ana M. Wahl

**Assistant Professor** Brittany Battle, Alexandra Brewer, Andrea Gomez Cervantes

**Teaching Professor** Steven E. Gunkel

**Adjunct Assistant Professor** Yaqi Yuan

**Research Full Professor** Catherine Harris

**Research Assistant Professor** Robert Freeland

**Emeritus Professor** Catherine Harris

## Sociology, B.A.

### Requirements

Requires 31 hours. Students are required to complete:

Code	Title	Hours
<b>Required Major Courses</b>		
Four Core Courses		
One 100-level SOC course *		3
SOC 270	Sociological Theory **	3
SOC 271	Social Statistics **	4
SOC 272	Research Methods in Sociology **	3
<b>Concentrations within the Major</b>		
Students pursuing a major in sociology may elect to specialize in one of four concentrations:		12
Inequality and Social Justice		

Crime and Criminal Justice

Business and Society

Social Determinants of Health and Well-Being

\*

*Students should take one 100-level SOC course in the freshmen or sophomore year prior to declaring their major in sociology. Any one but no more than two 100-level SOC courses will count towards the major. No 100-level SOC course taken by seniors can count towards the major.*

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*Students are strongly encouraged to complete SOC 270 and SOC 271 in the fall of their junior year, and SOC 272 in the spring of their junior year.*

A minimum average of 2.0 in all sociology courses is required at the time the major is declared. A minimum GPA of 2.0 in all sociology courses is required for graduation.

## Inequality and Social Justice

The student must complete the requirements for the major in sociology including 12 hours from the following SOC electives:

Code	Title	Hours
SOC 305	Gender in Society	3
SOC 309	Sexuality and Society	3
SOC 321	Sociology of Contested Past	1.5
SOC 329	Health Inequalities	3
SOC 334	Sociology of Education	3
SOC 344	Social Justice in Theory, Method, and Practice	3
SOC 355	Social Psychology of Inequality	3
SOC 356	Sociology of Immigration	3
SOC 358	Racial Capitalism	3
SOC 359	Race and Racism	3
SOC 360	Social Inequality	3
SOC 364	Power, Politics, and Protest	3
SOC 369	Social Movements	3
SOC 381	Special Topics Seminar in Social Inequality	3

## Crime and Criminal Justice

The student must complete the requirements for the major in sociology including 12 hours from the following SOC electives:

Code	Title	Hours
SOC 338	Courts and Criminal Procedure in the Era of Mass Incarceration	3
SOC 339	Family Violence	3
SOC 340	Corrections	3
SOC 341	Criminology	3
SOC 342	Juvenile Delinquency	3
SOC 343	Law and Society	3
SOC 345	Advanced Seminar on Criminal Homicide	3
SOC 346	Sociology of Guns	3
SOC 352	White-collar Crime	3
SOC 357	Crime, Law, and Immigration	3

SOC 384	Special Topics Seminar in Crime and Criminal Justice	3
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Business and Society

The student must complete the requirements for the major in sociology including 12 hour from the following SOC electives:

Code	Title	Hours
SOC 303	Business and Society	3
SOC 316	Conflict Management in Organizations	3
SOC 320	Sociology of Sports and Art Worlds	1.5
SOC 336	Money, Markets and Medicine	3
SOC 351	Management and Organizations	3
SOC 352	White-collar Crime	3
SOC 358	Racial Capitalism	3
SOC 362	Work, Conflict, and Change	3
SOC 363	Global Capitalism	3
SOC 365	Technology, Culture, and Change	3
SOC 366	Sociological Analysis of Film	3
SOC 385	Special Topics Seminar in Business and Society	3

Social Determinants of Health and Well-Being

The student must complete the requirements for the major in sociology including 12 hours in the concentration\*:

Code	Title	Hours
SOC 309	Sexuality and Society	
SOC 327	Sociology of Emotion	
SOC 328	The Sociology of Food	
SOC 329	Health Inequalities	
SOC 330	Gender, Social Relationships, and Well-Being	
SOC 331	The Social and Legal Contexts of Medicine	
SOC 335	Sociology of Health and Illness	
SOC 336	Money, Markets and Medicine	
SOC 337	Opioids in American Society	
SOC 339	Family Violence	
SOC 346	Sociology of Guns	
SOC 368	Death and Dying	
SOC 383	Special Topics Seminar in Medicine and Health Care	

\* Pending approval by core faculty in the concentration or the Chair of the Department, students may have the option of counting a health-related course in another social science department not on the list towards the 12-hours once they provide a syllabus of the course.

Students must petition the department for substitutions. A minimum of 31 hours is required for each program. Students who complete the requirements for a concentration are awarded a certificate by the department and have the concentration included on their college transcript.

Honors

Students will be awarded the designation "Honors in Sociology," if their GPA in the major at the time of graduating is 3.8 or higher.

Sociology, Minor Requirements

Requires 15 hours and must include:

Code	Title	Hours
Select at least one but no more than two 100-level SOC courses *		
Select at least one of the following 200-level courses:		3
SOC 270	Sociological Theory	
SOC 271	Social Statistics	
SOC 272	Research Methods in Sociology	

\* No 100-level sociology course taken by seniors may count towards the minor.

A minimum GPA of 2.0 in sociology courses is required at the time the minor is declared. A minimum GPA of 2.0 in sociology courses is required for certification as a minor. Students who intend to pursue a sociology minor are encouraged to notify the department early in their junior year, and they are invited to participate in all departmental functions.

Spanish (SPA)

The Department’s mission is to guide students towards proficiency in Spanish and toward the knowledge necessary to communicate effectively in a variety of cultural contexts. Foreign language literacy and intercultural competence are central components of a liberal arts education and open up diverse and unique career opportunities.

Programs

The Department offers programs leading to a major in Spanish, a minor in Spanish, and concentrations in Spanish for Business, Spanish for Health Professions, Spanish Translation/Localization and Spanish Interpreting. The requirements for completion of each degree program are those in effect in the bulletin year when the declaration of the major, minor, and concentration occurs.

Study Abroad

The Department strongly encourages students of Spanish to spend a year, a semester, or a summer studying abroad. Overseas study in concert with on-campus coursework helps students develop greater fluency, deeper knowledge of other cultures, and increased awareness of their own language, attitudes, and beliefs.

Special Notes

Pass/fail Policy for 100-Level Language Courses:

Sophomores, juniors, and seniors may choose to take 100-level language courses pass/fail, subject to instructor approval and the following requirements:

- 1. Pass/fail students must achieve an overall course grade of C or better to pass.



2. Pass/fail students are subject to the same attendance policy as all students.
3. Pass/fail students must complete each component of the course included in the syllabus grade breakdown. That is, students will not be able to skip any one part of the course, such as homework or the final exam, and still earn a pass grade.

#### Transfer Credit Policy:

Transfer credit **from American universities** must be pre-approved before courses are taken by students. Course instruction and coursework must be entirely in Spanish. No online courses will count towards the major or minor. Courses must be similar in content and coursework to those listed under Spanish (<https://bulletin.wfu.edu/courses-az/spa/>).

Transfer credit **from non-WFU study abroad programs** will be approved as 500 or 520 credit. Transfer credit as 500 will count as elective credit for the major or minor (limit of 3 credits). Transfer credit approved as 520 will count as general elective credit towards graduation.

No more than 3 hours of credit from non-Wake Forest (affiliate) study abroad programs will count towards a Spanish major or minor.

## Contact Information

Department of Spanish (<https://spanish.wfu.edu/>)  
Greene Hall 324, Box 7566  
Phone 336-758-5487

## Programs

### Major

- Spanish, B.A.

### Minor

- Spanish, Minor

## Foreign Area Studies

- Spanish Studies

## Concentrations

- Spanish for Business, Concentration
- Spanish for Health Professions, Concentration
- Spanish Interpreting, Concentration
- Spanish Translation/Localization, Concentration

## Summer Programs and Study Abroad

### Summer Programs for the Language Requirement

- Intensive Summer Language Institute (ISLI) (<https://bulletin.wfu.edu/undergraduate/departments-programs/spanish/summer-programs-study-abroad/isli/>)
- Salamanca 212 Program (<https://bulletin.wfu.edu/undergraduate/departments-programs/spanish/summer-programs-study-abroad/salamanca212/>)

## Study Abroad Programs in Spanish

- Chile Immersion Program (<https://bulletin.wfu.edu/undergraduate/departments-programs/spanish/summer-programs-study-abroad/chile-immersion/>)
- Cuba Program (<https://bulletin.wfu.edu/undergraduate/departments-programs/spanish/summer-programs-study-abroad/cuba/>)
- Salamanca Immersion Program (<https://bulletin.wfu.edu/undergraduate/departments-programs/spanish/summer-programs-study-abroad/salamanca/>)
- Salamanca Internship Program (<https://bulletin.wfu.edu/undergraduate/departments-programs/spanish/summer-programs-study-abroad/salamanca-internship/>)

## Courses

### Spanish (SPA)

#### SPA 111. Elementary Spanish I. (3 h)

A two-semester sequence designed to help students develop the ability to understand and speak Spanish and also learn to read and write Spanish at the elementary level. Labs required.

#### SPA 112. Elementary Spanish II. (3 h)

A two-semester sequence designed to help students develop the ability to understand and speak Spanish and also learn to read and write Spanish at the elementary level. P-SPA 111 or equivalent. Labs required.

#### SPA 113. Intensive Elementary Spanish. (4 h)

A course reviewing the material of SPA 111-112 in one semester, intended for students whose preparation for SPA 153 is inadequate. Credit not given for both SPA 113 and SPA 111 or 112. Labs required. By placement or faculty recommendation.

#### SPA 153. Intermediate Spanish. (4 h)

Intermediate-level course covering the structure of the language, developing students' reading, writing, and conversation skills and preparing them for oral and written discussion of readings. Note that SPA 153 and 154 are mutually exclusive. Labs required. P—SPA 111-112, or 113; or placement.

#### SPA 153S. Intensive Beginning and Intermediate Spanish in an Immersion Setting. (5 h)

Designed to enable students to achieve proficiency in Spanish language at the beginning-intermediate level by developing reading, writing, and conversation skills and preparing students for oral and written discussion of readings. Offered only in the summer. (ISLI) P—SPA 112 or 113; or placement; or POI.

#### SPA 154. Accelerated Intermediate Spanish. (3 h)

An intensive, intermediate-level course intended for students with a stronger background than 153 students. It offers the opportunity to develop further their reading, writing, and conversation skills and prepare for oral and written discussion of readings. Labs required. P-POI or placement.

#### SPA 195. Spanish Language and Culture. (1-3 h)

Spanish vocabulary, grammar, and culture. Offered only in Wake Forest study abroad programs. P-POI.

#### SPA 196. Spanish for Neuroscience. (3 h)

Introduction to basic Spanish vocabulary and grammar for those working in the field of neuroscience. Offered only abroad. P - POI.



**SPA 197. Spanish for Reading Knowledge. (1.5 h)**

Review of essential Spanish grammar, usage, vocabulary and processing strategies for reading various types of literary, social science and technical publications for content. Designed for students interested mainly in strengthening reading proficiency in the language, and aimed at preparing students to take the graduate reading exam administered at the end of the course. Undergraduate credit given. Offered in the first half of the semester. Pass/Fail only. P-Intermediate Spanish or its equivalent, and placement exam.

**SPA 198. Service Learning in Spanish Language. (1.5 h)**

Experiential learning that links classroom instruction and community service done as an adjunct to specially-designated courses throughout the Spanish curriculum. Pass/Fail only. May be repeated for credit. P-POI.

**SPA 199. Internship in Spanish Language. (1.5, 3 h)**

Under faculty direction, a student undertakes a language project in conjunction with a service commitment or internship in a Spanish-speaking country. Includes, but is not limited to, vocabulary building, keeping a journal, and reading professional material. Offered only in Salamanca. May be repeated for credit. Pass/fail only. Does not count towards the major or minor.

**SPA 212. Exploring the Hispanic World. (3 h)**

Explores significant cultural expressions from the Spanish-speaking world. Emphasizes both the development of competence in speaking, reading and writing Spanish, and understanding how particular Hispanic societies have defined themselves. Credit not allowed for both SPA 212 and 213. P—SPA 153; or equivalent.

**SPA 213. Encounters: Hispanic Literature and Culture. (4 h)**

Encounters with significant literary expressions from the Spanish-speaking world. Emphasizes the advancement of competence in speaking, reading and writing, and the analysis of literature in its cultural contexts. Credit not allowed for both 213 and 212. P—SPA 153 or equivalent.

**SPA 280. The Spanish-Speaking World: Portals and Perspectives. (3 h)**

Examination of the diversity of cultural, linguistic, and artistic expressions and the role of Spanish in today's globalized world. P—SPA 212 or 213; or POI; or placement.

**SPA 280L. The Spanish-Speaking World: Portals and Perspectives for Heritage Speakers. (3 h)**

Examination of the diversity of cultural, linguistic, and artistic expressions and the role of Spanish in today's globalized world. Open to heritage speakers of Spanish only. P-SPA 212 or 213; or POI; or placement.

**SPA 290. Workshop in Critical Reading and Writing. (3 h)**

Practice in language analysis with emphasis on developing effective reading and writing strategies. Not open to students who have already completed 7 hours in the major. P-SPA 212 or 213; or POI.

**SPA 300A. Spanish Across the Curriculum. (1.5 h)**

Course work in Spanish done as an adjunct to specially-designated courses throughout the college curriculum. May be taken for grade or Pass/Fail. May be repeated for credit. P-POI.

**SPA 300B. Spanish Across the Business/Economics Curriculum. (1.5 h)**

Coursework in Spanish done as an adjunct to specifically-designated courses in business and economics curriculum. May be repeated for credit. P-POI.

**SPA 300C. Spanish Across the Sciences Curriculum. (1.5-3 h)**

Coursework in Spanish done as an adjunct to specifically-designated courses in the sciences and medical curriculum. May be repeated for credit. P-POI.

**SPA 301. Intensive Spanish. (1.5 h)**

Intensive study and practice of the oral and written languages. Familiarization with Spanish culture and daily life. Classes in conversational and idiomatic Spanish, excursions to points of interest and lectures on selected topics. Pass/Fail only. Does not count towards the major or minor.

**SPA 303. Spanish Conversation. (3 h)**

Based on cultural material intended to increase students' aural skills and oral proficiency by systematically increasing vocabulary and reinforcing command of specific grammatical points. Counts toward the major. Students whose speaking skills, in the instructor's judgment, are already advanced, may not enroll. P—200-level course or equivalent.

**SPA 303I. Language Study in the Context of an Internship. (1.5, 3 h)**

Development of oral proficiency and writing skills. Reading, discussions, and writing assignments based on texts relevant to internships being undertaken by students. Must be taken in conjunction with SPA 199. May count toward the major or minor. Credit not given for both 303 and 303I. P - a 200-level course.

**SPA 304. Selected Topics in Spanish Language and Hispanic Culture. (3 h)**

Topics vary. Offered only in Abroad Programs. May be repeated for credit when the topic changes. P - 200-level SPA course or equivalent.

**SPA 309. Grammar and Composition. (4 h)**

Systematic study of Spanish morphology, sentence structure, and expository usage applied to various kinds of composition, including description, narration, and argumentation. P— SPA 280 or equivalent.

**SPA 309L. Grammar and Composition for Heritage Speakers of Spanish. (4 h)**

Systematic study of Spanish orthography, word formation, sentence structure, and expository usage applied to various written forms. Emphasis on grammatical knowledge, vocabulary development, and extensive writing practice. Content and skills intended for heritage speakers who are competent in spoken Spanish but want to improve their writing skills. P—200-level course or equivalent and POI.

**SPA 310. Anecdotes, Bestsellers, Cuentos. The ABCs of Storytelling in the Spanish-Speaking World. (3 h)**

Traces the development of prose fiction and non-fiction, with special attention to signature movements, texts, and representative writers. P— SPA 280 or 290.

**SPA 311. Bard, Ballad, Bolero. Poetry, and Song in the Spanish-Speaking World. (3 h)**

Survey of poetry and music with study of representative examples from a variety of periods and countries. P—SPA 280 or 290.

**SPA 312. Page, Stage, and Performance. Theater and Drama of the Spanish-Speaking World. (3 h)**

Survey of theatrical productions and dramatic texts with study of representative examples from a variety of periods and countries. P— SPA 280 or 290.

**SPA 313. Lights, Camera, ¡Acción!. Cinema and Culture in the Spanish-Speaking World. (3 h)**

Traces the development of cinematic arts and industry, with special attention to signature movements, films, and directors and the representation of cultures on screen. P—SPA 280 or 290.

**SPA 315. The Making of Spain: Interdisciplinary Approaches to the Cultures of Spain. (3 h)**

Examination of Spain's cultural pluralism through visual arts, architecture, film, music, and literature from the medieval period to the present. P— SPA 280 or 290. (CD)

**SPA 316. Paradise in Perspective: An Interdisciplinary Approach to the Wider Caribbean. (3 h)**

Examination of Hispanic Caribbean cultures through visual arts, architecture, film, music, and literature from the pre-Columbian period to the present. P—SPA 280 or 290. (CD)

**SPA 317. Mil máscaras/ A Thousand Masks: Interdisciplinary Approaches to Mexico and Central America. (3 h)**

Examination of Mexican and Central American cultures within today's global world through visual arts, architecture, film, music, and literature from the pre-Columbian period to the present. P - SPA 280 or 290. (CD)

**SPA 318. The Andes to Patagonia: Interdisciplinary Approaches to South American Culture. (3 h)**

Examination of Andean and Southern Cone cultures through visual arts, architecture, film, music, and literature from the pre-Columbian period to the present. P—SPA 280 or 290. (CD)

**SPA 319. Literary and Cultural Studies of Spanish America. (3 h)**

Study of selected major works of Spanish-American literature within their historical and cultural contexts. Emphasis on linguistic and political structures, intellectual currents, art, music, and film to promote understanding of Spanish America's historical development. Offered only in WFU abroad programs. P-SPA 280 or 290. (CD)

**SPA 320. Introduction to Hispanic Linguistics. (3 h)**

Survey of the core areas in Hispanic linguistics: phonetics, phonology, morphology, syntax, semantics, and language variation. Basic concepts and methodology of linguistic analysis as preparation for further study in the field. P—SPA 309 or 309L.

**SPA 322. Spanish pronunciation and Dialect Variation. (3 h)**

Description of, and practice with, the sounds, rhythm, and intonation of Spanish and the differences from English, with special attention to social and regional diversity. Strongly recommended for improving pronunciation. Meets a N.C. requirement for teacher certification. P—SPA 309 or 309L.

**SPA 324. Med & Scientific Translation. (3 h)**

Introduces strategies for translation of documentation relevant to healthcare setting and scientific domains through applied projects. Study of textual conventions and creation of domain-specific resources to support translation process. P-SPA 309 or 309L.

**SPA 325. Spanish for Business I. (3 h)**

Introduction to the vocabulary and skills necessary to perform effectively in Hispanic business settings. Emphasis on oral and written practices, reading, and intercultural knowledge of business practices. P-SPA 309 or 309L or POI.

**SPA 326. International Business: Spain/Latin America. (3 h)**

Study of characteristic features of Spanish and/or Latin American business culture. Focuses on communicating successfully in the world of Hispanic commerce and on acquiring an international view of current issues in business. Offered only in WFU abroad programs. P-SPA 309 or 309L or POI.

**SPA 327. Spanish for Business II. (3 h)**

Continued study of the discourse used in Hispanic business settings. Emphasis on oral and written business presentations, reading and analysis of case studies, and intercultural knowledge of the business world. P-SPA 309 or 309L or POI.

**SPA 328. Medical Spanish. (3 h)**

Study of terminology and sociocultural issues relevant to interlinguistic medical communication. Oral and written practice in the medical context. P - SPA 309 or 309L; or POI.

**SPA 329. Intermediate Topics in Literary and Cultural Studies. (3 h)**

Selected topics in Spanish and/or Spanish-American literature and culture offered at an intermediate level. Topics vary. Offered only in WFU abroad programs. May be repeated for credit when topic changes. P-SPA 280 or 290.

**SPA 330. The Debate about Woman in Late Medieval Spain. (3 h)**

Explores romantic love in the Iberian Peninsula in the 14th and 15th centuries focusing on the debate about woman as an index of the social changes happening at that moment. P— any course in SPA 310-SPA 319 sequence; or POI.

**SPA 331. Medieval Spain: A Cultural and Literary Perspective. (3 h)**

Examines literary, social, and cultural themes, such as: Quests and Discoveries, Pilgrimage and the Act of Reading, Images of Islam, The Judaic Tradition in Spanish Literature, and Spiritual Life and Ideal. P— any course in SPA 310-SPA 319 sequence; or POI.

**SPA 332. The Golden Age of Spain. (3 h)**

Close analysis of literary texts, such as *Lazarillo de Tormes*, and study of the history, art, politics, and economics of the 16th and 17th centuries, with emphasis on themes such as the writer and society, humanism, the picaresque, Catholic mysticism, and power and politics. P— any course in SPA 310-SPA 319 sequence; or POI.

**SPA 333. The Spain of Don Quijote. (3 h)**

Study of the novel *Don Quijote* and its film adaptations, with emphasis on the portrayal of gender roles and individual and collective identity. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 334. Voices of Modern Spain. (3 h)**

Study of the multifaceted cultural identity of contemporary Spain through different literary genres, art, and film. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 335. Love, Death, and Poetry. (3 h)**

Study of the representation of universal themes in Spanish poetry from different historical periods. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 336. Lorca, Dali, Bunuel: An Artistic Exploration. (3 h)**

Study of the relationship of these three Spanish artists through their writings, paintings, and films, respectively, and of their impact on the 20th century. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 337. Contemporary Theater from Spain. (3 h)**

Study of major dramatic works from Spain. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 338. Fashioning Class, Gender, and National Identity in 18th/19th-Century Spain. (3 h)**

Explores representations of social class, gender, and national identity in the literature and visual culture of Spain (fashion, illustrated press, etc.) of 18th/19th-Century Spain. Topics vary, but overarching themes may range from royal identity and Enlightenment to industrialization and middle-class culture. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 341. Latin American Historical Fiction: Memory, Myth, and Social Justice. (3 h)**

Introduction to the ways Latin American historical fiction has shaped public memory over the past five centuries. Representative novels, plays, poems, films, and short stories. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 342. From Colonial to Postcolonial Voices. (3 h)**

Exploration of twentieth- and twenty-first century literary, artistic, and cinematic adaptations of colonial stories of discovery by writers, artists, and filmmakers from Spain and Spanish America. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 343. Travel Literature. (1.5-3 h)**

Analyzes various cultural documents to ask questions such as: what do travelers report seeing, how do they describe their journeys and why? In the past and the present, how has travel literature influenced European perceptions of the Americas and vice versa? P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 344. The 18th- and 19th-century Periodical Press in Spain and Spanish America. (1.5-3 h)**

Explores the role of newspaper culture for Enlightenment projects. Topics include patriotism, national histories, natural histories, cultural critique, science and satire. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 345. The Transatlantic Civil War. (3 h)**

Exploration of the artistic and literary responses to the Spanish Civil War. Emphasis on the resulting cultural exchange among Spain, Latin America, and the United States. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 346. Transatlantic Transitions: Postdictatorship in Spain and the Southern Cone. (3 h)**

Examination of the intersections among trauma, memory, and culture in Spain, Argentina, Chile, and Uruguay during and after the rule of dictatorial regimes in the late twentieth century. Relates political needs for reconciliation, reconstruction, and remembrance to specific aesthetic strategies. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 347. Contemporary Theater in Spain and Spanish America. (3 h)**

Study of contemporary Peninsular and Spanish-American theater within its political, social, cultural, and aesthetic context. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 348. Contemporary Women Novelists and their Female Characters. (3 h)**

Study of representative novels by women writers from Spain and Latin America, with emphasis on the representation of the female protagonist within her cultural context. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 349. Great Authors and Directors. (1.5-3 h)**

Study of works by a major Hispanic author or film director with attention to formative contexts as well as aesthetic, cultural, and socio-political legacies. May be repeated for credit when focus changes. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 350. Film Adaptations of Literary Works. (3 h)**

Study of the cinematic and literary discourses through major Spanish literary works from different historical periods and their film adaptation. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 351. Cinema and Society. (3 h)**

Exploration of a specific national or regional film history with particular attention to cinematic representations of social, political, and cultural contexts. May be repeated for credit when focus changes. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 352. Mexican Cultures between Global South and Global North. (3 h)**

Examines contemporary examples of Mexican visual art, film, literature, performance, and mass culture from a transnational perspective by analyzing patterns of production, distribution, and consumption in creative industries. Explores how Mexico's cross-border cultural economy both sustains and disrupts global North-South disparities. P-any course in SPA 310-SPA 319 sequence; or POI. (CD)

**SPA 355. Romantic Nationalism, Avant-garde Nihilism, and the Deconstruction of Utopia. (3 h)**

Study of Latin-American poetry, including symbolist, surrealist, and conversational poetry, "happenings," and artistic manifestoes. Politics, nation-building, liberation theology, and love are common themes. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 356. Transgressing Borders: Identity in Latin-American and U.S. Latino Cultures. (3 h)**

Socio-historical study of theories on culture, sexual politics, and race in relation to literary texts, lyrics of popular music, and art of Latin America and the diaspora. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 357. Spanish American Short Story. (3 h)**

Intensive study of the 20th-century Spanish-American short story with emphasis on major trends and representative authors, such as Quiroga, Rulfo, Borges, Cortázar, Donoso, and García Márquez. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 358. Spanish-American Novel. (3 h)**

Study of the novel in Spanish America from its beginning through the contemporary period. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 359. Spanish-American Theater: From Page to Stage. (3 h)**

Study of the transition of a dramatic work from text to performance and the role of Spanish-American theater as a vehicle for cultural values and socio-political issues. Includes rehearsals for the public staging of selected one-act plays. Proficiency in Spanish and willingness to act on stage are required. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 360. Contemporary Theatre. (3 h)**

Study of major dramatic works from various Latin-American countries. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 361. Fictions of Mexican Revolution. (3 h)**

Explores 20th-century Mexican cultural production as it relates to the Mexican Revolution (1910-1920). Readings include novels, shorts stories, popular poetry, and historiographic texts. Attention to Mexican muralism and cinema, and special emphasis on relationships between literature, history, and contemporary politics. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 362. Masculinity in Mexican Cinema. (3 h)**

Explores representations of masculinity in contemporary Mexican film (1990-present) with attention to film genres, aesthetic movements, national and global sociopolitical contexts, and gender politics. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 363. Cultural and Social Entrepreneurship: Promotion of Latin American and Latino Societies. (3 h)**

Sparks interdisciplinary entrepreneurial thinking about careers in arts and educational organizations that both serve and promote Latino communities and provides the knowledge and skills to implement effective programming. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 364. Indigenous Literatures and Visual Arts in Latin America. (3 h)**

Study of the images, identities, and self-representations of contemporary indigenous societies in 20th- and 21st-century Latin America. Analysis and discussion of literary texts and visual arts. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 366. Advanced Topics in Literary and Cultural Studies. (3 h)**

Selected topics in Spanish and/or Spanish-American literature and culture offered at an advanced level. Topics vary. Offered only in WFU abroad programs. May be repeated for credit when topic changes. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 367. Cuban Literature. (3 h)**

Study of Cuban literature from the 18th century to the present: romanticism, modernism, naturalism, the avant-garde movement, and the post-Revolutionary period. Offered in Havana. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 368. Afro Cuban Cultural Expression. (3 h)**

Comprehensive study of Cuban culture with a concentration on the artistic manifestations of Afro-Cuban religions. Students study literature, art, film, music, and popular culture to analyze how Afro-Cuban culture constitutes national culture. Offered in Havana. Also listed as LAS 220C. P-any course in SPA 310-SPA 319 sequence; or POI. (CD)

**SPA 369. Special Topics in Literary and Cultural Studies. (1.5, 3 h)**

Selected special topics in Hispanic Spanish-American literature and culture. May be repeated for credit when topic changes. P-any course in SPA 310-SPA 319 sequence; or POI.

**SPA 370. History of the Spanish Language. (3 h)**

The development of Spanish from an early Romance dialect to a world language. Study of changes in the language's sounds, grammar, and vocabulary system, with a special focus on the effects of a cultural history and relationships with other languages. P-SPA 309 or 309L and (recommended) LIN 150/ANT 150, or SPA 320.

**SPA 371. Contrastive Spanish/English Grammar and Stylistics. (3 h)**

Advanced study of structure and style in a variety of Spanish texts, with an in-depth approach to idiomatic expressions and some back/cross translation exercises. P-SPA 309 or 309L and (recommended) LIN 150/ANT 150, or SPA 320.

**SPA 372. Acquisition of Spanish. (3 h)**

Comparative study of first language acquisition, adult second language acquisition, and heritage speaker bilingualism. Emphasis on stages of acquisition, influencing factors, and typical outcomes. P-SPA 309 or 309L; or POI.

**SPA 373. Language and Society. (3 h)**

An introduction to the study and methodologies of Spanish sociolinguistics. Emphasis on language and its interaction with socio-economic status, gender, age, ideology, governmental policy, and identity in Spanish-speaking communities. P-SPA 309 or 309L.

**SPA 379. Special Topics in Hispanic Linguistics. (3 h)**

Investigation of key areas in Spanish languages research, such as dialectology, history, language acquisition, and usage. May be repeated for credit. P-SPA 309 or 309L and (recommended) LIN 150/ANT 150, or SPA 320.

**SPA 380. Spanish for the Professions. (3 h)**

Spanish usage of a selected professional area. Emphasizes communication in typical situations and interactions, specialized vocabulary, cultural differences, and related technical readings in the subject matter. Topics offered from the following list: a. Health Occupations; b. Social Work; c. Law and Law Enforcement; d. Other (on demand). P—SPA 309 or 309L; and any course in SPA 310-SPA 329 sequence; and POI.

**SPA 381. Spanish Translation. (3 h)**

Introduces translation strategies through practice, with emphasis on Spanish into English. Focuses on translating in domains such as social science, computing, economics, the entertainment industry, banking, and journalism. P—SPA 309 or 309L, any course in SPA 310-329 sequence, and (recommended) SPA 371; or POI.

**SPA 382. Spanish/English Interpreting. (3 h)**

Introduces strategies of interpreting from Spanish into English, primarily. Intensive laboratory practice course to develop basic skills inconsecutive/escort/simultaneous interpreting. Some voice-over talent training is also included. P - SPA 309 or 309L; and any course in SPA 310-SPA 329 sequence; and senior standing or POI.

**SPA 384. Internships for STL & SI. (1.5-3 h)**

Under faculty supervision, a student undertakes a translation/interpreting project at a translation bureau or translation department of a company/public organization. A community service-oriented internship is preferred for interpreting. Does not count toward major or minor. P-SPA 381 or 382.

**SPA 385. Special Topics in Translation. (3 h)**

Selected topics in Translation Studies ranging from translation theories and descriptive studies to applied translation and related areas such as, terminology, documentation and language industries, among other relevant fields. May be repeated if course content differs. P-SPA 309 or 309L; and any course in SPA 310-SPA 329, or SPA 371 or POI.

**SPA 386. Special Topics in Interpreting. (3 h)**

Selected topics in Interpreting Studies including different interpreting settings, specialized interpreting, terminology for interpreting. May be repeated if content differs. P-SPA 309 or 309L; and any course SPA 310-SPA 329 sequence, or SPA 371 or POI.

**SPA 390. International Business: Spain and Latin America. (3 h)**

Study of the most characteristic features of the economic and financial situation and perspectives in Spain and Latin America. Focuses on communicating successfully in the world of Hispanic business and on acquiring an international view of that world and its cultural differences. Counts as elective for the Spanish major. P-SPA 309 or 309L; or POI.

**SPA 391. Internship in Spanish for Business and the Professions. (1.5-3 h)**

Under faculty supervision, a student completes an internship in a bilingual business or professional setting. Does not count toward major or minor in Spanish. Pass/Fail only. P—SPA 309 or 309L; or POI.

**SPA 397. Spanish Independent Study. (1-3 h)**

P-POI.

**SPA 398. Honors Directed Reading and Research. (1.5 h)**

Required for honors in Spanish. P-POI.

**SPA 399. Honors Directed Writing. (3 h)**

Required for honors in Spanish. P-POI.



## Portuguese (PTG)

### PTG 111. Elementary Portuguese. (3 h)

Two-semester sequence designed to help students develop the ability to understand and speak Portuguese and also learn to read and write Portuguese at the elementary level. Labs required.

### PTG 112. Elementary Portuguese. (3 h)

Two-semester sequence designed to help students develop the ability to understand and speak Portuguese and also learn to read and write Portuguese at the elementary level. Labs required.

### PTG 113. Intensive Elementary Portuguese. (4 h)

Intensive introduction to Portuguese designed to help students develop the ability to understand and speak Portuguese and also learn to read and write Portuguese at the elementary level. P-POI.

### PTG 153. Intermediate Portuguese. (4 h)

Intermediate-level course covering the structure of the language, developing students' reading, writing and conversation skills and preparing them for oral and written discussion of readings. Note that PTG 153 and 154 are mutually exclusive. Labs required. P-PTG 113 or POI.

### PTG 154. Accelerated Intermediate Portuguese. (3 h)

Intensive intermediate-level course. Offers the opportunity to develop further reading, writing and conversation skills and prepare for oral and written discussion of readings. Labs required. P-PTG 113 or POI.

### PTG 212. Exploring the Lusophone World. (3 h)

Exploration of significant cultural expressions from the Portuguese-speaking world. Emphasis on the development of competence in speaking, reading and writing Portuguese and on understanding how particular Lusophone societies have defined themselves. Offered only upon sufficient demand. P-PTG 153 or 154 or equivalent.

## Faculty

**Chair** Kathryn Mayers

**Professors** Jane W. Albrecht, Ola Furmanek, Luis González, Soledad Miguel-Prendes, José Luis Venegas

**Associate Professors** Irma Alarcón, Diego Burgos, Andrea Echeverria, Margaret Ewalt, Jerid Francom, Anne Hardcastle, Linda S. Howe, Tiffany Judy, Kathryn Mayers, Samanta Ordóñez, María Teresa Sanhueza, Nicholas Wolters

**Assistant Professors** Ana Cecilia Calle

Poveda, Sara Fernández Cuenca, César Gutiérrez

**Professor of the Practice** Rebekah Morris

**Associate Professors of the Practice** Liliana Mendoza-Batista, Encarna Turner

**Assistant Teaching Professors** Alison Atkins, Claudia Francom, Daneil Jung, Lauren Miller, Carmen Pérez-Muñoz, Jessica Shade Venegas, Boston Woolfolk

**Visiting Assistant Professors** Ryan Goodman, James Patrick Kozey, Tamara Morgan

**Salamanca, Spain: On-Site Director** Javier G. Garrido

**Cultural Assistant** Fernando Díaz

## Spanish, B.A.

### Requirements

Requires a minimum of 28 hours in Spanish courses numbered 280 and above. It must include:

Code	Title	Hours
<b>Required Major Courses</b>		
SPA 280	The Spanish-Speaking World: Portals and Perspectives	3
SPA 309 or SPA 309L	Grammar and Composition * Grammar and Composition for Heritage Speakers of Spanish	4
Select one of the following Genre Courses:		3
SPA 310	Anecdotes, Bestsellers, Cuentos. The ABCs of Storytelling in the Spanish-Speaking World	
SPA 311	Bard, Ballad, Bolero. Poetry, and Song in the Spanish-Speaking World	
SPA 312	Page, Stage, and Performance. Theater and Drama of the Spanish-Speaking World	
SPA 313	Lights, Camera, ¡Acción!. Cinema and Culture in the Spanish-Speaking World	
Select one of the following Regions Courses:		3
SPA 315	The Making of Spain: Interdisciplinary Approaches to the Cultures of Spain	
SPA 316	Paradise in Perspective: An Interdisciplinary Approach to the Wider Caribbean	
SPA 317	Mil máscaras/ A Thousand Masks: Interdisciplinary Approaches to Mexico and Central America	
SPA 318	The Andes to Patagonia: Interdisciplinary Approaches to South American Culture	
SPA 319	Literary and Cultural Studies of Spanish America	
Select six hours from SPA 330 - SPA 395		6
Select nine hours of of Electives credits from Spanish classes numbered above 280 *		9

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*Students must achieve at least a C grade in SPA 309 or SPA 309L. SPA 309 or SPA 309L must be taken on the Reynolda or Salamanca campus.*

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*No more than 10 hours may be counted from courses numbered SPA 280-SPA 309.*

Students must achieve a GPA of 2.0 in the major.

## Honors

The honors designation in Spanish is a recognition of outstanding scholarship in the field, as evidenced by academic achievement, critical thinking, and intellectual initiative. Highly qualified majors selected by the faculty are invited to participate in the honors program, which candidates undertake in addition to the requirements for the major.

The honors program requires completion of:

1. SPA 398 (Directed Reading, 1.5h)
2. SPA 399 (Directed Research, 3h)
3. Directed Reading, normally taken during the fall semester of the student's final year, includes reading and discussion of a number of texts on the selected topic, and a written exam covering these



texts. At the end of fall semester, the student submits an annotated bibliography and an abstract of the honors thesis.

4. Directed Research, taken during the student's final semester, consists of writing the thesis following a schedule established by the director and the student.

At the end of this course, the honors student defends the thesis orally before appropriate faculty who collectively may confer honors.

## Spanish, Minor Requirements

Requires a minimum of 19 hours in Spanish courses numbered 280 and above. It must include:

Code	Title	Hours
SPA 280	The Spanish-Speaking World: Portals and Perspectives	3
SPA 309 or SPA 309L	Grammar and Composition * Grammar and Composition for Heritage Speakers of Spanish	4
Select one of the following Genre courses:		3
SPA 310	Anecdotes, Bestsellers, Cuentos. The ABCs of Storytelling in the Spanish-Speaking World	
SPA 311	Bard, Ballad, Bolero. Poetry, and Song in the Spanish-Speaking World	
SPA 312	Page, Stage, and Performance. Theater and Drama of the Spanish-Speaking World	
SPA 313	Lights, Camera, ¡Acción!. Cinema and Culture in the Spanish-Speaking World	
Select one of the following Regions course:		3
SPA 315	The Making of Spain: Interdisciplinary Approaches to the Cultures of Spain	
SPA 316	Paradise in Perspective: An Interdisciplinary Approach to the Wider Caribbean	
SPA 317	Mil máscaras/ A Thousand Masks: Interdisciplinary Approaches to Mexico and Central America	
SPA 318	The Andes to Patagonia: Interdisciplinary Approaches to South American Culture	
SPA 319	Literary and Cultural Studies of Spanish America	
Select three credit hours from SPA 330 - SPA 395		3
Select three additional hours of elective credit from Spanish classes numbered above 280 **		3

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*Students must achieve at least a C grade in SPA 309 or SPA 309L. SPA 309 or SPA 309L must be taken on the Reynolda or Salamanca campus.*

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*No more than 10 hours may be counted from courses numbered SPA 280-SPA 309.*

Students must achieve a GPA of 2.0 in the minor.

## Spanish Studies Requirements

Foreign Area Study

Students are required to participate in the Spanish program at Salamanca for one or two semesters. They also are required to take:

Code	Title	Hours
HST 216	General History of Spain (taught in Salamanca)	3
POL 202	Political Structures of Present-day Spain (taught in Salamanca)	3
ART 230	Spanish Art and Architecture (taught in Salamanca)	3
SPA 315	The Making of Spain: Interdisciplinary Approaches to the Cultures of Spain (taught in Salamanca)	3

Select nine additional hours from the advanced courses in Spanish language and the literature and culture of Spain offered by the Department of Spanish and Italian, or from those offered at the University of Salamanca

## Spanish for Business, Concentration Requirements

Teaches general concepts and skills necessary to perform effectively in professional international business settings. Requirements include:

Code	Title	Hours
Select two of the following:		6
SPA 325	Spanish for Business I	
SPA 326	International Business: Spain/Latin America	
SPA 327	Spanish for Business II	
Select one course from the following Options:		3
Option 1:		
SPA 315	The Making of Spain: Interdisciplinary Approaches to the Cultures of Spain	
SPA 316	Paradise in Perspective: An Interdisciplinary Approach to the Wider Caribbean	
SPA 317	Mil máscaras/ A Thousand Masks: Interdisciplinary Approaches to Mexico and Central America	
SPA 318	The Andes to Patagonia: Interdisciplinary Approaches to South American Culture	
SPA 319	Literary and Cultural Studies of Spanish America	
Option 2:		
SPA 381	Spanish Translation	

## Spanish for Health Professions, Concentration

### Requirements

Teaches medical and cultural concepts and prepares students to use Spanish in a healthcare setting. Requirements are the following:

Code	Title	Hours
SPA 324	Med & Scientific Translation	3
or SPA 371	Contrastive Spanish/English Grammar and Stylistics	
SPA 328	Medical Spanish	3
SPA 382	Spanish/English Interpreting	3

## Spanish Interpreting, Concentration

### Requirements

SI teaches strategies for different types of Spanish/English interpreting. Includes an internship. Requirements include:

Code	Title	Hours
SPA 382	Spanish/English Interpreting	3
SPA 384	Internships for STL & SI	1.5-3

Select one course in SPA 330- SPA 369

Select one of the following:		3
SPA 322	Spanish pronunciation and Dialect Variation	
SPA 324	Med & Scientific Translation	
SPA 328	Medical Spanish	
SPA 381	Spanish Translation	
SPA 371	Contrastive Spanish/English Grammar and Stylistics	
LIN 383	Language Engineering: Localization and Terminology	

Students must achieve a grade of minimum B- in each course in this concentration track.

## Spanish Translation/Localization, Concentration

### Requirements

STL teaches strategies of Spanish into English translation and introduces students to various software/website translation applications. Includes an internship in a professional translation environment. Requirements include:

Code	Title	Hours
SPA 371	Contrastive Spanish/English Grammar and Stylistics	3
SPA 381	Spanish Translation	3
LIN 383	Language Engineering: Localization and Terminology	3
SPA 384	Internships for STL & SI	1.5-3

Select one of the following:

3

SPA 382	Spanish/English Interpreting
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Students must achieve a grade of minimum B- in each course in the concentration track.

## Statistical Sciences (STA)

A major in statistics or applied statistics can be achieved by satisfying the requirements listed for the bachelor of science. Lower division students are urged to consult a member of the departmental faculty before enrolling in courses other than those satisfying Division V requirements.

To declare a major in either Statistics or Applied Statistics, a student must have completed STA 112, and either MTH 112 or MTH 121, with AP credit or by earning a grade of C or higher in each course. A minimum grade point average of 2.0 in courses which comprise a major or minor in the department is required for graduation with any major or minor which the department offers. Students may major in Mathematical Business and minor in statistics, but no courses which are electives for the Mathematical Business major may be counted as electives for the Statistics minor. However, courses which are required for the Mathematical Business major (e.g. STA 310) may be counted as electives for the Statistics minor. Students may not minor in statistics and also major in either statistics or applied statistics.

The department regularly schedules activities in statistics for students that enhance the course offerings. Examples are:

- the American Statistical Association DataFest
- Local chapter of the AWM (American Women in Mathematics)
- data science and hackathon events
- meetings of the mathematics and statistics club
- seminars and courses which build upon the regularly scheduled course offerings
- student research with faculty
- The Math and Stats Center provides an opportunity for students to receive tutoring in all MTH and STA courses throughout the year. Opportunities to serve as a tutor are also available.

Students who are enrolled at Wake Forest may not take courses in statistics at other institutions to satisfy divisional requirements.

## Contact Information

Department of Statistical Sciences (<https://stats.wfu.edu/>)  
Manchester Hall 127, Box 7388  
Phone 336-758-5300

## Programs Majors

- Applied Statistics, B.S.
- Mathematical Business, B.S.
- Statistics, B.A.
- Statistics, B.S.

## Minors

- Statistics, Minor

## Certificate

- Certificate in Actuarial Science

## Courses

### Statistical Sciences (STA)

#### STA 107. Explorations in Statistics. (3 h)

Introduction to statistical literacy and the role of statistics in settings such as elections, medicine, sports, and the sciences. Topics vary by instructor. (D, QR)

#### STA 111. Elementary Probability and Statistics. (4 h)

Data collection and visualization, exploratory analysis, introductory probability, inference techniques for one variable, and statistical literacy. Lab. (D, QR)

#### STA 112. Introduction to Regression and Data Science. (3 h)

A foundational course in regression and data science. The course introduces data analysis through statistical computing in R, least-squares and logistic regression, model selection, and data visualization. P-STA 111 or POI. (D, QR)

#### STA 175. Competitions. (1-3 h)

Seminar designed for students who wish to participate in statistics and/or data analysis competitions. Not to be counted toward any major or minor offered by the department. May be repeated for credit. Pass/Fail only.

#### STA 214. Applied Generalized Linear Models. (3 h)

A course in statistical models, emphasizing models for count and categorical data, an exploration of likelihood-based modeling, and an introduction to mixed effects models. These models are applied using R. P-STA 112 and MTH 111. (QR, D)

#### STA 247. Design and Sampling. (3 h)

Experimental designs, observational studies, survey design and estimation with stratified, cluster, and other sampling schemes. P-STA 112 or POI. (D)

#### STA 279. Topics in Statistics. (1-3 h)

Topics in statistics not considered in regular courses, or which continue study begun in regular courses. Content varies.

#### STA 310. Probability. (3 h)

Distributions of discrete and continuous random variables, sampling distributions. Covers much of the material on the syllabus for the first actuarial exam. Also listed as MTH 357. P-MTH 112 or POI. (D)

#### STA 311. Statistical Inference. (3 h)

Derivation of point estimators, hypothesis testing, and confidence intervals, using both frequentist and Bayesian approaches. P-STA 310 or MTH 357 or POI. (D)

#### STA 312. Linear Models. (3 h)

Theory of estimation and testing in linear models. Topics include least squares and the normal equations, the Gauss-Markov Theorem, testing general linear hypotheses, model selection, and applications. P-MTH 121 or 205, and STA 310 or MTH 357. (D)

#### STA 352. Networks: Models and Analysis. (3 h)

A course in fundamental network theory concepts, including measures of network structure, community detection, clustering, and network modelling and inference. Topics also draw from recent advances in the analysis of networks and network data, as well as applications in economics, sociology, biology, computer science, and other areas. Also listed as MTH 359. P-MTH 117 or MTH 121 or MTH 205, and one course in STA at the 200 level or above. (D)

#### STA 362. Multivariate Statistics. (3 h)

Multivariate and linear methods for classification, visualization, discrimination, and analysis of high dimensional data. P-STA 112 and MTH 121 or MTH 205, or POI. (D)

#### STA 363. Introduction to Statistical Learning. (3 h)

An introduction to supervised learning. Topics may include lasso and ridge regression, splines, generalized additive models, random forests, and support vector machines. P-STA 112 and MTH 121 or 205, or POI, experience with statistical computing. (D)

#### STA 364. Computational and Nonparametric Statistics. (3 h)

Computational and Nonparametric Statistics (3 h). Computationally intensive statistical methods. Topics may include simulation, Monte Carlo integration and Markov Chain Monte Carlo, sub-sampling, non-parametric estimation and regression. Students will make extensive use of statistical software throughout the course. P-STA 112, and either STA 310 or MTH 357, or POI. (D)

#### STA 365. Applied Bayesian Statistics. (3 h)

An introduction to Bayesian statistics and computational methods for performing Bayesian data analysis. Topics may include conjugate distributions, objective prior distributions, Bayesian inference, hierarchical models, and Markov chain Monte Carlo methods. P - STA 112 and STA 310. (QR, D)

#### STA 368. Time Series and Forecasting. (3 h)

Methods and models for time series processes and autocorrelated data. Topics include model diagnostics, ARMA models, spectral methods, computational considerations, and forecasting error. P-STA 212/112, and either STA 310 or MTH 357, or POI. (D)

#### STA 379. Advanced Topics in Statistics. (1-3 h)

Topics in statistics not considered in regular courses or which continue study begun in regular courses. Content varies.

#### STA 381. Applied Statistics Capstone. (2 h)

Students integrate knowledge acquired throughout their degree program. Topics include developing a research plan, statistical writing, data visualization, and data ethics. Students will communicate statistical results to both technical and non-technical audiences through written reports and oral presentations. Offered fall semester. P-senior STA major.

#### STA 382. Applied Statistics Capstone. (1.5 h)

A capstone course for students in the B.S. in Applied Statistics. Topics include developing a project plan, team work skills, statistical writing, data visualization, and data ethics. Students will communicate statistical results to both technical and non-technical audiences through written reports and oral presentations. P-STA 363 and junior or senior B.S. in Applied Statistics major. Cross listed as STA 381. Students in the B.S. in Statistics may request entry into this course by contacting the professor, and may be admitted if there is space available.

#### STA 383. Individual Study. (1-3 h)

A course of independent study directed by a faculty adviser. By prearrangement.

#### STA 391. Honors Research I. (1 h)

Independent study or research directed by a faculty adviser by prearrangement with the adviser.

#### STA 392. Honors Research II. (1 h)

Preparation of a paper, followed by an oral presentation based upon work completed in STA 391.

## Faculty

**Chair** Robert Erhardt

**Professors** Kenneth Berenhaut, Robert Erhardt

**Associate Professors** Daniel Beavers, Staci Hepler  
**Assistant Professors** Leonardo Cella, Ciaran Evans, Sarah Lotspeich, Lucy D'Agostino McGowan, Emily Huang, Sneha Jadhav  
**Associate Teaching Professors** Nicole Dalzell, Lynne Yengulalp  
**Teacher-Scholar Postdoctoral Fellows** Eva Murphy  
**Visiting Assitant Professors** Shantanu Awasthi, Wimarsha Jayanetti, Premathilaka Methsarani, Yasin Rabby

# Applied Statistics, B.S. Requirements

Requires:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	3
CSC 111	Introduction to Computer Science	4
STA 112	Introduction to Regression and Data Science	3
STA 310/ MTH 357	Probability	3
STA 311	Statistical Inference	3
STA 312	Linear Models	3
STA 363	Introduction to Statistical Learning	3
STA 382	Applied Statistics Capstone	1.5
Select two of the following:		6-7
CSC 112	Fundamentals of Computer Science	
CSC 201	Data Structures and Algorithms	
MTH 253	Operations Research	
MTH 254	Optimization Theory	
MTH 326	Numerical Linear Algebra	
MTH 355	Introduction to Numerical Methods	
Select 2 additional electives in STA at the 200 or 300 level, one of which must be numbered above 300.*		6

\*  
Excluding STA 383, STA 391, and STA 392.

\*\*  
Students are encouraged to participate in STA 175 for applied experience. This course is offered every Spring as a 1 credit Pass/Fail course, and may be repeated.

## Honors

To graduate with a designation of “Honors in Applied Statistics”, students in the B.S. in Applied Statistics major must:

- Satisfactorily complete a year-long senior research project, completed as in the sequential courses STA 391 and STA 392.
- Have a minimum GPA of 3.5 in the major and a 3.0 overall GPA to graduate with Honors.
- Students must apply to participate in an Honors project. For application details, please see the department website.

# Certificate in Actuarial Science

Code	Title	Hours
ACC 111	Introductory Financial Accounting	3
ECN 150	Introduction to Economics	3
ECN 205	Intermediate Microeconomics	3
or ECN 210	Intermediate Mathematical Microeconomics	
ECN 207	Intermediate Macroeconomics	3
or ECN 211	Intermediate Mathematical Macroeconomics	
FIN 231	Principles of Finance	3
STA 310	Probability	3
STA 311	Statistical Inference	3

To declare the certificate in actuarial science, a student must receive at least a C or AP credit in each of ACC 111, ECN 150, and MTH 112. Upon declaration, students will gain access to the pre-registration procedures in the relevant departments and in the School of Business.

Students are strongly encouraged to take Society of Actuaries (SOA) Exam P shortly after completing STA 310, and SOA Exam FM shortly after completing FIN 231. For more information on these exams, consult the SOA. Students are also strongly encouraged to seek an actuarial internship in the summer after their junior year.

Students can apply for Validation by Education Experience (VEE) credit with the SOA after passing at least two actuarial exams.

# Mathematical Business, B.S. Requirements

Students interested in pursuing this joint major must be granted formal admission to the program upon application to the School of Business' Committee on Admissions, Continuation, and Scholarships. To graduate from Wake Forest University with a major in mathematical business, the student must satisfy the requirements for graduation of both the Department of Statistical Sciences and the School of Business. This interdisciplinary program, consisting of a minimum of 49.5 hours, prepares students for careers in business with a strong background in mathematics. The major has the following course requirements:

Code	Title	Hours
<b>Prerequisites for Admission</b>		
ACC 111	Introductory Financial Accounting	3
ECN 150	Introduction to Economics	3
MTH 112	Calculus with Analytic Geometry II	4
STA 112	Introduction to Regression and Data Science	3
ACC 111 and STA 112 count toward Core Requirements		
<b>Core Requirements</b>		
ACC 221	Introductory Management Accounting	3
BEM 211	Organizational Behavior	3
BEM 221	Principles of Marketing	3
BEM 241	Production and Operations Management	3
BEM 251	Management Information Systems	3
BEM 261	Legal Environment of Business	3
BEM 388	Management Simulation	1.5

FIN 231	Principles of Finance	3
<b>Required Major Courses</b>		
BEM 392	Seminar in Mathematical Business Analysis	3
MTH 121	Linear Algebra I	3
MTH 253	Operations Research	3
STA 310	Probability	3
STA 363	Introduction to Statistical Learning	3
Select a minimum of two additional courses *		6
<b>Recommended Electives</b>		
BEM 383	Seminar in Negotiations	3
BEM 371	Strategic Management	3
or BEM 372	Strategic Management in Entrepreneurial Firms	
CSC 111 & CSC 112	Introduction to Computer Science and Fundamentals of Computer Science	8
STA 362	Multivariate Statistics	3

\*

*Chosen from 3 or 4-hour courses among business, computer science, economics, mathematics, or statistics, excluding MTH 381 and STA 383. One elective must be 300-level or higher in either mathematics or statistics; the other elective must be either 200-level or higher in one of these five areas, or CSC 111 or CSC 112.*

Students may major in Mathematical Business and also complete the certificate in Actuarial Science, however no courses from the certificate may be used to satisfy any electives from the Mathematical Business Major.

## Honors

Mathematical Business majors with a minimum cumulative grade point average of 3.0 and a minimum grade point average of 3.5 in the major are eligible to apply for admission to the honors program in mathematical business. The application is available from the program co-directors, and must be submitted prior to the start of a student's senior year. Honors students write a paper under the supervision of a faculty advisor and also present their work. Those who successfully complete the requirements specified by the School of Business and the Department of Statistical Sciences graduate with the designation "Honors in Mathematical Business." For additional information, interested students should consult with both departments' program directors.

## Statistics, B.A.

### Requirements

Requires:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 121	Linear Algebra I	3
CSC 102	Problem Solving with Python	3-4
or CSC 111	Introduction to Computer Science	
STA 112	Introduction to Regression and Data Science	3
STA 310	Probability	3
or MTH 357	Probability	
STA 311	Statistical Inference	3

STA 312	Linear Models	3
Choose 4 additional electives in STA. Optionally, one of these STA electives may be switched for MTH 117 (4h). At least one elective must be at the 300 level in STA.*, **		12

\*

*Excluding STA 381, STA 382, STA 383, STA 391, and STA 392.*

\*\*

*STA 111 may be taken as an elective as long as the student does not already have credit for STA 112 (meaning you cannot enroll in / receive credit for STA 111 after you already have credit for STA 112).*

## Honors

To graduate with a designation of "Honors in Statistics", students in the B.A. in Statistics major must:

- Satisfactorily complete a year-long senior research project, completed as in the sequential courses STA 391 and STA 392.
- Have a minimum GPA of 3.5 in the major and a 3.0 overall GPA to graduate with Honors.
- Students must apply to participate in an Honors project. For application details, please see the department website.

## Statistics, B.S.

### Requirements

Requires:

Code	Title	Hours
MTH 112	Calculus with Analytic Geometry II	4
MTH 113	Multivariable Calculus	4
MTH 117	Discrete Mathematics	4
MTH 121	Linear Algebra I	3
CSC 111	Introduction to Computer Science	4
STA 112	Introduction to Regression and Data Science	3
STA 310/ MTH 357	Probability	3
STA 311	Statistical Inference	3
STA 312	Linear Models	3
Select one of the following:		3
STA 362	Multivariate Statistics	
STA 363	Introduction to Statistical Learning	

Choose 3 additional electives in STA at the 200 or 300 level. At least one elective must be in STA at the 300 level.\*

\*

*Excluding STA 381, STA 383, STA 391 and STA 392.*

\*\*

Note: Many graduate programs require Real Analysis (MTH 311) or may require other courses outside the major. Students who intend to pursue graduate study should check program requirements and take additional courses as needed.



Honors

To graduate with a designation of “Honors in Statistics”, students in the B.S. in Statistics major must:

- Satisfactorily complete a year-long senior research project, completed as in the sequential courses STA 391 and STA 392.
- Have a minimum GPA of 3.5 in the major and a 3.0 overall GPA to graduate with Honors.
- Students must apply to participate in an Honors project. For application details, please see the department website.

Statistics, Minor

Requirements

Requires:

Code	Title	Hours
STA 112	Introduction to Regression and Data Science	3
MTH 112 or MTH 121	Calculus with Analytic Geometry II Linear Algebra I	4
Select four electives in STA from 111-379 (Excluding STA 175). At least one elective must be at the 300 level. *		12-13

Students are responsible for satisfying prerequisites for all courses selected for the statistics minor.

Theatre and Dance (THE/DCE)

The Department of Theatre and Dance offers students an exceptional education in theatre and dance, and plays an integral role in the Wake Forest community. We are a creative and collegial department that values close working relationships between students and faculty, that sees the arts as integral to a liberal arts education, and that prizes intellectual discipline as well as free thinking and expression. We aspire to create exceptional artist/scholars, exploring through classes and productions intersections of theatre and dance with other realms of study, and giving expression to humanity’s foremost social and intellectual concerns. We promote inclusivity, intellectual curiosity, innovation, dialogue, and problem-solving skills. And we believe that artistic commitment, personal development, responsibility to one’s community, and academic rigor can all coexist.

Each season, the department mounts four subscription series productions, two dance concerts, and numerous student-directed and designed pieces. Students learn through work on productions—whether in the rehearsal hall or shop—as well as through classwork in acting and directing, dance technique, choreography, design, playwriting, voice and movement, history, dramatic literature, performance art, theatre education, and technical theatre.

Students with both academic and artistic ability will find a comfortable home at Wake Forest University. Our students work closely with a vigorous faculty on a wide variety of projects. They enjoy the benefits of a nationally ranked university with small classes, impressive facilities, and an active theatre and dance program, and they grow as both scholars and artists. College is for learning—through books and lectures, certainly, but also through self-exploration and creative expression. We at Wake Forest believe that excellence in both arts and academics is not only possible but also desirable. Myriad student theatre, dance, and performance

groups on campus contribute to a vital educational environment for the study of performance.

Contact Information

Department of Theatre and Dance (<http://college.wfu.edu/theatre/>)  
Scales Fine Arts Center 219, Box 7264  
Phone 336-758-5294

Programs

Major

- Theatre, B.A.

Minors

- Dance, Minor
- Theatre, Minor

Courses

Dance (DCE)

- DCE 101. Beginning Tap Dance. (2 h)**  
Fundamentals of tap dance technique with an emphasis placed on technique, rhythm, vocabulary, and performance qualities. May be taken two times for credit.
- DCE 120. Beginning Modern Dance Technique. (2 h)**  
Fundamentals of modern dance technique, with an emphasis placed on movement concepts, vocabulary, technique, alignment, placement, and flexibility. May be taken two times for credit.
- DCE 122. Special Topics in Dance. (1-3 h)**  
An intensive study of selected topics in dance. May be repeated.
- DCE 123. Introduction to Dance Composition. (2 h)**  
Introduction to the fundamental study of improvisation, composition and choreography. P-DCE 221, 226, or DCE 227; or POI.
- DCE 124. Social Dance. (1.5 h)**  
Fundamental techniques of social dance, providing basic skills, concepts of movement, style and fundamental step patterns found in social dance rhythms. Students will learn basic smooth dances, rhythm dances, Latin-American dances and Cuban dances.
- DCE 125. Folk and Social Dance. (1.5 h)**  
Fundamentals of folk and social dance, providing the basic skills, concepts of movement, style and fundamental step patterns of folk and social dance. Emphasis is on the development of fundamental dance skills and practice in utilizing dance techniques.
- DCE 126. Beginning Jazz Dance. (2 h)**  
Fundamentals of jazz technique with an emphasis on alignment, isolations, flexibility, basic turns, jumps, and combinations. May be taken two times for credit.
- DCE 127. Beginning Classical Ballet Techniques. (2 h)**  
Fundamentals of classical ballet technique with an emphasis on alignment, placement, flexibility, barre work, adagio and petite allegro. May be taken two times for credit and two times Pass/Fail.
- DCE 128. Dance Performance. (1 h)**  
Practical experience in the areas of rehearsal, production, and performance, as a performer in the Fall or Spring Dance Concert. May be taken up to four times for credit.

**DCE 129. Choreography. (1 h)**

Practical experience in the areas of rehearsal, choreography production and performance as a choreographer in the Spring Dance Concert. May be taken only once.

**DCE 130. Movement for All. (1.5 h)**

A beginning level dance class for all students that surveys jazz, modern and/or ballet techniques. Emphasis on flexibility, coordination, and efficiency of movement. Eight week course.

**DCE 131. African Dance. (1.5 h)**

Designed to develop basic West African dance technique, build students' musicality and performance skills and create an awareness of African culture. May be taken 2 times for credit.

**DCE 133. Hip Hop Dance. (1.5 h)**

Fundamentals of Hip Hop dance technique. May be taken 2 times for credit.

**DCE 150. Design and Production for Dance. (2 h)**

Introduction to the fundamentals of lighting, sound editing, dance floor installation, costumes and stage management for dance performance. Credit not allowed for both DCE 150 and THE 150. P-POI.

**DCE 200. Senior Dance Project. (2 h)**

An investigation of selected semi-professional problems involving the creative process of choreography, study of notation, research idea, or production.

**DCE 201. Intermediate Tap Dance. (2 h)**

A progressive development of technique and vocabulary from DCE 101, with an emphasis on exploring rhythm, dynamics and performance qualities. May be taken four times for credit. P-DCE 101 or POI.

**DCE 202. History of Dance. (3 h)**

A survey of the development of dance as a performing art from the Renaissance to the present with an emphasis on scope, style and function. (D)

**DCE 203. 20th-Century Modern Dance History. (3 h)**

Exploration of the history of modern dance from Isadora Duncan to contemporary modern dance trends in the U.S. and abroad. (D)

**DCE 205. Improvisation. (2 h)**

An investigation of the art and technique of improvised dancing. The course borrows from visual art, poetry, literature, theatre, and music as catalysts for original movement generation. P-DCE 120 or 221.

**DCE 221. Intermediate Modern Dance Technique. (2 h)**

A progressive development of movement concepts and vocabulary from DCE 120, with an emphasis on exploring both the classical and contemporary techniques of modern dance. May be taken four times for credit. P-DCE 120 or POI.

**DCE 222. Advanced Modern Dance Technique. (2 h)**

A progressive development of the concepts of DCE 221 with an emphasis on qualitative performance, virtuosity and versatility in a variety of technical forms within the modern dance discipline. May be taken four times for credit. P-DCE 221 or POI.

**DCE 223. Dance Composition. (3 h)**

Fundamental study of improvisation, composition, and choreography. P - DCE 221, 226, 229, or POI.

**DCE 224. Advanced Social Dance. (1.5 h)**

Progressive development of technique in rhythm, dance hold, footwork and patterns of ballroom and Latin dance. Emphasis on performance and competitive dance styles. May be taken two times for credit. P-DCE 124 or POI.

**DCE 226. Intermediate Jazz Dance. (2 h)**

This course pursues the mastery of basic jazz technique along with more complex center floor combinations. Emphasis is placed on performance qualities and musicality. May be taken four times for credit. P-DCE 126 or POI.

**DCE 227. Advanced Jazz Dance. (2 h)**

Pursues the mastery of jazz technique along with more complex center floor combinations. Emphasis is placed on performance qualities, musicality, technique, virtuosity, and creativity. May be taken four times for credit. P-DCE 226 or POI.

**DCE 229. Intermediate Classical Ballet. (2 h)**

Pursues the mastery of basic ballet technique along with more complex barre and center combinations, performance qualities, and musicality. May be taken four times for credit. P-POI.

**DCE 231. Advanced Classical Ballet. (3 h)**

Continues the mastery of basic ballet technique along with more complex barre and center combinations, performance qualities, musicality and pointe work. May be taken four times for credit. P-POI.

**DCE 233. Advanced Studio Classical Ballet. (3 h)**

Professional level pace of ballet technique. Complex barre and center combinations as well as more advanced pointe work in class. May be taken 4 times for credit. P-POI.

**DCE 235. Ballet Repertory. (2 h)**

An intermediate and advanced level technique class focusing on the development and performance of classical and contemporary ballet repertoires. May be repeated 4 times for credit. P-DCE 229 or POI.

**DCE 236. Multi-Ethnic Dance. (3 h)**

Exploration of the cultural importance of dance in major ethnic groups in American society. Also listed as AES 236. (CD)

**DCE 241. Advanced Tap Dance. (2 h)**

A progressive development of the concepts of DCE 201 with an emphasis on qualitative performance, virtuosity and versatility in a variety of technical forms within the tap dance discipline. May be taken four times for credit. P-DCE 201 or POI.

**DCE 285. Internship in Dance. (1-3 h)**

Internship, approved by the department, to be carried out under the supervision of a departmental faculty member, designed to meet the proposing student's needs and interests related to their study of dance. Requirements may include an evaluative paper and public presentation. Normally one course in an appropriate sub-filed is taken prior to the internship. P-POI.

**DCE 294. Individual Study. (1-3 h)**

Research and readings in an area of interest to be approved and supervised by a faculty adviser. May be taken for a total of not more than 3 hours. P-POI.

## Theatre (THE)

**THE 100. Participation. (0.5 h)**

Attendance/participation in Mainstage and Studio performances and other events as established by the department. Specific attendance/participation requirements will be established at the beginning of each semester. Assignments for technical production are made through consultation with the technical and design faculty. May be repeated for credit. Pass/Fail only. P-POI.

**THE 110. Introduction to Western Theatre. (3 h)**

Survey of the theory and practice of the major disciplines of Western theatre art: acting, directing, playwriting, and design. Optional lab-THE 110L. (D)

**THE 110L. Intro to Theatre-Lab. (1 h)**

Participation in production team on Mainstage as assigned. P or C-THE 110 or 111 and POI.

**THE 111. Introduction to Theatre. (3 h)**

Survey of the theory and practice of the major disciplines of theatre art: acting, directing, playwriting and design. Includes theatre practices from non-Western traditions. Optional lab – THE 110L. (D)

**THE 125. Basic Voice and Movement for non-Majors. (3 h)**

Introduction to basic voice and movement technique. May include topics such as breathing, healthy vocalization, articulation, vocal expressiveness and energy, alignment, tension release, kinesthetic awareness, basic anatomy. Does not count toward Major.

**THE 126. Stage Makeup. (1.5 h)**

A study of the design and application of theatrical makeup in relationship to historical period and character development.

**THE 140. Acting I. (3 h)**

Fundamental acting theory and techniques including exercises, monologues and scene work.

**THE 145. Voice and Movement. (3 h)**

Building awareness of the actor's instrument through the development of basic vocal and physical skills. Typically offered in the fall term. Counts toward Major. P-THE 140.

**THE 150. Introduction to Design and Production. (4 h)**

Introduction to the fundamentals of theatrical design and technology including script analysis, design development, and presentation methods. Through the lab, the student develops basic skills in theater technology. Credit not allowed for both DCE 150 and THE 150. Lab-3 hours. (D)

**THE 155. Stagecraft. (3 h)**

This introductory course focuses on contemporary materials, and construction methods employed in the planning, fabrication and installation of stage scenery. Emphasis on using current technologies for problem solving.

**THE 181. Acting Workshop. (1 h)**

Taught in conjunction with Directing. Workshop actors will perform in scenes directed by student directors. Pass/Fail only.

**THE 188. The Contemporary Theatre. (1 h)**

Explores contemporary theatre with travel to one or more metropolitan theatre centers through production attendance, discussion, and writing. Location varies. Pass/fail only. P-POI.

**THE 230. Advanced Voice and Movement. (3 h)**

Continued training and application of vocal and physical skills for the actor. P-THE 145.

**THE 241. Acting for the Camera. (3 h)**

Introduces the theory and practice of acting for the camera. Focused on film/video/TV acting, may also include commercials and other formats. Basic knowledge of realistic acting required. P - THE 140.

**THE 245. Acting II. (3 h)**

Advanced study and practice of the skills introduced in Acting I. P-THE 140 and 145.

**THE 246. Period and Style. (3 h)**

Studies social customs, movement, dances, and theatrical styles relating to the performance of drama in historical settings as well as in period plays. Includes performances in class. P-THE 145 or 230 and THE 140. (D)

**THE 250. Scene Design. (3 h)**

A study of the fundamental principles and techniques of stage design. Drafting, model building, perspective rendering, historical research, and scene painting will be emphasized. P-THE 150.

**THE 251. Costume Design. (3 h)**

Studies the fundamental principles and techniques of costume and makeup design with an emphasis on historical research in the context of the text. Explores the basics of costume rendering, materials, and costume construction. P-THE 150 or POI.

**THE 252. Lighting Design. (3 h)**

An exploration of the lighting designer's process from script to production. A variety of staging situations will be studied, including proscenium, thrust and arena production. P-THE 150.

**THE 253. Sound and Projections Design. (3 h)**

Developing and executing sound design and projections designs for theatrical production from concept to integration into performance. Covers recording, content creation, digital editing, mixing, and playback. P - THE 150 or POI.

**THE 254. Scenic Art for Theatre. (3 h)**

Hands-on introduction to the tools and techniques employed by scenic artists and painters for contemporary stage and film. May include an introduction to sculpting as well as a variety of projects and exercises in decorative and figurative painting.

**THE 255. History of Costume. (3 h)**

Surveys the development of clothing and fashion with emphasis on historical and cultural influences and their application to costuming art. (D)

**THE 258. Stage Management. (1.5 h)**

Examines the role of the stage manager in theatre and other venues. Consideration of approaches, philosophy, nuts and bolts. Exploration of the responsibilities of the stage manager from auditions through rehearsals, techs, and performances including extended runs and touring and the key relationships therein with director, performer, designer and producer. P-THE 110 or 111 and 150.

**THE 259. Theatre Management. (3 h)**

This course reviews the development of theatre management in the United States, with emphasis on the role of the producer; explores commercial and not-for-profit theatre with attention to planning, personnel, and the economics of theatre. Includes readings, lectures, and reports. P-THE 110 or 111.

**THE 266. Modern English and Continental Drama and the London Stage. (3 h)**

Studies the works of major playwrights of England and Europe from 1875 to the present. May also include contemporary production of classic plays. Particular emphasis will be placed on plays which are currently being presented in London theatres. Also offered in London. Also listed as ENG 347. (D)

**THE 270. Theatre in Education. (3 h)**

Practical experience for theater and education students to work together with children in the classroom using theatre to teach core curriculum. Emphasizes methods and techniques as well as the development and implementation of creative lesson plans. Weekly public school teaching experience and seminar. Also listed as Education 223.

**THE 274. World Theatre. (3 h)**

An exploration of non-U.S. Theatre, its histories, approaches, and applications. Study may include the theatre of East Asia, the Middle East, Africa, Latin America, and contemporary Europe, as well as non-English plays in translation. (CD, D)

**THE 283. Practicum. (1-1.5 h)**

Projects under faculty supervision. May be repeated for no more than three hours. P- POI.

**THE 285. Internship in Theatre. (1-3 h)**

Internship, approved by the department, to be carried out under the supervision of a departmental faculty member, designed to meet the proposing student's needs and interests related to their study of theatre. Requirements may include an evaluative paper and public presentation. Normally one course in an appropriate sub-field is taken prior to the internship. P-POI.

**THE 290. Special Topics. (1.5-3 h)**

The intensive study of selected topics in theatre. May be repeated.

**THE 294. Individual Study. (1-3 h)**

Research and readings in an area of interest to be approved and supervised by a faculty adviser. May be taken for no more than three times for a total of not more than nine hours. P-POI.

**THE 295. Development and Performance. (1-4 h)**

An intensive experiential course designed to research and develop a theater piece resulting in performance. Focus will vary. May be repeated once for credit.

**THE 310. History of Western Theatre I. (3 h)**

Surveys of the development of Western theatre and drama through the Greek, Roman, medieval, and Renaissance theatres. Suitable for non-majors. (D)

**THE 311. History of Western Theatre II. (3 h)**

Survey of Western theatre and drama including English Restoration, the eighteenth century, Romanticism, Realism, the revolts against Realism and the post-modern theatre. Suitable for non-majors. (D)

**THE 320. British Drama to 1642. (3 h)**

British drama from its beginning to 1642, exclusive of Shakespeare. Representative cycle plays, moralities, Elizabethan and Jacobean tragedies, comedies, and tragicomedies. Also listed as ENG 320.

**THE 323. Shakespeare. (3 h)**

Thirteen representative plays illustrating Shakespeare's development as a poet and dramatist. Also listed as ENG 323.

**THE 336. Restoration and Eighteenth-Century British Drama. (3 h)**

British drama from 1660 to 1780, including representative plays by Dryden, Etherege, Wycherley, Congreve, Goldsmith, and Sheridan. Also listed as ENG 336.

**THE 340. Directing. (4 h)**

A theoretical and experiential investigation into directing for the theatre. P-THE 140, C or P – THE 150.

**THE 341. Directing I. (3 h)**

An introduction to the theory and practice of play directing. P-THE 140. C or P-THE 150.

**THE 342. Directing II. (3 h)**

Advanced study of the theory and practice of play directing. P-THE 140, 150, and 341. C or P-THE 250 or 251 or 252 or POI.

**THE 343. Studio Production. (1.5, 3 h)**

The organization, techniques and problems encountered in the production of a play for the public. May be repeated once. P - THE 150 and POI.

**THE 344. Acting Shakespeare. (3 h)**

A practical study of varying styles in interpreting and acting Shakespeare's plays from the time of the Elizabethans to the present day. P-THE 140 and 145. (D)

**THE 360. Playwriting. (3 h)**

This course will examine the elements of dramatic structure and their representations in a variety of dramatic writings. It will explore the fundamentals of playwriting through a series of writing exercises. Also listed as CRW 384.

**THE 362. Feminism and Theatre. (3 h)**

Introduces students to the intersection of theatre and feminism and experience its interdisciplinary lineage and academic interventions. Students will learn and apply feminist theory, which looks beyond the conventional theatre for a continuum of performance that includes paly, ritual, sport, everyday life and social roles, as well as performance art, global and intercultural performance. Engaging with various feminist theoretical approaches from radical and liberal feminism to intersectional and transnational feminism, students will be encouraged to critically examine race, class, gender, sexuality, ethnicity, and nationality expressed on and offstage. Also listed as WGS 362.

**THE 372. Contemporary Drama. (3 h)**

The course will consider varieties of form and substance in plays and performance texts from Godot to the present. Readings will cover such playwrights as Beckett, Pinter, Stoppard, Churchill, Wertenbaker, Albee, Shepard, Fornes, Mamet, Wilson, Soyinka, Fugard, and Foreman. Also listed as ENG 394.

**THE 373. Women Playwrights. (3 h)**

Examination of selected plays and/or performance texts by women. Focus varies, for example, looking at works by contemporary American women or early women dramatists such as Hrosvitha, Sor Juana, and Aphra Behn. Also listed as WGS 319. (CD)

**THE 374. Contemporary World Drama. (3 h)**

This course will consider varieties of form and substance in plays and performance texts from outside the mainstream of the Western theatrical tradition. Focus will vary, for example Asian and Asian-American playwrights or drama of the Middle East. (CD)

**THE 375. American Drama. (3 h)**

A historical overview of drama in the United States, covering such playwrights as Boucicault, Mowatt, O'Neill, Glaspell, Wilder, Williams, Miller, Hansberry, Albee, Shepard, Norman, Hwang, Vogel, Mamet, and Wilson. Also listed as ENG 375.

**THE 376. Multicultural American Drama. (3 h)**

Examines the dramatic works of playwrights from various racial and ethnic communities such as Asian American, Native American, African American, and Latino. The course will include consideration of issues, themes, style, and form. Also listed as ENG 393. (CD)

**THE 390. Special Topics. (1-3 h)**

The intensive study of selected topics in the theatre. May be repeated.

**THE 392. Special Topics in Dramatic Literature. (1-3 h)**

Intensive study of selected plays and/or performance texts.



**THE 393. Sp Top Dramatic Lit Cult Diver. (3 h)**  
Intensive study of selected plays and/or performance texts, focusing on cultural differences - for instance, women playwrights, GLBT playwrights, or class-focused works. (CD)

**THE 395. Senior Seminar. (1 h)**  
Preparation for further, post-graduation work and study in theatre. Highly recommended for theatre majors and minors.

**THE 399. Theatre Honors. (3 h)**  
Tutorial involving intensive work in the area of special interest for qualified seniors who wish to graduate with departmental honors. P-POD.

Faculty

**Department Chair** Mary Wayne-Thomas  
**Associate Chair** Cindy Gendrich  
**Director of University Theatre** Corey Gilliam  
**Co-Directors of Dance**, Associate Professor of the Practice Christopher Martin, Brantly Shapiro  
**Professor and Vice Provost for Arts and Interdisciplinary Initiatives** Christina Tsoules Soriano  
**Professor and F.M. Kirby Family Faculty Fellow** Mary Wayne-Thomas  
**Professors** Sharon Andrews, J.K. Curry, Brook Davis, Rob Eastman-Mullins, Cindy Gendrich, Nina Maria Lucas  
**Associate Professor** Kevin Fraizer  
**Teaching Professor and Wright Family Faculty Fellow** Leah Roy  
**Assistant Teaching Professors** Michael Kamtman, Tina Yarborough-Liggins  
**Visiting Lecturer in Dance** Sam Shapiro  
**Adjunct Lecturers** Michael Huie

Theatre, B.A.

Requirements

Consists of a minimum of 37 hours, including:

Code	Title	Hours
THE 110	Introduction to Western Theatre	3
or THE 111	Introduction to Theatre	
THE 140	Acting I	3
THE 145	Voice and Movement	3
THE 150	Introduction to Design and Production	4
Select one of the following:		3
THE 250	Scene Design	
THE 251	Costume Design	
THE 252	Lighting Design	
THE 253	Sound and Projections Design	
THE 310	History of Western Theatre I	3
THE 311	History of Western Theatre II	3
THE 340	Directing	4
Select a Dramatic Literature course		3
Select one of the following Options:		2-2.5
Option 1:		
THE 100	Participation (four semesters)	
Option 2:		
THE 100	Participation (three semesters)	
THE 110L	Intro to Theatre-Lab	

Select the remaining courses from offerings in theatre, or select one of the following:		6
DCE 202	History of Dance	
DCE 203	20th-Century Modern Dance History	
DCE 223	Dance Composition	

A minimum GPA of 2.0 in all theatre courses attempted is required for graduation. Majors will participate in senior assessment, including submission of a portfolio. Majors should consult with their advisers about additional regulations. No more than three hours of THE 294 may be counted toward the 37 hours required for the major; up to a maximum of nine hours or three courses of THE 294 may be counted beyond the 37 hours in the major. Those who plan to be theatre majors are urged to begin their studies during their first year.

Honors

Highly qualified majors (departmental GPA of 3.3, overall GPA of 3.0) are invited by the department to apply for admission to the honors program in theatre. To be graduated with the designation “Honors in Theatre,” a student must successfully complete THE 399 with a grade of B or better. Honors projects may consist of:

- 1. A research paper of exceptional quality
- 2. A creative project in playwriting, design, directing, acting or dramaturgy
- 3. Other approved project

The theatre honors project must be presented and defended before a departmental Honors Committee. The department can furnish honors candidates with complete information on preparation and completion of projects.

Dance, Minor

Requirements

A dance minor requires a minimum of 18 hours and must include:

Code	Title	Hours
Select one of the following dance composition courses:		2-3
DCE 123	Introduction to Dance Composition	
DCE 223	Dance Composition	
Select one of the following modern courses :		2
DCE 120	Beginning Modern Dance Technique	
DCE 221	Intermediate Modern Dance Technique	
DCE 222	Advanced Modern Dance Technique	
Select one of the following jazz courses:		2
DCE 126	Beginning Jazz Dance	
DCE 226	Intermediate Jazz Dance	
DCE 227	Advanced Jazz Dance	
Select one of the following ballet courses:		2
DCE 127	Beginning Classical Ballet Techniques	
DCE 229	Intermediate Classical Ballet	
DCE 231	Advanced Classical Ballet	
or DCE 233	Advanced Studio Classical Ballet	
Select one of the following participation courses:		1
DCE 128	Dance Performance	
DCE 129	Choreography	



THE 100	Participation (taken twice for 1h total)	
DCE 200	Senior Dance Project	2
DCE 202	History of Dance	3
or DCE 203	20th-Century Modern Dance History	
DCE 205	Improvisation	2
or DCE 235	Ballet Repertory	
DCE 150	Design and Production for Dance	2
or THE 150	Introduction to Design and Production	

## Theatre, Minor

### Requirements

Requires 20 hours:

Code	Title	Hours
THE 110	Introduction to Western Theatre	3
or THE 111	Introduction to Theatre	
THE 140	Acting I	3
THE 150	Introduction to Design and Production	4
THE 310	History of Western Theatre I	3
or THE 311	History of Western Theatre II	
Select one THE Elective at the 200 level or higher or select one of the following:		3
DCE 202	History of Dance	
DCE 203	20th-Century Modern Dance History	
DCE 223	Dance Composition	
Select one of the following Options:		1-1.5
Option 1:		
THE 100	Participation (two semesters)	
Option 2:		
THE 100	Participation	
THE 110L	Intro to Theatre-Lab	
Select a Dramatic Literature course		

Potential minors should contact the chair of the department soon after arrival on the campus.

## Women's, Gender, and Sexuality Studies (WGS)

The department of Women's, Gender, and Sexuality Studies provides an opportunity for research and dialogue on a broad range of topics related to feminist contributions as well as to the fundamental fields of human knowledge and achievement and interdisciplinary studies of feminisms, masculinity, sex, gender and sexuality. A student intending to major or minor in Women's, Gender, and Sexuality Studies should consult the chair of the department, preferably during their first or early in their second year.

### Contact Information

Women's, Gender, and Sexuality Studies Department (<http://college.wfu.edu/wgs/>)  
Tribble Hall A105, P.O. Box 7365  
Phone 336-758-3758

## Programs

### Major

- Women's, Gender, and Sexuality Studies, B.A.

### Minor

- Women's, Gender, and Sexuality Studies, Minor

## Courses

### Women's, Gender, and Sexuality Studies (WGS)

#### WGS 101. Window on Women's, Gender and Sexual Studies. (1.5 h)

An opportunity to experience and reflect analytically in writing on the diverse cultural and intellectual life of Wake Forest, with an emphasis on women's, and gender, and sexuality studies events and topics.

#### WGS 121. Feminist Leadership Project. (1.5 h)

Explores the principles of feminist leadership to deepen self-awareness about personal leadership skills and gain tools for creating feminist social change. This highly interactive class welcomes students who are new to feminist thought/activism as well as those seeking to deepen their engagement with feminism. Pass/fail only.

#### WGS 122. LGBTQ Center Change Agents Leadership Project. (1.5 h)

Open to participants in the LGBTQ Center's Change Agent program. Participants will explore principles of identity development (individual and community), queer and feminist theories of leadership and change, understanding gender and sexuality as frameworks for community organizing and social change, and development and implementation of a final change related project. Pass/fail only. P-POI.

#### WGS 125. Prepare. (1.5 h)

Provides students with an overview of the social, emotional, and legal issues related to sexual violence, and teaches them to design and implement educational programs on this topic. Pass/fail only.

#### WGS 150. Perspectives in Gender and Sexuality. (3 h)

Introduces feminism as a lens of analysis; gender, sexuality, and other social categories as social constructs; sexism, heterosexism, and other social systems as systems of oppression; and intersectionality as a lens of analysis. Topics of the course will vary based on the instructor. (D)

#### WGS 200. The WGS Field Guide to Museums. (1.5 h)

Provides opportunities to develop expertise in interpretation of collections through a gender lens while considering the role of public education and creative thinking in community settings.

#### WGS 214. Gender and Sexuality in World History. (3 h)

Introduces the global and historical breadth of gender and sexual systems. Foundational and current approaches to cross-cultural historical analysis of masculinity, women's rights, and differences between LGBTQ identities and other models. Also listed as HST 114. (D)

#### WGS 221. Introduction to Women's, Gender, and Sexuality Studies. (3 h)

Introduces many of the key topics, debates, and theoretical paradigms in the field of Women's, Gender, and Sexuality Studies. Addresses questions such as: What are gender and sexuality and how do gender and sexual norms influence the lives of people in society? What is the relationship between gender and sexuality and other social categories such as race and class? What is power and how is power distributed differently according to gender, race, class, and sexuality? The course strives to train students in analytical thinking and presses them to think critically about gender and sexuality in the past, present, and future. (CD)

**WGS 222. Introduction to Sexuality Studies. (3 h)**

Provides an interdisciplinary grounding in the foundations of queer culture and studies, with a critical interrogation of sex, gender, sexuality, pleasure, and embodiment in popular culture, literature, health, science, and politics. (CD)

**WGS 224. Readings in Queer Theology. (1.5 h)**

This seminar-style reading course surveys classic and new works in queer theology. Queer theology transgresses dominant constructions of gender identity and sexuality; and as such, it can be seen as an expression of the Christian gospel that subverts human understandings of life, community, and the divine. The course explores biblical and Christian theological perspectives on sexuality, social constructions of sexuality, and issues such as power, marriage equality, and sexual ethics.

**WGS 230. Studies in Gender and Literature. (3 h)**

Addresses ways in which gender and literacy practices intersect in various cultures and historical periods. Attention will be paid to the role of literature in formulating, subverting, or resisting gender norms. May be repeated for credit if topic differs.

**WGS 234. Sexual Revolution! Gender and Sexuality in the United States, 1950-1980. (3 h)**

Examines how conflicts around gender and sexuality played out from the 1950s to the 1970s in both the popular and high culture of the time: in bestselling novels and poems as well as canonical literature, and in television as well as in experimental film. We will consider the 1950s twice: once through the art produced at that time, and then through art produced about the 1950s after mainstream gender norms had shifted.

**WGS 250. #Black Girl Magic. (3 h)**

Explores the politics and practices that Black femmes, girls, and women engage in to make themselves "magically" real. (CD)

**WGS 251. Race and Ethnic Diversity in America. (3 h)**

Different race and ethnic experiences are examined through an institutional approach that examines religion, work, schooling, marriage patterns, and culture from cross-cultural perspective. Grand theoretical schemes like the "melting pot" are critiqued for their relevance in an age of new cultural expectations among the many American ethnic groups. Also listed as AES 251. (CD)

**WGS 271. Making Sense of the News Through a Feminist Lens. (1-3 h)**

Inquiry into news literacy from a feminist perspective, with the intention to identify gender bias and consider questions of empowerment, exclusion, consumerism, and how to navigate the digital landscape to distinguish verified, reliable news from propaganda.

**WGS 300. Gender and Sexuality in Literary Adaptations. (1.5, 3 h)**

Focuses on understanding the relationship between written literature (novel, play, short story, poem) and its adaptation to another genre or medium (film, painting, video game, song, etc.) through the lens of gender and sexuality.

**WGS 301. Feminist Political Thought. (3 h)**

Introduction to feminist thought and its implications for the study and practice of political theory. Topics include feminist critiques of the Western political tradition and schools of feminist political theory. Also listed as POL 277. (CD)

**WGS 302. Feminist Philosophy. (3 h)**

Examination of feminist approaches to philosophical theorizing. Topics may include feminist critiques of the scope and methods of mainstream philosophy, feminist approaches to ethics, epistemology and philosophy of language, and feminist conceptions of the self, sexuality, and moral agency. Also listed as PHI 379. P-One PHI course or POL.

**WGS 303. When Black Women Clap Back. (3 h)**

Exploration of how Diasporic Black women talk back to institutional practices that marginalize them, and how Black women engage in the necessary labor to make a more democratic society. (CD)

**WGS 305. Transgender History, Identity and Politics. (3 h)**

Explores the experiences of and responses to transgender, gender non-conforming, and intersex (TGI) people in nineteenth-and twentieth-century America. We will examine how scientific/medical authorities, legal authorities, and everyday people have understood and responded to various kinds of gender non-conformity. Same as HST 371. (CD)

**WGS 306. Queer Public Histories. (3 h)**

Explores how public history projects (oral histories, museums, archives, documentaries) document gay, lesbian, and queer communities in the U.S. Discusses how historical and contemporary LGBTQ stories have been collected and examines the various queer identities that emerge through this process. Same as HST 372.

**WGS 307. The Queer Fantastic. (3 h)**

We consider fantastic writing from the 1930s to the present that critiques the hegemonic values of gender and sexuality by offering other social and societal structures, and consider the otherworldly as a critical refraction of the world that produced the writer.

**WGS 309. Environmentalism, the Humanities, and Gender. (3 h)**

Survey of the global spread of Environmentalism, with an emphasis on its evolution as a disciplinary field that includes eco-feminism and feminist perspectives on the environment. Topics include the investigation of women's roles in environmental history and the construction of global environmental narratives. Also listed as HMN 292.

**WGS 310. Gender, Power and Violence. (3 h)**

A research-centered study of various issues related to violence, power, and gender in American society. Emphasizes sociological analysis of competing theoretical explanations of violence with respect to race, class, gender, religion, and sexual orientation. (CD)

**WGS 318. Film Lab in Women's, Gender, and Sexuality Studies. (1.5-3 h)**

Viewing, dissecting, and analyzing films. Fosters the skills to create complex cinematic analyses and explore feminist theoretical issues related to spectatorship.

**WGS 319. Women Playwrights. (3 h)**

Examination of selected plays and/or performance texts by women. Focus varies, for example, looking at works by contemporary American women or early women dramatists such as Hrosvitha, Sor Juana, and Aphra Behn. Also listed as THE 373. (CD)

**WGS 322. Feminist, Womanist, Mujerista Theologies: Constructive Perspectives on Christian Thought. (3 h)**

Examines major topics in Christian theology from African American (womanist), Latina/Hispanic (mujerista), and queer perspectives.

**WGS 326. Telling Women's Lives: Writing about Entrepreneurs, Activists, and Thought Leaders. (3 h)**

This course will use an interdisciplinary approach to address fundamental issues of female leadership by examining recent developments in long- and short-form narratives about women (biography, essays, profiles) and employing journalistic tools to interview and write profiles of women entrepreneurs, activists, and thought leaders. Also listed as ENT 326.

**WGS 327. The Feminist Book Society. (1.5, 3 h)**

A reading course designed to introduce students to classic and contemporary feminist texts. Emphasis on close reading, discussions, and writing. May be repeated for credit if texts differ.

**WGS 329. Politics of Gender and Sexuality: Cross-Cultural Perspectives. (3 h)**

Examines cultural constructions of gender and sexuality from a cross-cultural perspective and the relationship between feminism and cultural rights activism through time. Emphasizes how varied forms of feminisms are constituted within diverse social, cultural, and economic systems. Students consider how feminists are negotiating positions at the intersection of cultural and human rights. Also listed as ANT 329.

**WGS 330. Gender and the Politics of Health. (3 h)**

Examines the intersections of gender, medicine, health, and illness, with a focus on the U.S. context. Topics include: reproduction, mental illness, breast cancer, heart disease, and HIV/AIDS, among others. We explore the following questions: How have women and men interacted differently with the field of medicine, as healers, patients, and subjects of medical research? How do social and cultural norms about gender influence the definition of illness categories? What role does medicine play in defining and enforcing the boundaries of what is considered socially acceptable in terms of gender? How does gender as a social role affect health outcomes?

**WGS 332. Men, Masculinity and Power. (3 h)**

Offers an introduction to the burgeoning interdisciplinary field of masculinity studies. Students will explore the social, historical, and cultural construction of masculinity and male roles (as fathers, sexual and romantic partners, and workers) and how these constructions differ according to race, class, sexuality, etc. In addition, the course will examine how norms about masculinity simultaneously empower men as a group and many individual men, while also disadvantaging many individual men and regulating the behavior of all men. Students will explore possibilities for challenging hegemonic forms of masculinity and for creating new types of masculinity.

**WGS 333. Sexual Politics in the United States. (3 h)**

Explores the politics of sexuality in the United States. Drawing on feminist scholarship, queer theory, and lesbian, gay, and transgender studies, we will explore different historical and theoretical approaches to thinking about issues of power and sexuality. We will discuss sexual identities and cultures, state regulation of sexuality, sexual commerce, and cultural representations of sexuality, among other topics. Throughout we will examine how other social categories such as race, class, gender, and disability intersect with the politics of sexuality.

**WGS 345. Girls Gone Wild: A Century of Misbehavior. (3 h)**

Analyzes what made girls and women "bad" and "wild" in the twentieth-century United States, and how such judgments changed over time. Engages closely with novels, short stories, movies, comics, podcasts, and an opera with an eye to what behaviors were considered appropriate, and how they interrelated with sexual attraction, with economics, and with love. We examine the relationship between being configured as a sexual object (a recipient of desire) and a sexual subject (a possessor of desire), and come to a critical understanding of how the "proper" and "improper" forms of both were constantly in flux. We ask how race, ethnicity, and queerness interacted with hegemonic concepts of beauty and desire, and whether "masculinity" and "femininity" are necessarily attached to men and women. We read theories of sex and gender, examine concepts of projection and male hegemony, and ask how men as well as women are shaped by rules of appropriate behavior.

**WGS 346. Visual Narratives: Image, Sequence, Story. (3 h)**

Investigates the relationship of image, sequence, and story in typography, comics, woodcut novels, and photographic books, and film, as well as fiction and poetry with unusual visual elements, and then asks how these various elements offer different visual and textual expressions of sexuality. Students will conduct formalist analyses and further investigate visual narrative through creative exercises with the goal of developing an aesthetic sensibility and a technical vocabulary that enable them to discuss visual narrative with precision. Please note that some visual narratives will include graphic scenes of sexuality. Same as ENG 345.

**WGS 347. Joan Didion/Edmund White: Personal/History. (3 h)**

Examines Didion and White, two of the most important American writers of the past fifty years. Both are known for their journalism as well as their fiction, and their interest in U.S. cultural and political history, especially in terms of gender and sexuality, permeates their novels. This course analyzes three works by each author, developing themes from motherhood, sexuality, imperialism, rebellion and AIDS.

**WGS 349. Invert, Pervert, Bull Dagger, Queen: U.S. Queer Fiction in the 20th Century. (3 h)**

Explores the history of lesbians, gay men, bisexuals, the transgendered, and other queers through fiction by and about them written over the last century in the United States. We also consider biography, artifacts of popular culture, comics, drama, and film. Topics include the relationship between homosexual desire and queerness in a broad sense; LGBTQ children; biological and psychological understandings of sexual orientation; and how social construction informs sexual identity and desire.

**WGS 358. Mothers and Daughters. (3 h)**

A course that examines literature, psychology, and feminist theories on motherhood and the mother-daughter relationship.

**WGS 362. Feminism and Theatre. (3 h)**

Introduces students to the intersection of theater and feminism and experience its interdisciplinary lineage and academic interventions. Students will learn and apply feminist theory, which looks beyond the conventional theater for a continuum of performance that includes play, ritual, sport, everyday life and social roles, as well as performance art, global and intercultural performance. Engaging with various feminist theoretical approaches from radical and liberal feminism to intersectional and transnational feminism, students will be encouraged to critically examine race, class, gender, sexuality, ethnicity, and nationality expressed on and offstage.

**WGS 363. Gender and Sexuality in Contemporary Korea. (3 h)**

Examines gender and sexuality in Korean TV, film, K-pop, protests, and everyday performances, focusing on diverse socio-political issues within and beyond the Korean Peninsula. Topics include: the evolution of feminism, #metoo movement, LGBTQ cultures, sex work, aging, plastic surgery industry, postcolonial and post-Korean war conflicts, and transpacific affinities. (CD)

**WGS 364. Women of Color, Feminisms, and the Politics of Resistance in the U.S. (3 h)**  
Examines historical and contemporary issues and current events affecting the lives of African American, Asian American, Latina, and Native American women. Exploring major theoretical and practical viewpoints in women's studies scholarship, the course will reveal the importance of intersectionality between race, gender, sexuality, class, and/or ethnicity in the everyday lives of multicultural women. Through arts-based civic engagement projects and activities, this course will also encourage students to formulate their own language of resistance against multiple forms of oppression. (CD)

**WGS 365. Transnational Asia and Asian American Feminism. (3 h)**  
Analyzes historical, socio-political, and cultural events as well as contemporary issues structuring the lives of Asian American women and queer community. Students will learn intersectional and transnational feminist approaches to examine race, class, gender, sexuality, ethnicity, nationality, and kinship in Asian American art and activism.

**WGS 377. Special Topics. (1.5-3 h)**  
Includes such women's, gender and sexuality studies topics as gender issues in the twenty-first century, critical approaches to women's issues, and the emergence of feminist thought. May be repeated for credit if topic differs.

**WGS 380. Sexuality, Law, and Power. (3 h)**  
Explores a wide variety of issues related to sexual identity and orientation by looking at the ways in which the law can constrict social development as well as act as a catalyst for change. Examines how religion and popular morality shape the law and are shaped by it.

**WGS 381. Gender and the Law. (3 h)**  
Examines how the law affects women's lives in a number of contexts. Considers a number of different areas, including but not limited to employment, education, family responsibilities, violence against women, and other issues affecting women's bodies, including pornography and prostitution. The class will also review a number of feminist legal theories and issues relating to the intersection of gender with race and class.

**WGS 383. Race, Gender, and the Courts. (3 h)**  
Examines the impact of state and federal court cases upon the evolution of race and gender relations in the U.S. from 1789 to the present. Each case is placed within the political, economic and social historical context for the given time periods. Race includes Native Americans, African Americans, Asian Americans, and Latino Americans. This class will analyze government intervention, inaction, and creative interpretation. Same as HST 358.

**WGS 388. South Asian Women: Religion, Culture and Politics. (3 h)**  
Using a feminist and post-colonial perspective, and taking into account the histories, experiences, and lives of South Asian women, this course, examines the intersection of religion, race, and gender from both a theoretical and a practical point of view. It focuses on issues of representation and identity formation, recognizing how categories such as "South Asian" and "woman" become tools for a simultaneous understanding of both culture and gender, creating a place for both oppression and empowerment. Same as REL 388.

**WGS 395. Honors in Women's, Gender, and Sexuality Studies. (1.5 h)**  
Course for students carrying out an honors project under the supervision of a faculty advisor.

**WGS 396. Independent Study. (1-3 h)**  
Independent projects in women's, gender, and sexuality studies which either continue study begun in regular courses or develop new areas of interest. Course may be repeated, but a maximum of 3 hours may apply to the minor. By prearrangement.

**WGS 397. Public Engagement in Women's, Gender, and Sexuality Studies. (1.5, 3 h)**  
An opportunity for students to engage in work and research that is shared with the broader public, either on campus or in a local community. A maximum of 3 hours may apply to the major or minor. P-POI.

**WGS 398. Theory and Practice of Women's, Gender, and Sexuality Studies. (3 h)**  
Examines the major themes and terminology in Women, Gender, and Sexuality Studies, with focus on its diverse and multicultural expressions through time. Themes to be explored include schools of feminism, interlocking systems of oppression and the connection between theory and practice.

**WGS 399. Research Seminar in Women's, Gender, and Sexuality Studies. (3 h)**  
A capstone, research-centered course in which students complete a significant research or creative project of their choosing situated within the field of Women's, Gender, and Sexuality Studies.

**Faculty**  
**Chair** Julia Jordan-Zachery  
**Professor** Julia Jordan Zachery  
**Associate Professors** Wanda Balzano, Kristina Gupta, Jeff Solomon  
**Assistant Professor** Tivia Collins  
**Visiting Assistant Professor** Carla Wilson

Women's, Gender, and Sexuality Studies, B.A.

Requirements

Requires a minimum of 27 hours and must include the following courses:

Code	Title	Hours
WGS 221	Introduction to Women's, Gender, and Sexuality Studies	3
or WGS 222	Introduction to Sexuality Studies	
WGS 398	Theory and Practice of Women's, Gender, and Sexuality Studies	3
WGS 399	Research Seminar in Women's, Gender, and Sexuality Studies	3
Select one of the following:		1.5-3
WGS 397	Public Engagement in Women's, Gender, and Sexuality Studies (internship)	
Any WGS or WGS cross-listed course with a service-learning or public-engagement component		
15-16.5 hours of Elective courses *		15-16.5

\*  
*Must consist of WGS courses and courses approved for WGS credit (consult approved list on file with the Chair).*

- No more than 9 hours from one department other than WGS or program may apply to the WGS major.
- No more than 3 hours may be taken pass/fail.



- No more than 6 hours from the 100-level may count toward the major.
- No more than 6 hours from the student's minor(s) may count toward the major.
- No online course taken at institutions other than Wake Forest may count towards the major

Students pursuing the major are encouraged to enroll in WGS 221 or WGS 222 by the fall semester of the junior year, WGS 398 by the spring semester of their junior year, and WGS 399, the research seminar, during their senior year.

## Electives for Women's, Gender, and Sexuality Studies

Code	Title	Hours
All courses are subject to approval for the major and the minor. Special Topics courses must be in a relevant area. Additional elective courses may have been approved since publication of this bulletin. The chair of the department maintains a complete list of all official elective courses.		
<b>Courses in the Humanities</b>		
AES 357	Studies in Chicano/a Literature	3
ART 351	Topics in Gender and Art	3
EAL 241	Gender and Sexuality in Modern and Contemporary Japan	3
ENG 340	Studies in Women and Literature	3
ENG 344	Studies in Poetry (when topic relates to WGS)	3
ENG 357	Studies in Chicano/a Literature	3
ENG 371	American Ethnic Literature	3
GES 390	German Women Writers	3
HST 324	Fashion in the Eighteenth Century	3
HST 336	Gender and Power in African History	3
HST 337	Women and Gender in Early America	3
HST 338	Sexuality, Race and Class in the United States since 1850	3
HST 348	Samurai and Geisha: Fact, Film, and Fiction	3
HST 359	Prostitutes, Machos, and Travestis: Sex and Gender in Latin American History	3
HST 372	Queer Public Histories	3
HST 388	Nation, Faith, and Gender in the Middle East	3
HMN 223	African and Caribbean Literature	3
HMN 290	The Humanities through Film, Literature and Media	3
ITA 335	Italian Women Writers	3
ITA 336	Italian Women and the City	3
MSC 109	Gender, Sexuality, and Music	3
PHI 379	Feminist Philosophy	3
REL 318	Feminist and Contemporary Interpretations of the New Testament	3
REL 345	The African-American Religious Experience	3
REL 388	South Asian Women: Religion, Culture and Politics	3
SPA 348	Contemporary Women Novelists and their Female Characters	3

### Courses in the Social and Natural Sciences

AES 310	Race, Class, and Gender in a Color-blind Society	3
ANT 332	Anthropology of Gender	3
ANT 333	Language and Gender	3
COM 318	Culture and Sitcom	3
COM 320	Media Theory and Criticism	3
COM 340	Democracy, Slavery and Sex: Emancipation Discourse from the Founding to the Civil War	3
COM 341	Class, Race, Sex and War: Emancipation Discourse from the Civil War to the Second Wave of Feminism	3
COM 370	Special Topics (when topic is "Race, Class, Gender, and Sexuality")	1-3
EDU 310	Race, Class, and Gender in a Color-blind Society	3
LIN 333	Language and Gender	3
POL 277	Feminist Political Thought	3
PSY 265	Human Sexuality	3
PSY 359	Psychology of Gender	3
PSY 364	Stereotyping and Prejudice	3
SOC 153	Contemporary Families	3
SOC 305	Gender in Society	3
SOC 309	Sexuality and Society	3
SOC 327	Sociology of Emotion	3
SOC 347	Society, Culture, and Sport	3
SOC 359	Race and Racism	3
SOC 360	Social Inequality	3

## Honors

Highly qualified majors, who have earned an overall GPA of 3.3, with an average of 3.5 on work in WGS, may apply for admission to the honors program in Women's, Gender, and Sexuality Studies. To be graduated with the designation "Honors in Women's, Gender, and Sexuality Studies," the student must present an honors-quality research paper and successfully defend the paper in an oral examination. For additional information, students should consult the department chair.

## Women's, Gender, and Sexuality Studies, Minor

### Requirements

Requires a total of 18 hours.

Code	Title	Hours
WGS 221	Introduction to Women's, Gender, and Sexuality Studies	3
or WGS 222	Introduction to Sexuality Studies	
Select a minimum of 15 additional hours		15

If courses not designated WGS are taken, they must be from an approved list on file with the chair of the department; examples of these courses are listed below.



- Students may count no more than 6 hours from their major(s) toward the minor.
- No more than 3 hours may be taken pass/fail.
- No online course taken at institutions other than Wake Forest may count toward the minor.

Students pursuing the minor are encouraged to take WGS 221 in the first or second year prior to taking other 200 or 300 level classes.

## Electives for Women's, Gender, and Sexuality Studies

Code	Title	Hours
<b>Courses in the Humanities</b>		
AES 357	Studies in Chicano/a Literature	3
ART 351	Topics in Gender and Art	3
EAL 241	Gender and Sexuality in Modern and Contemporary Japan	3
ENG 340	Studies in Women and Literature	3
ENG 344	Studies in Poetry (when topic relates to WGS)	3
ENG 357	Studies in Chicano/a Literature	3
ENG 371	American Ethnic Literature	3
GES 390	German Women Writers	3
HST 324	Fashion in the Eighteenth Century	3
HST 336	Gender and Power in African History	3
HST 337	Women and Gender in Early America	3
HST 338	Sexuality, Race and Class in the United States since 1850	3
HST 348	Samurai and Geisha: Fact, Film, and Fiction	3
HST 359	Prostitutes, Machos, and Travestis: Sex and Gender in Latin American History	3
HST 372	Queer Public Histories	3
HST 388	Nation, Faith, and Gender in the Middle East	3
HMN 223	African and Caribbean Literature	3
HMN 290	The Humanities through Film, Literature and Media	3
ITA 335	Italian Women Writers	3
ITA 336	Italian Women and the City	3
MSC 109	Gender, Sexuality, and Music	3
PHI 379	Feminist Philosophy	3
REL 318	Feminist and Contemporary Interpretations of the New Testament	3
REL 345	The African-American Religious Experience	3
REL 388	South Asian Women: Religion, Culture and Politics	3
SPA 348	Contemporary Women Novelists and their Female Characters	3
<b>Courses in the Social and Natural Sciences</b>		

AES 310	Race, Class, and Gender in a Color-blind Society	3
ANT 332	Anthropology of Gender	3
ANT 333	Language and Gender	3
COM 318	Culture and Sitcom	3
COM 320	Media Theory and Criticism	3
COM 340	Democracy, Slavery and Sex: Emancipation Discourse from the Founding to the Civil War	3
COM 341	Class, Race, Sex and War: Emancipation Discourse from the Civil War to the Second Wave of Feminism	3
COM 370	Special Topics (when topic is "Race, Class, Gender, and Sexuality")	1-3
EDU 310	Race, Class, and Gender in a Color-blind Society	3
LIN 333	Language and Gender	3
POL 277	Feminist Political Thought	3
PSY 265	Human Sexuality	3
PSY 359	Psychology of Gender	3
PSY 364	Stereotyping and Prejudice	3
SOC 153	Contemporary Families	3
SOC 305	Gender in Society	3
SOC 309	Sexuality and Society	3
SOC 327	Sociology of Emotion	3
SOC 347	Society, Culture, and Sport	3
SOC 359	Race and Racism	3
SOC 360	Social Inequality	3

## Other Courses

### ACP 101. Preparing for Academic Quiz Competition. (1 h)

Prepares students for academic quiz competition (quiz bowl) via the study of academic material in history, science, literature, mythology, philosophy, religion, social sciences, fine arts, geography, current events and other fields; via writing questions for academic competition tournaments; and via on-campus competition. Pass/Fail only. May be taken three times for credit. P-POI.

### FYE 101. The College Transition. (1 h)

Exploration of issues related to academic success, living in community, and wellbeing in the transition to college. Emphasizes principles, understanding, and skills to promote a successful college transition. Pass/fail only. First-year students only.

### FYE 110. Introduction to Mentored Scholarship. (1 h)

Introduction for first- and second-year students to the scholarship of WFU faculty within a particular college division. Teacher-scholars from different departments and programs will describe what problems excite them, what tools they use, and how students can get involved. Pass/fail only.

### FYS 100. First Year Seminar. (3 h)

First year seminars are a basic requirement for graduation and are designed to enhance each student's academic and social integration into Wake Forest. They foster intellectual interchange, both written and oral, and encourage examination of opposing viewpoints through reading, writing, and debate of issues in a small group setting. Seminars are offered in most academic departments and programs.

**LIB 100. Academic Research and Information Issues. (1.5 h)**

An introduction to the research process and methods for finding, retrieving and evaluating information in an academic library and through online sources. Encourages the development of the skills, attitudes and abilities essential to the discovery of information and promotes an understanding of how scholarship is produced, valued, and shared. Explores the use of information in creating new knowledge and participating ethically in communities of learning.

**LIB 210. Social Sciences Research Sources and Strategies. (1.5 h)**

This half-semester course helps develop emerging social science scholars through exploring interdisciplinarity; research process; evaluating and citing sources; scholarly conversations; and reflecting on information issues. P - Major in Communication, Psychology, Politics, and International Affairs or POI for majors or minors in other social science disciplines.

**LIB 220. Science Research Sources and Strategies. (1.5 h)**

This half-semester course provides students with an understanding of the sources and strategies for doing research in the natural sciences as well as the ethical, legal, and socioeconomic factors that influence scientific information production and dissemination. P—Major or minor in science discipline or POI.

**LIB 230. Business and Accounting Research Sources and Strategies. (1.5 h)**

Provides students with an understanding of the sources and strategies necessary for doing research in business and accounting. Topics include strategies for developing research projects, resources available in each discipline, finding and evaluating sources and interpreting research results. P-P - Major in BEM, Finance, Accounting or POI for majors or minors in other business-related disciplines.

**LIB 235. Research Methods for Entrepreneurs. (1.5 h)**

This course is intended for students pursuing a minor in entrepreneurship or starting their own entrepreneurial project. It will introduce them to research methods and resources appropriate for business planning, including subscription-based resources available through WFU as well as reliable free resources available from governments, public libraries and elsewhere. The class will learn how to assess a potential market during the exploratory phase all the way through evaluating competitors and industry trends for more fully-formed business concepts. Trends in information gathering and information use by entrepreneurs will also be discussed.

**LIB 250. Humanities Research Sources and Strategies. (1.5 h)**

Provides students with an understanding of the sources and strategies necessary for doing research in the humanities (English, classics, humanities, religion, history, philosophy, foreign language, art, music, theatre, dance). Topics include strategies for developing research projects, resources available in each discipline, finding and evaluating sources and interpreting research results. Must be sophomore or above to enroll.

**LIB 260. History of Material Texts, 1500-2000. (1.5 h)**

Introduces issues in the history of the book in the West, from early modern manuscript culture through the beginnings of the digital age. Using materials from ZSR Library's Special Collections, students examine printed texts as objects of study in three major ways: as material artifacts, as vehicles for text, and as social constructs. Includes a descriptive bibliography/research paper, hands-on typesetting, printing, and bookbinding projects. For more information contact the Special Collections Librarian, ZSR Library.

**LIB 290. Topics in Information. (1-3 h)**

Intensive look at one or more current topics in information. Course may be retaken for credit if topic varies.

**SPM 201. Basic Athletic Training. (3 h)**

A study of the basic knowledge and skills in the prevention, treatment, and care of common athletic injuries.

**SPM 302. Advanced Athletic Training. (3 h)****WDC 100. Internship. (3, 6 h)**

A one semester internship in government, a non-governmental organization, non-profit organization, or business, matching the individual student's interests. Part of the Wake Washington semester program.

## Wake Forest University School of Business

In today's fiercely competitive marketplace, you need more than just a degree. Employers are looking for students that can stand out from the crowd and contribute from day one. You'll gain that competitive edge at the Wake Forest University School of Business. As an undergraduate business school student, you'll be exposed to a world of opportunity that will give you the chance to develop the skills and experience that employers are seeking. With classes and activities in the inspiring new Farrell Hall, you'll benefit from team-based learning, professional development, hands-on experience, leadership opportunities and study abroad programs. You'll also receive personal attention and access to some of the best business minds in the country—our faculty and alumni. You will leave the School of Business armed with the practical experience and the business acumen to set you apart from the competition.

The Wake Forest University School of Business offers a Bachelor of Science (BS) degree program for undergraduates.

1. Accountancy (ACC) – Prepares students for careers in accounting and consulting firms, investment banks, and other institutions. Provides a foundation for the Master of Science in Accountancy (MSA) degree, which is strongly recommended.
2. Business and Enterprise Management (BEM) – Preserves a general business curriculum while allowing students to gain greater depth in a number of specialty areas. Emphasizes development of strong leadership and critical thinking skills, enabling students to pursue management careers in a wide range of fields.
3. Finance (FIN) – Prepares students for careers in financial services, including investment and commercial banking and financial consulting.
4. Mathematical Business (MBU) – The mathematical business major, offered by the School of Business jointly with the Department of Statistical Sciences, offers technical and quantitative training with a comprehensive business acumen to prepare students for careers that require data analytics-based, advanced quantitative approaches to problem solving. In today's complex global environment, where problems in business, consulting, and public policy are becoming more intricate, the program equips students with the methodology skills at the interface with business and statistics. The mathematical business major is a STEM-designated (science, technology, engineering, and mathematics) degree program, for international student OPT application purposes.

## Accreditation

The Wake Forest School of Business is accredited through AACSB International's management accreditation standards as well as its accounting accreditation standards. Accounting accreditation is an elective extension of management accreditation. AACSB International may be contacted at 813-769-6500,

777 South Harbour Island Boulevard, Suite 750  
Tampa, Florida 33602

and at their website (<https://www.aacsb.edu>). Inquiries should relate only to the accreditation status of the school and not to general admissions information.

AACSB International accreditation represents the highest standard of achievement for business schools and accounting programs, worldwide. Institutions that earn accreditation confirm their commitment to quality and continuous improvement through a rigorous and comprehensive peer review. AACSB International accreditation is the hallmark of excellence in business education.

Wake Forest University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, and doctorate degrees. Questions about the accreditation of Wake Forest University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website <https://www.sacscoc.org> (<https://www.sacscoc.org/>).

## Programs and Majors

The Wake Forest School of Business offers a four-year bachelor of science degree, with majors in:

- Accountancy
- Business and Enterprise Management
- Finance
- Mathematical Business (offered jointly with the Department of Statistical Sciences)

and four graduate degree programs:

- Master of Science in Accountancy (MSA)
- Master of Science in Management (MSM)
- Master of Business Administration (MBA)
- Master of Science in Business Analytics (MSBA)

When taken in conjunction with the School of Business's undergraduate degrees (Accountancy or Finance), the MSA degree requires only one additional year of study.

## Programs Majors

- Accountancy, B.S.
- Business and Enterprise Management, B.S.
- Finance, B.S.
- Mathematical Business, B.S.
- Actuarial Science Certificate

## Certificate

- Actuarial Science Certificate

## Courses

### Accountancy (ACC)

#### ACC 110. Introduction to Financial and Managerial Accounting. (3 h)

Basic Accounting concepts and procedures used in the preparation of financial reports issued to stockholders, creditors and managers of business enterprises. Open only to Juniors and Seniors not majoring in the Schools of Business. Cannot be substituted for Accounting 111.

#### ACC 111. Introductory Financial Accounting. (3 h)

Introduction to financial accounting and reporting, including the role of financial information in business decisions, the basic financial statements, and the processes used to prepare these financial statements. Students are introduced to the accounting and reporting issues associated with an organization's financing, investing, and operating activities. Sophomore standing. P-Sophomore standing; minimum cumulative GPA 2.85; or POI.

#### ACC 211. Intermediate Accounting I. (4 h)

Study of the conceptual framework underlying financial accounting in the United States as well as the financial accounting standards setting process and the basic corporate financial statements. Financial accounting and reporting issues associated with receivables, inventories, property, plant, and equipment, and intangible assets are also examined. P-minimum of C in ACC 111.

#### ACC 212. Intermediate Accounting II. (4 h)

Examination of financial accounting and reporting issues associated with current liabilities and contingencies, long-term liabilities, stockholders' equity, dilutive securities and earnings per share, income taxes, pensions, and postretirement benefits, leases, financial statement errors, and the statement of cash flows. P-Minimum of C in ACC 211.

#### ACC 221. Introductory Management Accounting. (3 h)

Study of the concepts fundamental to management accounting which aid in decision-making, performance evaluation, and planning and control. The topics covered include product costing systems, budgeting, differential and breakeven analysis, responsibility accounting, cost allocation, and management accounting reports. P-Minimum of C in ACC 111.

#### ACC 237. Taxes and Their Role in Business and Personal Decisions. (3 h)

Review of legal and accounting concepts associated with the federal taxation of personal income. Topics examined include the regular and alternative minimum tax models as well as gross income, capital gains, property transactions, deductions, and credits. P- Minimum of C in ACC 211 and C- ACC 212 or POI.

#### ACC 311. Advanced Financial Accounting. (3 h)

A comprehensive study of business combinations, the equity method of accounting for investments in common stock, and consolidated financial statement preparation. Also covered are accounting theory as applied to special problems such as accounting for partnerships and international accounting issues including foreign currency financial statement translation. In addition, government and nonprofit accounting are introduced in this course. P-ACC 211 and 212 with a grade of C or better.

**ACC 321. Accounting for Managerial Decision Making. (3 h)**

Provides students with advanced exposure to topics in cost structure management, planning, control, and decision making. Primary emphasis is placed on developing students' appreciation for how financial modeling and strategic analysis work together in unified decision making. To develop students as financial leaders, the foundation of the course will be the Information Value Chain promulgated by accounting academic researchers (e.g. Blocher 2009) and accounting practitioner organizations (Institute of Management Accountants). P-ACC 221 with a grade of C or better.

**ACC 351. Accounting Information Systems. (3 h)**

Study of the design and operation of accounting systems including the revenue, expenditure, and administrative transaction cycles. Emphasis is on the necessary controls for reliable data. P-BEM 251, and a minimum of C in ACC 212; or POI.

**ACC 352. Introduction to Auditing. (3 h)**

Examination of basic auditing concepts and practices, and the auditor's professional responsibilities. Emphasis is on auditing standards and the auditing procedures commonly used in public accounting. P-minimum of C in ACC 212; C-ACC 351; or POI.

**ACC 378. Individualized Reading and Research. (1-3 h)**

Directed study in specialized areas of accountancy. P-POI.

**ACC 390. Professional and Ethical Responsibilities of Accountants. (1.5 h)**

This course begins the process of moving students along a continuum from student to emerging accounting professional. Students develop an understanding of the accounting profession's broad societal purposes, as well as its ethical and professional standards and practices, along with an understanding of their various responsibilities as professional accountants - to the profession, to their clients, and to the public at large. Students reflect on the meaning and demands of professional accounting practice so as to develop an emerging professional identity consistent with the profession's broad purposes and ethical standards and practices. P-Senior standing or POI.

**ACC 391. Professional Accounting Internship. (3 h)**

Professional accounting field work, under the direction of a faculty member. Students gain relevant practical experience which builds on prior coursework and provides an experiential knowledge base for coursework. Pass/Fail. P-ACC 390. C-ACC 392.

**ACC 392. Professional and Ethical Responsibilities of Accountants - Internship Practicum. (1.5 h)**

Students apply, reinforce, and extend the themes and topics of ACC 390 in the context of a professional accounting internship. P-ACC 390.

**ACC 393. Professional and Ethical Responsibilities of Accountants - Case Study Practicum. (1.5 h)**

Students use a combination of historical and fictional case studies to apply, reinforce, and extend the themes and topics of ACC 390. P-ACC 390 (Not open to students who have taken ACC 392)

## Business (BUS)

**BUS 101S. Introduction to Business Software. (1.5 h)**

Provides students with basic skills in business software. Focuses on software for presentations, spreadsheets, and databases. In addition, students are familiarized with databases provided through the library and through the Internet that facilitate their ability to do research. This course does not count towards a School of Business degree. Summer only.

**BUS 111. Professional Life Skills. (1.5 h)**

Provides students with the basics of managing their personal finances and employee benefits. Focuses on topics such as: personal banking and budgeting fundamentals; individual credit and tax issues; employee investment and insurance options; and home rental or purchase considerations. Open to School of Business and non-School of Business students. Does not count towards a School of Business degree. Pass/Fail only.

**BUS 131. Personal Finance for Everyone. (3 h)**

This course is designed to set students with no required previous financial knowledge on a path to a life of financial empowerment and freedom. The course covers financial planning, budgeting, credit cards, investing, income taxes, financial markets, insurance, purchasing a home or car, estate planning and many other critical financial issues. The course emphasizes current relevant laws and regulations, construction of detailed models, and relevant research. Open to all Wake Forest students. Does not count toward a School of Business major or concentration.

**BUS 181. Field Study. (1 h)**

Directed field study in specialized areas of business. Does not count towards a School of Business degree. Pass/Fail only. Limit of 2. POI.

**BUS 281. Individualized Reading and Research. (1-3 h)**

Directed study in specialized areas of business. P-POI.

**BUS 295. Summer Management Program. (8 h)**

A study of the various functions of business including accounting, finance, information systems, management, marketing, production, and strategic planning. Special application and admission procedures. Does not count towards a School of Business major. Pass/Fail only. Offered only in the summer and open to all majors.

**BUS 297. SportsBIZ. (6 h)**

Study of the concepts, operations, and management principles associated with the sports industry. Students are introduced to such areas as the foundation of sports management, sociology of sports, sports marketing, psychology of coaching, sports economics and finance, ethics in management of sports organizations, legal issues in sports management, athletics administration, facilities management, and the strategic management of sports organizations. Students may not receive credit for both BUS295 and BUS297. Pass/Fail only. Offered only in the summer with preference given to first-year students.

## Business and Enterprise Management (BEM)

**BEM 201. Quantitative Analysis I. (3 h)**

Emphasizes the understanding and application of quantitative tools used in the business decision-making process. Issues covered include collection and presentation of data, sampling, and inferences. P-ACC 111 with a C or better and sophomore standing; or POI. (QR)

**BEM 202. Quantitative Analysis II. (3 h)**

Emphasizes the understanding and application of quantitative tools for analysis and managerial decision-making. Topics include such statistical tools as Chi-Square methods, analysis of variance and regression, and correlation analysis. Management science tools include statistical decision theory and some deterministic optimization models such as linear programming and its various extensions. Application of these methods to the analysis of decisions from various functional areas of business is an important component of the course. P- BEM 201.



**BEM 211. Organizational Behavior. (3 h)**

This survey course provides a broad overview of several evidence-based theories and frameworks of organizational behavior (OB) at the individual, group and organizational levels of analysis that can be applied to help identify, diagnose and provide solutions to important organizational challenges. In this way, students will gain the requisite knowledge and skills necessary to become more effective working professionals. P- or C- (For BEM majors only) BEM 287.

**BEM 221. Principles of Marketing. (3 h)**

Investigates the means by which firms create, maintain, and improve relationships with customers through the development of strong brands and effective marketing programs. Emphasizes the application, rather than the acquisition, of marketing knowledge. Explores how the four Ps-product, price, place, and promotion-can be used to solve problems, exploit opportunities and meet challenges in the global marketplace. Discussions, cases, objective tests, in-class exercises and a marketing campaign project are among the instructional methods used. P-ECN 150, ACC 111, or POI.

**BEM 241. Production and Operations Management. (3 h)**

Introduces the basic concepts of operations strategy and operations planning in support of the business strategy of the firm. Topics include: operations strategy, quality management, project planning and control, capacity planning, location, layout, demand forecasting, supply chain management, aggregate planning, production scheduling, and inventory systems. P-BEM 201; STA 112 for MBU majors.

**BEM 251. Management Information Systems. (3 h)**

Introduction to the business issues associated with information systems, designed to provide a broad perspective for utilizing and managing an organization's information resources. Frameworks are presented for understanding the placement and relationship of different types of information systems within an organization. Includes an overview of computing technology currently used in business organizations, techniques for developing and implementing information systems, advanced applications of information technology, and the strategic implications of information systems and technology for business.

**BEM 261. Legal Environment of Business. (3 h)**

Study of the legal environment in which business decisions are made in profit and nonprofit organizations. Emphasis is on how the law develops and how economic, political, social, international, and ethical considerations influence this development. Includes an overview of private law topics (such as torts, contracts, and agency) and public regulation of the employment relationship, the competitive marketplace and the environment. P- ACC 111.

**BEM 287. Professional Development Workshop Series A. (0-1.5 h)**

Enhances students' career-building skills through a series of workshops designed to address specific dimensions of professional development and career management. Students select from a menu of opportunities available during their first year in the management program, content varies. Pass/Fail only. P-Admission to the School of Business and the BEM major.

**BEM 312. Human Resource Management. (3 h)**

Focuses on important human resources management (HRM) skills that are frequently used by general managers. Upon completion of the course, students should be literate in basic HRM concepts, knowledgeable of general managers' HRM responsibilities, and skilled in HRM applications as prospective managers. P- BEM 211.

**BEM 315. Managing in a Global Context. (3 h)**

Focuses on professional effectiveness in a global setting, whether in a global company, leading a global team, or doing business abroad. Emphasis is on cross-cultural differences and their impact on the conduct of business. Conducted in a seminar format, the course examines the complexities involved in operating in different cultures and the implications which these cultural differences have on managing organizations and employee behavior. P-BEM 211 or POI.

**BEM 316. Leading in Nonprofit Sector. (3 h)**

Explores the role of nonprofit organizations (churches, schools, civic organizations, health clinics, etc.) and examines how to effectively lead them. Basic knowledge areas of responsibility in nonprofit organizations (i.e. legal classifications and issues, recruiting and managing volunteers, community development, fundraising, board development and ethical concerns) are covered. Pertinent leadership theories and issues addressed. One half of the available seats are open to non-School of Business majors. P-Junior or senior standing.

**BEM 318. Calloway Leadership Experience. (3 h)**

Explores the history, art, science and practice of leadership in organizational settings. Focuses on theories and contemporary applications of such issues as change, vision, communication, coaching, followership, and motivation. The experience will capitalize on liberal arts background, previous business courses and students' practicum experience to demonstrate practical leadership insights. Emphasis will be placed upon merging theory and practice using experiential learning to prepare students to excel in leadership positions in their organizations and communities. P - Senior standing and BEM 287.

**BEM 322. Global Marketing Strategy. (3 h)**

Builds on BEM 221 to explore strategic issues in the global marketplace in greater depth through intensive examination of cases from consumer and industrial markets; product and service businesses; and for-profit and nonprofit organizations. Analyzes social, cultural, economic, legal, and political factors present in the global marketplace and their impact on planning and implementing marketing strategy. Focuses on building analytical and decision-making skills. Objective is to ensure students understand the key role of marketing strategy in achieving and maintaining competitive advantage in an ever-changing, increasingly complex global business environment. P-BEM 221.

**BEM 323. Selected Topics in Marketing. (3 h)**

Identifies the most current marketing topics and practices in the dynamic global marketplace and covers them in detail. Focuses on the application of leading-edge concepts and ideas in the creation of superior marketing strategies. Seminar approach requires active student participation in the identification, elaboration, and discussions of course material. P- BEM 221.

**BEM 324. Marketing Research. (3 h)**

Introduction to fundamentals of research methodology and use of research information in marketing decision-making. Topics include research design, data collection methods, scaling, sampling, and alternate methods of statistical data analysis. Students design and execute their own research projects. P- BEM 201 and 221.

**BEM 325. Consumer Behavior. (3 h)**

Focuses on understanding the customers/comsumers/buyers/clients/ patients/ patrons without whom marketing and business cannot survive. Examines consumer motivations, influences, decision-making processes and behaviors as they relate to the development of competitive marketing strategy. Discussions, mini-cases, in-class exercises, and a project are among the instructional methods used in the course. P- BEM 221 or POI.



**BEM 326. Brand Management and New Product Development. (3 h)**

Provides students with a unique insight into the role of a brand manager charged with identifying and implementing strategies to measure, manage and build brand equity over time. Special emphasis will be placed on identifying new sources of profitable growth while enhancing brand equity through strategic new product development. A team-based approach is utilized and supported by lectures, case studies, guest speakers, and a semester-long brand equity assessment/new product development project. P-BEM 221.

**BEM 327. Marketing Communications. (3 h)**

Designed for students whose career plans involve making strategic marketing decisions. Emphasizes ways to foster relationships with consumers by establishing a dialogue through advertising, consumer and trade promotions, the Internet, direct mail, publicity, packaging, point of sale material and event sponsorship. Discussions, cases, in-class exercises, oral presentations, and a marketing communications campaign project are among the instructional methods used in the course. P-BEM 221.

**BEM 328. Sports Marketing. (3 h)**

Focuses on the application of the strategic marketing process to the rapidly growing sports industry. Varied elements of the industry are examined: understanding the sports consumer; marketing and media; advertising and communication; promotion and special events; licensing; and corporate sponsorships. Current research, including gender-specific marketing, using athletes as endorsers, segmenting the sports market, measuring value of sponsorship, and the impact of technology on sports are covered. P- ECN 150 or equivalent.

**BEM 329. Marketing Analytics. (3 h)**

This course will cover the principles and strategic concepts of marketing analytics, a high-growth area that uses quantitative strategies, resource allocation decisions, and return on marketing investment (ROMI). Topics may include forecasting and positioning; predictive analytics; customer profitability; digital and social media analytics; and resource allocation. P - BEM 201, 221.

**BEM 332. Financial Statement Analysis. (1.5 h)**

This course is intended to present you with a framework for using financial and market information to analyze a business and assess its potential market value. The focus will be on the information included in a firm's financial statements and the accompanying notes, however you will also consider how other available information is relevant to this analysis. Throughout the semester we will examine (i) how to analyze and assess a company's business strategy, (ii) how to interpret and analyze differences in firm-specific application of accounting techniques, (iii) how to analyze financial data in a systematic and logical method, (iv) techniques for forecasting financial information, and (v) techniques for equity valuation. These components will then be pulled together into a comprehensive framework for evaluating a business focusing on the available financial information. P- FIN 231; BEM 201 or POI.

**BEM 342. Project Management. (1.5 h)**

With today's problems being increasingly more complex, this course offers an important skill set addressing these problems by covering concepts and issues important in effectively managing projects. Some of the topics are project selection, project planning, resource allocation, project control, project auditing, as well as team creation and team leadership. Upon completion of this course, students will have an understanding of the challenges and opportunities involved in project management. They will also understand the types of decisions involved in effectively completing a project meeting stakeholders' expectations, on time, and within budget. P- BEM 201 or POI.

**BEM 362. Contemporary Issues in Law and Public Policy. (3 h)**

In a seminar setting, the course explores emerging topics that have the capacity to affect the marketplace in significant ways. Flowing naturally from previous law-oriented classes, it provides the opportunity for students to delve more deeply and critically into the actual policies that give rise to legislation, case precedent, and regulation. As such, the course encourages strategic thinking about decision-making in a complex, ever-changing business environment. P-BEM 261.

**BEM 365. Ethics and Business Leadership. (3 h)**

An interdisciplinary exploration of ethics applied to business. Lectures, readings, and case-based approach introduce the necessary background information. Examples of ethical and unethical situations are used to develop an understanding of how an efficient and effective business can also be ethical. P- Junior or senior standing.

**BEM 371. Strategic Management. (3 h)**

Focuses on the derivation of competitive advantage and sustainable, superior performance by organizations. Emphasizes the shape, character, and overall direction of the total enterprise, and the activities of managers who are responsible for achieving strategic coordination and coherence across functions and divisions. Course content includes analyzing the effects of industry and competitive environments on the firm, determining the basis upon which the firm should compete, formulating and implementing integrative action plans, and strategic leadership. Strategy analysis frameworks are applied to situations including for-profit and nonprofit organizations, diversification, global strategy, and strategic change. This is a discussion-oriented class in which principles of strategic management are applied to complex case studies. P-(all majors) BEM 211, 221 and FIN 231. P or C-(all majors) BEM 241. P-(BEM majors only) BEM 287, 389.

**BEM 372. Strategic Management in Entrepreneurial Firms. (3 h)**

Core foundational concepts in strategic management are critically examined in the context of entrepreneurial firm settings. Emphasis is placed on applying principles of competitive analysis and strategic planning using case studies of startups, fast-growth firms, young firms in rapidly-changing industries, firms confronting early organizational life cycle problems, and new ventures seeking to expand internationally. Unique strategy issues confronted by new venture and by firms operating in electronic commerce, technology, and other fast-paced industries will be considered. This is a discussion-oriented class in which principles of strategic management are applied to complex case studies. P (All majors)-BEM 211, 221 and FIN 231. P or C-BEM 241. P-(BEM majors only)-BEM 287 and BEM 389.

**BEM 373. Strategy Games. (3 h)**

Provides an introduction to game theory and strategic thinking in a business context. Students will develop skill in formulating simultaneous and sequential game decisions and thinking ahead to endgame outcomes. Through a series of cases and exercises, students will gain experience recognizing the different types of strategic moves, implementing credible commitments and threats, and appreciating optimal mechanism design as a mode of analysis for changing the structure of tactical games. P-Only open to School of Business majors.

**BEM 375. Contemporary Issues in Business and Foundations of Capitalism. (3 h)**

Explores contemporary business issues such as corporate social responsibility, government regulation of business, health care and/or tax policy implications for business, stakeholders versus stockholders, and sources of economic development in less-developed nations. To do so we examine the foundations of capitalism its moral and intellectual underpinnings, the principal arguments that challenge and support capitalism and free markets, and the obligations of free institutions in society. This will be accomplished by reading a combination of novels, the work of leading political economists who have shaped generations of thinking at the highest levels of government and academia about capitalism, economics and free markets and recently-published works by business and political leaders.

**BEM 376. Introduction to Consulting. (1.5 h)**

This course is designed to expose you to the consulting mindset and the typical phases of a consulting engagement – selling a project, defining the problem/objective, gathering data, analysis, diagnosing solutions, and implementing recommendations. Effort will be placed on developing proficiencies in a range of skills required to practice consulting –e.g., critical thinking; data analysis; communication; relationship management; and the advanced use of software tools.

**BEM 377. Entrepreneurship. (3 h)**

Exposes students to multiple facets of entrepreneurship and teaches about creating new ventures in a very hands-on fashion. A broad range of ideas, readings, and cases enable students to understand the ambiguous and highly-charged environment of entrepreneurship, the contribution of entrepreneurial endeavors to business and society, and the characteristics of successful new venture startups. Focuses on three areas that define successful entrepreneurial pursuit of new for-profit, non-profit, and social enterprise initiatives: recognizing opportunity, management, and assembling resources. The completion of a team-based business plan for a new venture is usually required. Guest speakers present their views of entrepreneurial organizations based on real-world experiences- startup, financing, legal, transition, failure, etc. P- BEM 211, 221, and FIN 231, or POI.

**BEM 380. Finding Your Personal Value Proposition. (1-3 h)**

An examination of selected topics in business. May be repeated if course title differs.

**BEM 381. Individualized Reading and Research. (1-3 h)**

Directed study in specialized areas of business. P- POI.

**BEM 382. Management in the Visual Arts. (3 h)**

Taught by faculty from the School of Business and the Art Department. It provides both art and business students with the essential skills, pragmatic experiences, and a conceptual framework for understanding the role the visual arts play within the national and international economies. Students receive preparation for involvement in art galleries, auction houses, museums, and publishing, as well as for contributions to various boards and organizations that commission or purchase works of art. The marketing, financial, legal, and strategic aspects of art management are explored. Emphasis is on dialogue between art majors and business majors enrolled in the course. Field study in at least one major metropolitan area for the purpose of gaining intensive exposure to professional arts management is required, but the majority of travel costs are covered by the University. One half of enrollment spaces are available for students who have been accepted into the School of Business; the remaining half of the spaces are available to declared art majors with junior standing or higher. Also listed as ART 297. P-Junior or senior standing and POI.

**BEM 383. Seminar in Negotiations. (3 h)**

Focuses on the process of conducting successful negotiations in a business setting. Introduces concepts, theories, and analytical frameworks that underlie common negotiation techniques. Practical skills are emphasized through negotiation exercises and the analysis of contemporary business situations. Lectures, discussions, and role plays are among the instructional methods used. P- Senior status or POI.

**BEM 384. Design-Thinking and High-Performance Teams. (3 h)**

In this experiential class, we study the evolution of high-performance teams in design-thinking environments. At its core, design thinking is an approach to innovative problem solving that balances art, science, and business perspectives in realistic and highly impactful ways. In this course we develop the ability to participate in and lead high-performance teams within a design-thinking environment. The course involves an action-learning project that applies the perspectives of anthropology, history, political science, communication, and psychology, among others, in solving a real-world problem. Also listed as ENT 384.

**BEM 386. Selected Topics in Real Estate. (1.5 h)**

Examines the most pertinent topics in real estate. Focuses on subjects such as ownership and interest, the legal aspects of real estate, real estate finance and real estate trends. P-Senior standing and POI.

**BEM 388. Management Simulation. (1.5 h)**

Designed to integrate the functional areas of business through the use of an experiential simulation that requires students to draw on their learning from previous courses in operations, marketing, finance, human resource management, information systems, and strategic management. Students are organized into cross-functional management teams, and the teams are required to make plans for a business enterprise operating in a competitive environment, to make critical managerial decisions in response to real-world situations that arise, and to present their work to a faculty committee. P-Senior standing and BEM 211, BEM 221, BEM 241, BEM 251, and FIN 231; C-BEM 371 or 372 (MBU majors are exempt from strategy requirement).

**BEM 389. Management Internship. (3 h)**

The internship is a supervised learning experience that applies business coursework to an actual work environment for academic credit. The internship is subject to approval and consists of both academic and on-the-job learning components. P- Acceptance as a BEM major and completion of 15 hours of School of Business credit which must include BEM 211 and 287.

**BEM 391. Global Business Studies. (3 h)****BEM 392. Seminar in Mathematical Business Analysis. (3 h)**

Provides mathematical business majors with a forum where they can actually see how the mathematical, statistical and computer techniques can be brought to bear on many business problems in a variety of business functions. Emphasis is more on studying the process of modeling and implementation issues of the solutions and less on the algorithmic details. Critical and reflective thinking about models and translation of their results into management action that will add value to a process or a system is a major objective. Another objective of the seminar is to foster group work and the sharpening of presentation skills. P-BEM 211, 221, 241, FIN 231, MTH 253, 353, and STA 112.

**BEM 393. Principles of Risk Management. (3 h)**

Intended to assist students in identifying and analyzing risk and in managing it through a variety of mechanisms. Techniques such as loss control, risk retention, and risk transfer are discussed. This course also includes professional risk management field work, under the direction of a faculty member. Students will gain relevant practical experience that is integrated with casework and risk management theory. Emphasis is on analysis, decision-making in a global environment, teamwork, written and verbal skills, presentation skills, and using technology to solve problems. P-Junior or senior standing and POI.

**Finance (FIN)****FIN 203. Applied Quantitative Analysis for Finance. (3 h)**

Provides the basic mathematical and statistical tools needed for the study of applied finance. Topics: multiple regression, analysis of residuals and F-tests; analysis of time-series data; risk, preference and utility theory; stochastic processes; and applied optimization. P-BEM 201 and FIN 231 with a C or better; C-FIN 232; or POI.

**FIN 231. Principles of Finance. (3 h)**

Survey course examining the fundamentals of financial decision-making and including topics such as the time value of money, security valuation (corporate debt and equity pricing), risk and return, financial statement analysis, capital budgeting, and the cost of capital. Financial decision-making is developed within the context of domestic and international institutions and markets. P-ACC 111, and ECN 150.

**FIN 232. Intermediate Finance. (3 h)**

Required for all finance majors and is intended as preparation for upper level electives. It provides an examination of financial decision-making under uncertainty stressing practical applications of technology. Topics include yield curves and interest rate risk; the uses and risks of derivative securities; capital structure and the impact of leverage; statistical estimation of the cost of capital for the firm and its projects; financial statement forecasting (pro forma); and discounted cash flow valuation of the firm. The course incorporates electronic spreadsheet applications (Excel) in problem solving, statistics and financial modeling. P-BEM 201 and FIN 231 with C or better; C-FIN 203; or POI.

**FIN 233. Equity Investments. (3 h)**

The Equity Investments course exposes students to equity research, portfolio formation and analysis, equity security valuation, and stock selection for portfolio construction. The course uses accounting, fundamental analysis and a discounted cash flow framework to value equity securities. P-FIN 203 and FIN 232 with a C or better. May be taken as a co-requisite with FIN 203 and/or FIN 232 with POI.

**FIN 234. International Finance. (3 h)**

The course examines the impact of international financial economics on markets and the management of both domestic and multinational firms. Emphasis is placed upon institutional and environmental factors influencing trade, foreign exchange, and capital acquisition and allocation. P-FIN 203 and FIN 232 with a C or better; or POI.

**FIN 235. Selected Topics in Finance. (3 h)**

Identifies the most current topics and practices in the dynamic global financial industry and covers them in detail; may also explore a more narrow finance topic in depth. Focuses on the application of leading-edge concepts and ideas in the financial services and/or banking industries. A seminar approach requires active student participation in the identification, elaboration and discussion of course materials. Oral and written skills are emphasized. P - FIN 203 and FIN 232 with a C or better. May be taken as co-requisite with FIN 203 and/or FIN 232 with POI.

**FIN 236. Private Equity. (3 h)**

Covers the full life cycle of private equity. The course covers buyout, venture capital and growth capital investing, both from an investing and managerial point of view. While being relevant to students interested in becoming private equity professionals, the course is also applicable to those who might interact with private equity firms from the view of being an investment banker, a funding source, a participant in acquisitions or divestitures (such as a seller or management partner) or as an institutional investor in private equity funds. P - FIN 203 and FIN 232 with a C or better; or POI.

**FIN 237. Financial Markets and Institutions. (3 h)**

The course provides students with an understanding of the structure and functioning of US and international financial markets. Topics covered in the class: banking theory, the roles of traditional and non-traditional financial intermediaries, the impact of securitization, international financial competition, financial system stability and financial regulation. P-FIN 203 and FIN 232 with a C or better; or POI.

**FIN 238. Financial Modeling. (3 h)**

This course is intended to strengthen your knowledge in Finance and provide you with practical skills for implementing financial models in a spreadsheet. While the specific tool used in this class is Microsoft Excel, the techniques can be generalized and applied to various implementation tools. The subject matter is a blend of Corporate Finance and Investments with a heavier weighting placed on Corporate Finance.

**FIN 239. Financial Data Analytics. (3 h)**

This course serves as an introduction to many aspects of financial technology and data. Topics include machine learning, data visualization, Excel pivot tables and dashboards, monte carlo simulation, encryption, safety and ethics when working with financial data, Python, and introductions to traditional programming languages. Students will become familiar with and use Bloomberg terminals, Excel, Python, Morningstar, and Crystal Ball to analyze, visualize, and manipulate data. Students will apply these skills to work with real world financial data solving problems they are likely to see outside of the classroom. P-FIN 203 and 232 with a C or better; or POI.

**FIN 333. Advanced Finance. (3 h)**

Focuses on maximizing the firm's market value in a dynamic environment by exploring the interplay between (a) its operating and strategic decisions, (b) the evaluation of the firm and its strategies by the investment community, and (c) the functioning of capital markets and economies within which the firm operates. The course integrates results from relevant research with the effective practice of financial management by business professionals. P -FIN 203 and FIN 232 with a C or better, or POI.

**FIN 334. Blockchain and Cryptoassets. (3 h)**

This course provides an introduction to blockchain and cryptoassets. We begin by discussing Bitcoin, clarifying the innovation that it provided but also highlighting why it performs poorly as a payment system. We then discuss Ethereum and smart contracts. We clarify both new opportunities and new difficulties that arise when a blockchain allows for processing of smart contracts. We conclude by discussing more recently launched blockchains such as Cardano and Algorand. P-FIN 203 with a C or better and FIN 232 with a C or better.

**FIN 335. Financial Derivatives. (3 h)**

Explores the pricing and uses of derivatives; the role of market participants; how market structures and practices facilitate risk transfer; and the uses of derivatives for hedging. Covers futures/forwards, options, and swaps, the three most important types of financial derivatives. P-FIN 203 and 232 with a C or better; or POI.

**FIN 336. Fixed Income and Financial Engineering. (3 h)**

Provides an introduction to interest rate risk management, the nature of fixed income markets, the structure and underlying economic rationale for various structured products including collateralized debt obligations, and the role of financial engineering in fixed income markets and risk management. P-FIN 203 and 232 with a C or better; or POI.

**FIN 338. Real Estate Finance. (3 h)**

Focuses on concepts and techniques used to value and finance income-producing property investments. Provides students a critical perspective for making financial decisions about real estate. The nature of real estate risk, at both the level of the individual project and the investment portfolio. Class sessions will rely on case discussions as we consider how economic characteristics of the property and the local market, motives of different actors, and institutional arrangements interact to shape decision-making in real estate. P-FIN 203 and 232 with a C or better; or POI.

**FIN 381. Individualized Reading and Research. (1-3 h)**

Directed study in specialized areas of finance. P-POI.

## Faculty

**Sisel Distinguished Dean** Charalambos L. Iacovou

**Vice Dean of Faculty** Michelle Roehm

**Associate Dean of the Undergraduate Program** Kenny Herbst

**Associate Dean of the Master of Science in Management Program** Norma R. Montague

**Associate Dean of MBA Programs** Timothy R. Janke

**Assistant Dean of MBA Programs** Mark Johnson

**Associate Dean of Analytics Programs** Jeffrey D. Camm

**Dale K. Cline Associate Dean for Accountancy** Mark Evans

**F. M. Kirby Chair in Business Excellence and Professor** Charalambos L. Iacovou

**J. Tylee Wilson Chair in Business Ethics and Professor** Sean T. Hannah

**John B. McKinnon Professor** Ron L. Thompson

**Inmar Presidential Chair in Business Analytics and Professor** Jeffrey D. Camm

**David C. Darnell Presidential Chair in Principled Leadership and Professor** Derek R. Avery

**Kemper Professor in Business** J. Kline Harrison

**Delmer P. Hylton Professor of Accountancy** Jonathan E. Duchac

**C. C. Hope Chair of Financial Services and Law and Professor** Steve H. Nickles

**Thomas S. Goho Chair in Finance and Professor** Ajay Patel

**Thomas H. Davis Chair in Business and Professor** Haresh Gurnani

**Thomas K. Hearn, Jr. Professor in Finance** Robert C. Nash

**Sisel Faculty Professor** Pat H. Dickson

**Peter C. Brockway Chair of Strategic Management and Professor** Michelle Roehm

**Benson Pruitt Professor of Business** Sherry E. Moss

**Thomas W. Smith Presidential Chair in Business Ethics and Professor of Economics** James R. Otteson

**Professors** S. Douglas Beets, Frederick H. deB. Harris, James A. Narus, Scott M. Shafer, Julie H. Wayne, G. Page West III

**Teaching Professors** William L. Davis, Mark Johnson, Deon Strickland

**Executive in Residence and Adjunct Professor of the Practice** Peter Brockway

**Adjunct Professors** Dan Fogel, Michael French, Joe Mazzola, Steve Powell

**AT&T Faculty Fellow and Associate Professor** Gordon E. McCray

**James Farr Faculty Fellow and Associate Professor** John Sumanth

**Sisel Faculty Fellow & Associate Professor** Kenny Herbst

**Wall Street Partners Fellow and Associate Professor** Bill Marcum

**Associate Professors** George R. Aldhizer III, Terry A. Baker, Derrick

S. Boone, Holly H. Brower, Thomas G. Canace, Anna Cianci, Lisa Dragoni, Mark E. Evans, Jai Li, Patrick R. McMullen, Norma R. Montague, Jonathan P. Pinder, Michelle D. Steward, Ya-Wen Yang

**John Hendley Fellow & Associate Teaching Professor** Matthew T. Phillips

**Associate Teaching Professors** Anthony Amoruso, Phil Anderson, Tonya Balan, Chris Smith, Brian Young

**Adjunct Teaching Professor** Barbara Prestwood

**Assistant Professors** Jiaru Bai, Kenneth D. Ford, Philip Howard, Lauren Reid, Stephan Shipe, Carolina Salge

**Adjunct Assistant Professor** Ben Grannan

**Professors of the Practice** Tom Aleman, Roger L. Beahm, Timothy R.

Janke, Benjamin T. King, Martin Malloy, Amy Wallis, James B. Willis

**Associate Professors of the Practice** Susan I. Langlitz, Denis Maier

**Adjunct Professors of the Practice** Michael Ames, Bob Fly, Robert Gemmell, Jason Goddard, Zachary Hartsell, Sobia Hussaini, Ged King, Deron Mabe, Brian McKay, Shannon McKeen, Peter Mitchell, Michael Travis, Scott Warfield, Pete Woods

**Visiting Professors of the Practice** Ann Bliss, John Butler, Andrew Jarachovic

**Visiting Associate Professor of the Practice** Whitney Simpson

**Visiting Assistant Professor** Megan Regan

**Visiting Assistant Professor of the Practice** John Karabelas

**Visiting Assistant Teaching Professor** Ali Zeytoon-Nejad

**Affiliate Professor of the Practice** Jon Clift

**Adjunct Instructors** Vern Scoggins

**Affiliate Instructor** Ian Taplin

**Senior Lecturer** J. Bren Varner

**Adjunct Senior Lecturer** Ben Baker

**Lecturer** Pete Brewer, Jennifer Hudson

**Adjunct Lecturer** Thad Lewallen, Paula Payton

## Accountancy, B.S.

### Requirements

The School of Business' separate accounting accreditation through AACSB International requires that the School establish a separate statement of mission for its accountancy program complementary to the School's basic mission statement provided. Accordingly, the mission and values of the School's accountancy program are as follows:

The mission of the Wake Forest accountancy program is to enhance business, society, and the accountancy profession through our teaching and scholarship. We value: an environment that promotes thoughtful reflection and a high level of face-to-face interaction; intellectual curiosity, including a passion for the study of business; teaching excellence; challenging academic standards consistent with high-quality students; the creation and dissemination of knowledge; honor, integrity, and respect for the ethical and legal foundations of the accountancy profession; and strong relationships with alumni, recruiters, and other members of the accountancy profession.

The accountancy program includes both the baccalaureate consisting of 54.5 hours and the master's program. Students who major in either accountancy or finance (FIN-M) at the baccalaureate level may apply for admission to the MSA program during their junior year (see MSA Program Admissions). The coursework, combined with the opportunity to complete a professional internship, provides students with a solid foundation in the concepts, principles, and practices of accountancy and business.



Requires the following courses:

Code	Title	Hours
<b>Prerequisites for Admission</b>		
ACC 111	Introductory Financial Accounting	3
BEM 201	Quantitative Analysis I	3
ECN 150	Introduction to Economics	3
MTH 111	Calculus with Analytic Geometry I	4
or MTH 112	Calculus with Analytic Geometry II	
ACC 111 and BEM 201 count toward Core Requirements		
<b>Core Requirements</b>		
ACC 221	Introductory Management Accounting	3
BEM 211	Organizational Behavior	3
BEM 221	Principles of Marketing	3
BEM 241	Production and Operations Management	3
BEM 251	Management Information Systems	3
BEM 261	Legal Environment of Business	3
BEM 371	Strategic Management	3
or BEM 372	Strategic Management in Entrepreneurial Firms	
BEM 388	Management Simulation	1.5
FIN 231	Principles of Finance	3
<b>Required Major Courses</b>		
ACC 211	Intermediate Accounting I	4
ACC 212	Intermediate Accounting II	4
ACC 237	Taxes and Their Role in Business and Personal Decisions	3
ACC 351	Accounting Information Systems	3
ACC 352	Introduction to Auditing	3
ACC 390	Professional and Ethical Responsibilities of Accountants	1.5
ACC 392	Professional and Ethical Responsibilities of Accountants - Internship Practicum	1.5
or ACC 393	Professional and Ethical Responsibilities of Accountants - Case Study Practicum	
FIN 232	Intermediate Finance	3

ACC 391 is strongly recommended.

ACC 311 and ACC 321 are strongly recommended for students who do not intend to pursue the MSA degree.

## Honors

School of Business students (exclusive of mathematical business majors) with a grade point average of at least 3.0 on all college work and who are eligible for membership in Beta Gamma Sigma are invited to apply for admission to the honors program in business and accountancy. A project, paper, or readings, and an oral presentation or examination are required. Those who successfully complete the requirements specified by the School graduate with the designation "Honors in Accountancy," "Honors in Business and Enterprise Management," or "Honors in Finance." For additional information, interested students should consult a member of the faculty of the Wake Forest School of Business.

## Business and Enterprise Management, B.S. Requirements

The business and enterprise management major in the School of Business consists of 54 hours and combines a rigorous and high-quality curriculum with real-world applications. The degree program preserves a general business curriculum while simultaneously allowing students to gain greater depth in a number of specialty areas. The program emphasizes the development of strong leadership and critical thinking skills, enabling students to pursue careers in management in a wide range of fields.

Requires the following courses:

Code	Title	Hours
<b>Prerequisites for Admission</b>		
ACC 111	Introductory Financial Accounting	3
BEM 201	Quantitative Analysis I	3
ECN 150	Introduction to Economics	3
MTH 111	Calculus with Analytic Geometry I	4
or MTH 112	Calculus with Analytic Geometry II	
ACC 111 and BEM 201 count toward Core Requirements		
<b>Core Requirements</b>		
ACC 221	Introductory Management Accounting	3
BEM 202	Quantitative Analysis II	3
BEM 211	Organizational Behavior	3
BEM 221	Principles of Marketing	3
BEM 241	Production and Operations Management	3
BEM 251	Management Information Systems	3
BEM 261	Legal Environment of Business	3
BEM 371	Strategic Management	3
or BEM 372	Strategic Management in Entrepreneurial Firms	
BEM 388	Management Simulation	1.5
FIN 231	Principles of Finance	3
<b>Required Major Courses</b>		
BEM 287	Professional Development Workshop Series A	1.5
BEM 318	Calloway Leadership Experience	3
BEM 365	Ethics and Business Leadership	3
BEM 389	Management Internship	3
Select 9 hours in a pre-approved concentration area *		9
Marketing		
International Business		
New Business Development		
Management Consulting		
Other Elective Options		

\*

Concentration areas must include at least one BEM elective course or CGS 260.

## Honors

School of Business students (exclusive of mathematical business majors) with a grade point average of at least 3.0 on all college work and



who are eligible for membership in Beta Gamma Sigma are invited to apply for admission to the honors program in business and accountancy. A project, paper, or readings, and an oral presentation or examination are required. Those who successfully complete the requirements specified by the School graduate with the designation “Honors in Accountancy,” “Honors in Business and Enterprise Management,” or “Honors in Finance.” For additional information, interested students should consult a member of the faculty of the Wake Forest School of Business.

## Finance, B.S. Requirements

The finance major in the School of Business consists of 54.5 hours and prepares students to think analytically and critically by exposing them to theory and its real-world applications. Finance majors typically pursue careers in corporate finance and financial services, including portfolio management, investment and commercial banking, and financial consulting. The major emphasizes a strong concentration in finance and quantitative analysis and is supported by accounting concepts beyond the introductory level.

Requires the following courses:

Code	Title	Hours
<b>Prerequisites for Admission</b>		
ACC 111	Introductory Financial Accounting	3
ECN 150	Introduction to Economics	3
MTH 111	Calculus with Analytic Geometry I	4
or MTH 112	Calculus with Analytic Geometry II	
BEM 201	Quantitative Analysis I	3
ACC 111 and BEM 201 count toward Core Requirements		
<b>Core Requirements</b>		
ACC 221	Introductory Management Accounting	3
BEM 211	Organizational Behavior	3
BEM 221	Principles of Marketing	3
BEM 241	Production and Operations Management	3
BEM 251	Management Information Systems	3
BEM 261	Legal Environment of Business	3
BEM 371	Strategic Management	3
or BEM 372	Strategic Management in Entrepreneurial Firms	
BEM 388	Management Simulation	1.5
FIN 231	Principles of Finance	3
<b>Required Major Courses</b>		
ACC 211	Intermediate Accounting I	4
ACC 212	Intermediate Accounting II	4
FIN 203	Applied Quantitative Analysis for Finance	3
FIN 232	Intermediate Finance	3
Select a minimum of 9 hours of the following:		9
FIN 233	Equity Investments	
FIN 234	International Finance	
FIN 235	Selected Topics in Finance	
FIN 236	Private Equity	
FIN 237	Financial Markets and Institutions	
FIN 238	Financial Modeling	
FIN 239	Financial Data Analytics	
FIN 333	Advanced Finance	

FIN 334	Blockchain and Cryptoassets
FIN 335	Financial Derivatives
FIN 336	Fixed Income and Financial Engineering
FIN 338	Real Estate Finance

Finance majors with an interest in pursuing the Master of Science in Accountancy would be required to take the additional accounting coursework listed below:

Code	Title	Hours
<b>Required Additional Courses</b>		
ACC 237	Taxes and Their Role in Business and Personal Decisions	3
ACC 351	Accounting Information Systems	3
ACC 352	Introduction to Auditing	3
ACC 390	Professional and Ethical Responsibilities of Accountants	1.5
ACC 392	Professional and Ethical Responsibilities of Accountants - Internship Practicum	1.5
ACC 393	Professional and Ethical Responsibilities of Accountants - Case Study Practicum	1.5

ACC 391 is strongly recommended.

## Honors

School of Business students (exclusive of mathematical business majors) with a grade point average of at least 3.0 on all college work and who are eligible for membership in Beta Gamma Sigma are invited to apply for admission to the honors program in business and accountancy. A project, paper, or readings, and an oral presentation or examination are required. Those who successfully complete the requirements specified by the School graduate with the designation “Honors in Accountancy,” “Honors in Business and Enterprise Management,” or “Honors in Finance.” For additional information, interested students should consult a member of the faculty of the Wake Forest School of Business.

## Mathematical Business, B.S. Requirements

Students interested in pursuing this joint major must be granted formal admission to the program upon application to the School of Business' Committee on Admissions, Continuation, and Scholarships. To graduate from Wake Forest University with a major in mathematical business, the student must satisfy the requirements for graduation of both the Department of Statistical Sciences and the School of Business. This interdisciplinary program, consisting of a minimum of 49.5 hours, prepares students for careers in business with a strong background in mathematics. The major has the following course requirements:

Code	Title	Hours
<b>Prerequisites for Admission</b>		
ACC 111	Introductory Financial Accounting	3
ECN 150	Introduction to Economics	3
MTH 112	Calculus with Analytic Geometry II	4
STA 112	Introduction to Regression and Data Science	3
ACC 111 and STA 112 count toward Core Requirements		

**Core Requirements**

ACC 221	Introductory Management Accounting	3
BEM 211	Organizational Behavior	3
BEM 221	Principles of Marketing	3
BEM 241	Production and Operations Management	3
BEM 251	Management Information Systems	3
BEM 261	Legal Environment of Business	3
BEM 388	Management Simulation	1.5
FIN 231	Principles of Finance	3

**Required Major Courses**

BEM 392	Seminar in Mathematical Business Analysis	3
MTH 121	Linear Algebra I	3
MTH 253	Operations Research	3
STA 310	Probability	3
STA 363	Introduction to Statistical Learning	3
Select a minimum of two additional courses *		6

**Recommended Electives**

BEM 383	Seminar in Negotiations	3
BEM 371	Strategic Management	3
or BEM 372	Strategic Management in Entrepreneurial Firms	
CSC 111 & CSC 112	Introduction to Computer Science and Fundamentals of Computer Science	8
STA 362	Multivariate Statistics	3

\*

Chosen from 3 or 4-hour courses among business, computer science, economics, mathematics, or statistics, excluding MTH 381 and STA 383. One elective must be 300-level or higher in either mathematics or statistics; the other elective must be either 200-level or higher in one of these five areas, or CSC 111 or CSC 112.

## Honors

Mathematical Business majors with a minimum cumulative grade point average of 3.0 and a minimum grade point average of 3.5 in the major are eligible to apply for admission to the honors program in mathematical business. The application is available from the program co-directors, and must be submitted prior to the start of a student's senior year. Honors students write a paper under the supervision of a faculty advisor and also present their work. Those who successfully complete the requirements specified by the School of Business and the Department of Statistical Sciences graduate with the designation "Honors in Mathematical Business." For additional information, interested students should consult with both departments' program directors.

## Certificate in Actuarial Science

Code	Title	Hours
ACC 111	Introductory Financial Accounting	3
ECN 150	Introduction to Economics	3
ECN 205	Intermediate Microeconomics	3
or ECN 210	Intermediate Mathematical Microeconomics	
ECN 207	Intermediate Macroeconomics	3
or ECN 211	Intermediate Mathematical Macroeconomics	
FIN 231	Principles of Finance	3

STA 310	Probability	3
STA 311	Statistical Inference	3

To declare the certificate in actuarial science, a student must receive at least a C or AP credit in each of ACC 111, ECN 150, and MTH 112. Upon declaration, students will gain access to the pre-registration procedures in the relevant departments and in the School of Business.

Students are strongly encouraged to take Society of Actuaries (SOA) Exam P shortly after completing STA 310, and SOA Exam FM shortly after completing FIN 231. For more information on these exams, consult the SOA. Students are also strongly encouraged to seek an actuarial internship in the summer after their junior year.

Students can apply for Validation by Education Experience (VEE) credit with the SOA after passing at least two actuarial exams.

## Undergraduate Business Program Admission

Admission to the School of Business undergraduate program is by formal application, and applicants are screened by the School's Committee on Admissions, Continuation, and Scholarships. Before being considered for admission to the School of Business, the applicant first must have been admitted to Wake Forest University. Minimum requirements for admission to the Wake Forest School of Business undergraduate program are as follows:

1. Completion of 49 hours with a cumulative WFU grade point average of 2.85.
2. Completion of the following courses by the conclusion of the Sophomore year with a minimum grade of C in each course:

Code	Title	Hours
ECN 150	Introduction to Economics	3
MTH 111	Calculus with Analytic Geometry I	4
or MTH 112	Calculus with Analytic Geometry II	
ACC 111	Introductory Financial Accounting	3
BEM 201	Quantitative Analysis I **	3

\*

MTH 112 for the mathematical business major.

\*\*

STA 112 for the mathematical business major.

Based on availability, students may take one additional School of Business course in the spring of the sophomore year:

Code	Title	Hours
ACC 221	Introductory Management Accounting	3
BEM 211	Organizational Behavior	3
BEM 221	Principles of Marketing	3
BEM 251	Management Information Systems	3
BEM 261	Legal Environment of Business	3
FIN 231	Principles of Finance	3

Students who have not fully met the above requirements may still apply while requirements are in progress. The number of students who can be accommodated is limited. Meeting the minimum requirements is not a guarantee of admission. Therefore, the School of Business reserves the

right to deny admission or readmission to any student even though he or she meets the minimum requirements. Readmission to the Wake Forest University School of Business undergraduate program must be approved by the Committee on Admissions, Continuation, and Scholarships but first requires readmission to Wake Forest University, requirements for which are provided in this bulletin.

## MSA Program Admission

Admission to the MSA program requires undergraduate business school students who have completed ACC 211 to submit an application to the MSA program during their third year of study. The required application components include the online application and an unofficial transcript.

Students who are currently enrolled in the School of Business's undergraduate accounting or finance programs are automatically accepted into the MSA program provided they maintain a 3.0 GPA in their major and earn no less than a C+ in the following accounting courses: ACC 111, ACC 211, ACC 212, ACC 221 and ACC 237. All application components are due by December 1 (of the third year of study).

Additional information may be found here.

## Transfer of Credit from Other Schools

It is expected that most work toward degrees offered by the Wake Forest University School of Business will be taken in the School of Business. For students wishing to transfer credit from other schools towards their major, the following general guidelines apply:

1. All approvals for transfer credits from other institutions to the School of Business must be:
  - a. approved prior to admission into the School and will be limited to 6 hours for transfer students
  - b. pre-approved before such courses are taken by non-transfer students
2. Courses taken at AACSB accredited schools will be considered for transfer credit per (1) above. Transfer credit for all courses taken at schools not accredited by the AACSB generally requires a validation exam in order to be considered for transfer credit.
3. Study abroad transfer credit will be considered per (1) above for coursework taken through international programs sponsored by AACSB accredited schools or offered by select universities or programs approved by the School of Business faculty. Courses taken through international programs not meeting these qualifications will require a validation exam in order to be considered for transfer credit [per (1) above].
4. Courses passed at another school with the minimum passing grade at that school may not be transferred.
5. No work in courses from two-year schools will be accepted for major credit.
6. Courses taken elsewhere in subjects not offered at the School of Business will not necessarily count toward the hours required in the School of Business.
7. A maximum of two courses (6 hours) may be transferred after admission into the School of Business from other institutions (including any approved economics course counting toward the major).
8. In some cases, students may apply up to 9 hours toward a School of Business major from a Wake Forest sponsored program – including the Wake Forest sponsored programs in Barcelona and London

INSTEP. A maximum of 6 hours of core requirements can be taken from these programs.

9. Students earning more than 6 hours of School of Business credit through the Wake Forest Barcelona and/or London INSTEP Program may not also transfer credit from programs offered by institutions other than the Wake Forest School of Business.
10. Students entering the School of Business from Wake Forest College must take ACC 111 within the School of Business. Students transferring into the School of Business from another university must take a validation examination for ACC 111 to be eligible for transfer credit.

Students from Wake Forest College (non-School of Business majors) wishing to transfer business or accounting courses taken at other institutions towards credit as general electives in the College may do so upon review of that course's description in the school's catalog (and in some cases review of the syllabus for that course).

## Requirements for Continuation

In addition to the requirements outlined in the Procedures section of this bulletin, a student must be academically responsible and must show satisfactory progress toward completing the requirements for the degree. The administration of the Wake Forest School of Business notifies the student if satisfactory progress is not being made and, after consultation with the Committee on Admission, Continuation, and Scholarships, decides if the student may continue as a major in the School of Business.

## Requirements for Graduation

The Wake Forest School of Business confers the bachelor of science degree with a major in accountancy, business and enterprise management, finance, or mathematical business. The requirements for completion of the degrees are those in effect at the time the student enters the School of Business. No courses in the undergraduate School of Business can be taken pass/fail unless they are offered on that basis. In addition, the POI designation for any course does not override any program requirements for the major.

In addition to the courses stipulated, the student in the undergraduate School of Business must meet the following requirements for graduation:

1. *a minimum of 120 hours, including the basic and divisional requirements established by Wake Forest College*
2. *a minimum grade point average of 2.0 on all work attempted at Wake Forest*
3. *a minimum grade point average of 2.0 on all work attempted at other institutions*
4. *an overall 2.0 grade point average in all courses required in the major.*

## Beta Gamma Sigma, National Honor Society

Membership in Beta Gamma Sigma is the highest national recognition a student can receive in an undergraduate program in accounting or business. To be eligible for membership, a student must rank in the top ten percent of the junior or senior class.

# Wake Forest College Faculty

*Date following name indicates year of appointment. Listings represent those faculty teaching either full or part-time during Fall 2023 and/or Spring 2024.*

## **Irma V. Alarcón** (2005)

Associate Professor of Spanish and Italian  
BA, Universidad de Concepción (Chile); MA, PhD, Indiana University.

## **Jane W. Albrecht** (1987)

Professor of Spanish and Italian  
BA, Wright State University; MA, PhD, Indiana University.

## **Guillermo Alesandroni** (2020)

Visiting Assistant Professor  
BS, National University of Rosario; MS, University of Illinois at Chicago; PhD, Oklahoma State University.

## **Rebecca W. Alexander** (2000)

F.M. Kirby Family Faculty Fellow and Professor of Chemistry  
BS, Delaware; PhD, University of Pennsylvania.

## **Lucy Alford** (2020)

Assistant Professor of English  
BA, University of Virginia; Phd, Stanford University; PhD, University of Aberdeen.

## **Edward E. Allen** (1991)

Professor of Mathematics  
BS, Brigham Young University; MA, PhD, University of California (San Diego).

## **Justin Allman** (2020)

Associate Teaching Professor of Mathematics  
BS, Georgia Institute of Technology; MA, MAEd, Wake Forest University; PhD, University of North Carolina at Chapel Hill.

## **Kate R. Allman** (2014)

Adjunct Assistant Professor of Psychology  
BA, Emory University; MEd, Wake Forest University; PhD, University of North Carolina at Chapel Hill.

## **Sarra Alqahtani** (2019)

Assistant Professor of Computer Science  
BS, MS, King Saud University; PhD, The University of Tulsa.

## **Jacque L. Amoureux** (2011)

Associate Teaching Professor of Politics and International Affairs  
BS, MPA, Boise State University; MA, University of Iowa; PhD, Brown University.

## **Paul R. Anderson** (1990)

Professor of Physics  
BS, University of Wisconsin-Madison; MA, PhD, University of California (Santa Barbara).

## **David J. Anderson** (1992)

Professor of Biology  
BA, Denison University; MS, University of Michigan; PhD, Pennsylvania University.

## **T. Michael Anderson** (2010)

Professor of Biology  
BS, Oregon State University; PhD, Syracuse University.

## **Sharon G. Andrews** (1994)

Professor of Theatre  
BA, UNC-Chapel Hill; MFA, UNC-Greensboro.

## **Kendra Andrews** (2021)

Assistant Teaching Professor of English  
BA, University of North Carolina at Chapel Hill; MA, University of North Carolina at Charlotte; PhD, North Carolina State University.

## **Elizabeth Mazza Anthony** (1998)

Teaching Professor of French Studies  
BA, Duke University; MA, PhD, UNC-Chapel Hill.

## **Diana R. Arnett** (2014)

Associate Teaching Professor of Biology  
BS, MA, Youngstown State University; PhD, Kent State University.

## **Miriam A. Ashley-Ross** (1997)

Professor of Biology  
BS, Northern Arizona University; PhD, University of California (Irvine).

## **Robert J. Atchison** (2010)

Professor of Communication and Director of Debate  
BA, MA, Wake Forest University; PhD, University of Georgia.

## **Alison Atkins** (2013)

Assistant Teaching Professor of Spanish and Italian  
BA, Wake Forest University; MA, PhD, University of Virginia.

## **Emily A. Austin** (2009)

Professor of Philosophy  
BA, Hendrix College; PhD, Washington University (St. Louis).

## **R. Scott Baker** (2001)

Associate Professor of Education  
BA, Evergreen State College; MA, Tufts University; PhD, Teacher's College of Columbia University.

## **Duff Baker-Jarvis** (2019)

Visiting Assistant Professor  
BA, University of Colorado at Boulder; PhD, Michigan State University.

## **Grey Ballard** (2016)

Associate Professor of Computer Science and Dunn-Riley Faculty Fellow  
BS, MA, Wake Forest University; PhD, University of California Berkeley.

## **Wanda A. Balzano** (2005)

Chair and Associate Professor of Women's, Gender, and Sexuality Studies  
BA, MA, University of Naples, Italy; MA, PhD, University College, Dublin.

## **Adrian Bardon** (2002)

Associate Professor of Philosophy  
BA, Reed College; MA, Washington; PhD, University of Massachusetts (Amherst).

## **Ilaria Bargigia** (2020)

Assistant Professor of Physics  
Msc, PhD, Polytechnic University of Milan (Italy).

## **Phillip G. Batten** (1991)

Adjunct Assistant Professor of Psychology  
BA, PhD, UNC-Chapel Hill; MA, Yale University; MA, Wake Forest University.

## **Brittany Battle** (2019)

Assistant Professor of Sociology

BA, University of Delaware; MA, PhD, Rutgers University, New Brunswick.

**Kristen M. Beavers** (2012)

Associate Professor of Health and Exercise Science  
BS, Cornell University; MPH, UNC-Chapel Hill; PhD, Baylor University.

**Daniel Beavers** (2022)

Associate Professor of Statistical Sciences  
BS, Wake Forest University; MS, University of North Carolina Chapel Hill; PhD, Baylor University.

**H. Kenneth Bechtel** (1981)

Associate Professor of Sociology  
BA, MA, North Dakota; PhD, Southern Illinois University (Carbondale).

**Jack Bell** (2017)

Visiting Assistant Professor of English  
BA, University of Richmond; PhD, Duke University.

**Lina Benabdallah** (2017)

Associate Professor of Politics and International Affairs  
BA, University of Batna, Algeria; MA, PhD, University of Florida.

**Margaret C. Bender** (2000)

Professor of Anthropology  
BS, Cornell; MA, PhD, University of Chicago.

**Shannna Benjamin** (2022)

Professor of African American Studies  
BA, Johnson C Smith University; MA, University of Wisconsin Madison; PhD, University of Wisconsin Madison.

**Kenneth S. Berenhaut** (2000)

Professor of Mathematics  
BA, MS, University of Manitoba (Canada); MA, PhD, University of Georgia.

**Ulrich Bierbach** (1999)

Professor of Chemistry  
MS, PhD, University of Oldenburg (Germany); MM, UNC-Greensboro.

**Erin E. Binkley** (2014)

Associate Professor of Counseling  
BA, UNC-Chapel Hill; MA, Wake Forest University; PhD, Idaho State University.

**Katharine (Polly) A. Black** (2010)

Associate Teaching Professor of Communication  
BA, Vassar College; MA, Columbia University; MBA, University of Virginia Darden School of Business; PhD, University of Birmingham UK.

**Lisa M. Blee** (2009)

Associate Professor of History  
BA, Lewis and Clark College; PhD, University of Minnesota.

**Terry D. Blumenthal** (1987)

Professor of Psychology  
BS, University of Alberta (Edmonton); MS, PhD, University of California (Berkeley).

**Sarah Bogard** (2020)

Visiting Assistant Professor of Spanish and Italian  
BA, University of California, Santa Cruz; MA, Middlebury College; PhD, University of Virginia.

**Jes Bolduc** Assistant Teaching Professor

PhD, Wake Forest University.

**Keith D. Bonin** (1992)

Professor of Physics and Associate Provost for Research and Scholarly Inquiry  
BS, Loyola University; PhD, University of Maryland.

**Abbey Bourdon** (2017)

Sterge Faculty Fellow and Associate Professor  
BA, University of Richmond; PhD, Wesleyan University.

**Rian E. Bowie** (2006)

Z. Smith Reynolds Foundation Fellow, Associate Teaching Professor  
BA, Tougaloo College; MA, Temple University; PhD, Emory University.

**Tina M. Boyer** (2010)

Assistant Professor of German  
BA, MA, New Mexico; PhD, University of California (Davis).

**Anthony Bradley** (2014)

Assistant Professor of Military Science  
BS, Park University.

**Shannon T. Brady** (2018)

Denton Family Faculty Fellow and Assistant Professor of Psychology  
BA, Lewis & Clark College; MS, Black Hills State University; PhD, Stanford University.

**Erin Branch** (2011)

Teaching Professor of English and Writing Program Administrator  
AB, Middlebury College; MA, PhD, UNC-Chapel Hill.

**R. Saylor Breckenridge** (2001)

Associate Professor of Sociology  
BA, MA, PhD, University of Arizona.

**Alexandra Brewer** (2020)

Assistant Professor of Sociology  
BA, Barnard College; MA, PhD, University of Chicago.

**Thomas Brister** (2005)

Teaching Professor of Politics and International Affairs  
BS, Georgetown University; MA, PhD, University of Virginia.

**Michaelle L. Browsers** (2000)

Professor of Politics and International Affairs  
BA, Whitman College; MA, University of Virginia; PhD, University of Minnesota.

**Hana E. Brown** (2011)

Associate Professor of Sociology  
BA, Bryn Mawr College; MA, PhD, University of California (Berkeley).

**M. Alan Brown** (2012)

Associate Professor of Education and Bryant/Groves Faculty Fellow  
BA, Appalachian State University; MA, Wake Forest University; PhD, University of Alabama.

**Christopher Brown** (2016)

Associate Professor of English  
BA, Georgetown University; JD, Georgetown University; MA, PhD, University of Maryland.

**Peter H. Brubaker** (1994)

Professor of Health and Exercise Science, Chair



BS, East Stroudsburg University; MA, Wake Forest University; PhD, Temple University.

**Nelson C. Brunsting** (2020)

Adjunct Professor

BA, Wake Forest University; MA, Victoria University of Wellington, New Zealand; PhD, University of North Carolina at Chapel Hill.

**Christy M. Buchanan** (1992)

Professor of Psychology

BA, Seattle Pacific University; PhD, University of Michigan.

**Stephanie C. Bunch** (2021)

Adjunct Assistant Professor of Health and Exercise Science  
BS, Appalachian State University; MPH, University of Arizona.

**Diego Burgos** (2011)

Associate Professor of Spanish and Italian

BA, University of Antioquia, Medellin (Colombia); MA, Pompeu Fabra University Institute for Applied Linguistics; PhD, Pompeu Fabra University.

**Rebeccah Byer** (2018)

Visiting Assistant Professor

BFA, University of Illinois at Urbana-Champaign.

**Eleni F. Caldwell** (2021)

Visiting Clinical Professor

BA, MEd, High Point University; EdD, University of North Carolina at Greensboro.

**Brian Calhoun** (2012)

Associate Professor of the Practice in Education

BS, MBA, MA, Wake Forest University.

**Ana Cecilia Calle Poveda** (2022)

Assistant Professor of Spanish

BA, Universidad Nacional de Colombia; PhD, University of Texas Austin.

**Alan S. Cameron** (2018)

Adjunct Associate Professor of Psychology

BA, University of North Carolina at Chapel Hill; MA, Wake Forest University; PhD, University of North Carolina at Chapel Hill.

**Mollie Rose Canzona** (2015)

Assistant Professor of Communication

BA, Salem College; MA, Emerson College; PhD, George Mason University.

**Eric D. Carlson** (1995)

Associate Professor of Physics

BS, Michigan State University; MA, PhD, Harvard University.

**Simone M. Caron** (1991)

Professor of History

BA, Bridgewater State University; MA, Northeastern; PhD, Clark University.

**Jacqui Carrasco** (1999)

Professor of Music

BA, University of California (Los Angeles); MM, DMA, State University of New York (Stony Brook).

**David L. Carroll** (2003)

Professor of Physics

BSc, North Carolina State University; PhD, Wesleyan University.

**Cheyenne Carter** (2014)

Assistant Teaching Professor of Counseling

BA, Baylor University; MS, Tarleton State University; PhD, University of North Texas.

**Stewart Carter** (1982)

Wake Forest Professor and Professor of Music

BME, Kansas; MS, Illinois; PhD, Stanford University.

**Donald R. Casares** (2017)

Assistant Professor of Counseling

BA, Franciscan University; MA, PhD, University of Holy Cross.

**Brenna Casey** (2021)

Visiting Assistant Professor of English

BA, Boston College; MFA, University of Notre Dame; MA, PhD, Duke University.

**Tammy H. Cashwell** (2013)

Associate Teaching Professor of Counseling

BS, Appalachian State University; MS, Mississippi State University; PhD, Mississippi State University.

**Daniel Castelblanco** (2021)

Visiting Assistant Professor of Spanish and Italian

BA, Pontificia Universidad Javeriana; MA, PhD, Georgetown University.

**Justin Catanoso** (1993)

Professor of the Practice in Journalism

BA, Pennsylvania State; MA, Wake Forest University.

**Amy Catanzano** (2013)

Associate Professor of English

BA, Colorado State University; MFA, University of Iowa.

**Daniel A. Cañas** (1987)

Associate Professor of Computer Science

BS, Tecnológico de Monterrey (Mexico); MS, Georgia Institute of Technology; PhD, University of Texas (Austin).

**Leonardo Cella** (2022)

Assistant Professor of Statistical Sciences

BS, Universidade de Brasília; MS, Universidade de Brasília; PhD, North Carolina State University.

**Frederick H. Chen** (2000)

Professor of Economics

BS, University of Wisconsin-Madison; MA, PhD, University of Chicago.

**Minghan Chen** (2019)

Assistant Professor of Computer Science

BS, Jiangnan University; MS, Northeastern University; PhD, Virginia Polytechnic Institute and State University.

**Samuel S. Cho** (2010)

Associate Professor of Physics and Computer Science

BS, University of Maryland, Baltimore County; MS, PhD, University of California, San Diego.

**N. Keita. Christophe** (2021)

Assistant Professor of Psychology

BA, Washington College; MA, PhD, University of North Carolina at Greensboro.

**Sherriann Lawson Clark** (2009)

Assistant Professor of Anthropology

BS, Pennsylvania State University; MA, PhD, American University.

**Amy Clark (2022)**

Assistant Professor of English  
BA, University of California, Berkeley; MA, University of California, Berkeley; PhD, University of California, Berkeley.

**Philip B. Clarke (2011)**

Associate Professor of Counseling  
BA, Wake Forest University; MS, UNC-Greensboro; PhD, UNC-Greensboro.

**Elizabeth A. Clendinning (2014)**

Associate Professor of Music  
AB, University of Chicago; MM, PhD, Florida State University.

**Benjamin Coates (2012)**

Associate Professor of History  
BA, Stanford University; MA, M. Phil, PhD, Columbia University.

**R. David Coates (1999)**

Worrell Professor of Anglo-American Studies in Politics and International Affairs  
BA, York University; PhD, Oxford University.

**Carolyn Coberly (2020)**

Visiting Assistant Professor  
BA, Cornell University; MA, Harvard University; PhD, University of Virginia.

**Daniel Cohen (2017)**

Professor of Practice and John C. Whitaker Jr. Executive Director of the Center for Entrepreneurship  
BS, Towson University; MAcc, George Washington University; PhD, Case Western Reserve University.

**Bruce Cole (2017)**

Assistant Teaching Professor of Spanish and Italian  
BA, MAT, Middle Tennessee State University.

**Veronica T. Cole (2019)**

Assistant Professor of Psychology  
BA, Wellesley College; MA, PhD, University of North Carolina at Chapel Hill.

**Guillaume Coly (2020)**

Assistant Professor of French Studies  
BA, MA, Université Cheikh Anta Diop de Dakar, Senegal; PhD, University of South Carolina.

**Christa L. Colyer (1997)**

Professor of Chemistry  
BSc, Trent University (Canada); MSc, University of Guelph (Canada); PhD, Queen's University (Canada).

**Lindsay Rae Comstock (2008)**

Assistant Professor of Chemistry  
BS, Northern Arizona University; PhD, University of Wisconsin.

**Gregory Cook (1999)**

Associate Professor of Physics  
BS, PhD, UNC-Chapel Hill.

**Rachel Corbman (2019)**

Visiting Assistant Professor of Women's, Gender, and Sexuality Studies  
PhD, Stonybrook.

**Regina J. Cordy (2018)**

Assistant Professor of Biology

BA, University of Virginia; PhD, Harvard University.

**Amanda Corris (2022)**

Assistant Professor of Philosophy  
PhD, University of Cincinnati.

**Jamie E. Crockett (2014)**

Associate Professor of Counseling  
BA, Keene State College; MS, PhD, UNC-Greensboro.

**Earl P. Crow (2006)**

Part-time Professor of Religion and Philosophy  
BA, BD, Duke University; PhD, The University of Manchester, UK.

**William Crowe (2022)**

Assistant Teaching Professor of Engineering  
PhD, Virginia Tech.

**Patricia M. Cunningham (1978)**

Francis P. Gaines Professor of Education  
BA, Rhode Island; MS, Florida State University; EdS Indiana State University; PhD, University of Georgia.

**John J. Curley (2008)**

Professor  
AB, Duke University; MA, University of Manchester/Sotheby's Institute; MA, PhD, Yale University.

**James F. Curran (1988)**

Professor of Biology  
BAAS, University of Delaware; MA, PhD, Rice University.

**Joshua Currie (2020)**

Assistant Professor of Biology  
BS, Tennessee Technological University; PhD, University of North Carolina at Chapel Hill.

**Jane Kathleen Curry (1998)**

Professor of Theatre and Susan & Gene Goodson Faculty Fellow  
BFA, University of Illinois (Urbana-Champaign); MFA, Brown University; PhD, University of New York.

**E. Mark Curtis (2014)**

Associate Professor of Economics  
BA, Furman; MA, Duke University; PhD, Georgia State University.

**Lucy D'Agostino McGowan (2019)**

Assistant Professor  
BA, University of North Carolina at Chapel Hill; MS, Washington University School of Medicine; PhD, Vanderbilt University.

**Chanchal Dadlani (2011)**

Associate Professor  
BA, Columbia University; AM, PhD, Harvard University.

**Dale Dagenbach (1990)**

Professor of Psychology  
BA, New College; MA, PhD, Michigan State University.

**Sara Dahill-Brown (2012)**

Associate Professor of Politics and International Affairs  
BA, Trinity University; MA, PhD, University of Wisconsin-Madison.

**Mary M. Dalton (1986)**

Professor of Communication

BA, Wake Forest University; MA, PhD, UNC (Greensboro).

**Christina M. Dalton** (2014)

Associate Professor of Economics  
BA, Cornell; PhD, University of Minnesota.

**John T. Dalton** (2010)

Associate Professor of Economics  
BA, UNC-Chapel Hill; PhD, University of Minnesota.

**Nicole M. Dalzell** (2017)

Associate Teaching Professor of Statistical Science  
BA, University of South Florida; MS, PhD, Duke University.

**Merih Danali** (2021)

Assistant Professor  
BA, Bogazici University; MA, Pennsylvania State University; PhD, Harvard University.

**Stephen W. Davis** (1991)

Adjunct Assistant Professor of Psychology  
BA, MA, Wake Forest University.

**Brook M. Davis** (1997)

Professor of Theatre  
BA, Wake Forest University; MFA, Virginia Commonwealth University; PhD, University of Maryland (College Park).

**Jose deVera** (2021)

Visiting Assistant Professor  
BFA, California State University; MFA, Yale School of Art.

**L. Neil DeVotta** (2008)

Professor of Politics and International Affairs  
BA, MA, Brigham Young University; PhD, University of Texas.

**Courtney Di Vittorio** (2019)

Assistant Professor of Engineering  
BE, McGill University; PhD, Georgia Institute of Technology.

**Sandra J. Dickson** (2009)

Professor of Communication  
BSED, Mississippi College; MA, University of West Florida; PhD, Florida State University.

**John J. Dinan** (2001)

Professor of Politics and International Affairs  
BS, MA, PhD, University of Virginia.

**Paul T. Dinh** (2021)

Assistant Professor of Military Science  
BA, California State University, Fresno.

**M. Nicole DiPiro** (2018)

Visiting Assistant Professor in Health and Exercise Science  
BS, University of Georgia; MS, University of South Carolina; PhD, Medical University of South Carolina.

**Crystal T. Dixon** (2021)

Associate Professor of the Practice of Health and Exercise Science  
BA, St. John Fisher College; MPH, East Carolina University; MA, Wake Forest University.

**George Donati** (2012)

Associate Research Professor of Chemistry

Degree, University of the Octávio Bastos Educational Foundation; MA, Federal University of São Carlos; PhD, Wake Forest University.

**Patricia C. Dos Santos** (2008)

Professor of Chemistry  
BS, Universidade Federal do Rio Grande do Sul, Porto Alegre (Brazil); PhD, Virginia Polytechnical Institute and State University.

**Jack A. Dostal** (2010)

Teaching Professor of Physics  
BS, University of Northern Iowa; MS, Iowa State University; PhD, Montana State University.

**Ron Doyle** (2022)

Part-Time Professor of the Practice of Computer Science / Entrepreneurship  
PhD, Duke University.

**Ryan P. Durling** (2021)

Assistant Professor of Military Science  
MA, University of Phoenix.

**Deanna L. Dzybon** (2020)

Adjunct Lecturer in Health and Exercise Science  
BA, St. John Fisher College.

**Robert D. M. Eastman-Mullins** (2007)

Professor of Theatre  
BLS, Mary Washington College; MFA, NC School of the Arts.

**Edward H. Eaves** (2013)

Associate Teaching Professor of Health and Exercise Science  
BS, College of William & Mary; MS, Michigan State University; EdD, University of North Carolina (Greensboro).

**Andrea Echeverria** (2014)

Associate Professor of Spanish and Italian  
MA, University of Virginia; PhD, Georgetown University.

**Maureen Eggert** (2009)

Affiliate in Women's, Gender, and Sexuality Studies  
BA, University of Central Florida; MLIS, University of Southern Mississippi; JD, Florida State University.

**Eric Ekstrand** (2012)

Associate Teaching Professor of English  
BA, Wake Forest University; MFA, University of Houston.

**Bryan Colburn Ellis** (2006)

Adjunct Assistant Professor  
BFA, University of North Carolina-Greensboro; MFA, Cranbrook Academy of Art.

**Nikki C. Elston** (2018)

Assistant Teaching Professor of Counseling  
BS, BA University of West Florida; MS, St. Cloud State University; PhD, Georgia State University.

**Keri Epps** (2018)

Assistant Teaching Professor of English  
BA, University of Georgia; MA, University of Alabama; PhD, University of Louisville.

**Marianne Erhardt** (2017)

Assistant Teaching Professor of English

BA, New York College at Geneseo; MFA, University of Wisconsin-Madison.

**Rob Erhardt** (2012)

Professor of Statistical Sciences

BA, University of New York College at Geneseo; MS, University of Wisconsin-Madison; PhD, UNC-Chapel Hill.

**Jennifer B. Erway** (2007)

Professor of Mathematics

BA, Claremont McKenna College; MA, PhD, University of California (San Diego).

**Justin Esarey** (2018)

Associate Professor of Politics and International Affairs

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Associate Professor of Spanish and Italian  
BA, York College; MA, University of Delaware; PhD, University of Virginia.

**Sharon K. Woodard** (1998)

Associate Professor of the Practice of Health and Exercise Science  
BS, Central Michigan University; MS, Wake Forest University.

**Boston Woolfolk** (2020)

Visiting Assistant Professor of Spanish and Italian  
BA, University of Virginia; MA, PhD, Vanderbilt University.

**Kimberly T. Wortmann** (2018)

Assistant Professor of Religion  
BA, Macalaster College; MTS, Harvard Divinity School; PhD, Harvard University.

**David Wren** (2013)

Associate Teaching Professor of Chemistry  
BS, University of California (Davis); MS, University of Colorado (Boulder); PhD, University of Northern Colorado (Greeley).

**Abbie K. Wrights** (2016)

Associate Teaching Professor of Health & Exercise Science  
BA, Messiah College; MS, Wake Forest University.

**Raymond L. Wyatt** (1956)

Professor Emeritus of Biology  
BS, Wake Forest University; PhD, UNC-Chapel Hill.

**David Yamane (2005)**

Associate Professor of Sociology  
BA, University of California (Berkeley); MS, PhD, University of Wisconsin-Madison.

**Kanako Yao (2021)**

Assistant Teaching Professor of East Asian Languages and Cultures  
BA, Showa Women's University, Japan; MA, University of Findlay; MA, PhD, Ohio State University.

**Tina Yarborough Liggins (2001)**

Assistant Teaching Professor of Dance  
BFA, UNC, Greensboro; MFA, Virginia Tech.

**Mir Yarfitz (2013)**

Associate Professor of History  
BA, Reed College; MA, PhD, University of California (Los Angeles).

**Saami Yazdani (2019)**

Associate Professor of Engineering  
BS, MS, Virginia Tech; PhD, Wake Forest University.

**Lynne Yengulap (2019)**

Associate Teaching Professor of Mathematics  
BS, MS, Miami University; PhD, University of Kansas.

**Barry Yeoman (2019)**

Adjunct Professor of Journalism  
BA, New York University.

**Kyana Young (2019)**

Assistant Professor of Engineering  
BS, University of Arizona; PhD, University of Wisconsin Madison.

**Qiaona Yu (2016)**

Associate Professor of East Asian Languages and Cultures  
BA, Beijing Foreign Studies University; MA, Peking University; PhD, University of Hawaii (M?noa).

**Chu (Alex) Yu (2020)**

Assistant Professor of Economics  
BA, Northwestern University; MA, PhD, University of California at San Diego.

**Yaqi Yuan (2020)**

Adjunct Assistant Professor of Sociology  
BA, MA, Hunan Agricultural University; PhD, SUNY Buffalo.

**Phoebe Zerwick (2010)**

Professor of the Practice  
BA, University of Chicago; MS, Columbia University.

**Clifford W. Zeyl (1997)**

Professor of Biology  
BSc, University of Guelph; MSc, PhD, McGill University.

**Qiong Zhang (2008)**

Associate Professor of History  
BA, MA, Wuhan University; PhD, Harvard University.

**Margaret D. Zulick (1991)**

Associate Professor of Communication  
BM, Westminster Choir College; MA, Earlham School of Religion; MTS, Garrett-Evangelical Theological Seminary.

## School of Business Faculty

*Date following name indicates year of appointment. Listings represent those faculty teaching either full or part-time during Fall 2023 and/or Spring 2024.*

**Majed Al-Ghandour (2021)**

Adjunct Associate Teaching Professor of Business Analytics  
BS, MS, Kuwait University; PhD, North Carolina State University.

**George R. Aldhizer III (2001)**

Associate Professor of Accounting  
BS, BA, Richmond; PhD, Texas Tech University.

**Tom Aleman (2018)**

Professor of the Practice of Accounting  
BS, BA, University of North Carolina at Charlotte.

**Michael Ames (2018)**

Professor of Practice of Business Analytics  
BA, University of Georgia, Athens; MBA, University of North Carolina at Chapel Hill.

**Anthony J. Amoruso (2019)**

Associate Teaching Professor of Accounting  
BS, Frostburg State College; MPA, West Virginia University; PhD, University of Georgia at Athens.

**Phillip C. Anderson (2019)**

Associate Teaching Professor of Management  
BSEE, Purdue University; MSEE, Illinois Institute of Technology; MBA, University of California, Los Angeles, Anderson School of Management; PhD, Massachusetts Institute of Technology, Sloan School of Management.

**Tonya E. Balan (2016)**

Associate Teaching Professor of Business Analytics  
BS, PhD North Carolina State University.

**Roger L. Beahm (2005)**

Professor of the Practice of Marketing  
BS, MBA, University of Colorado at Boulder.

**S. Douglas Beets (1987)**

Professor of Accounting  
BS, University of Tennessee; MAcc, PhD, Virginia Polytechnic Institute & State University.

**Emma L. Best (2020)**

Assistant Teaching Professor of Business Law  
BS, University of Florida; MBA, JD, Wake Forest University; DBA, University of North Carolina at Charlotte.

**Derrick S. Boone (1996)**

Associate Professor of Marketing  
BA, University of North Carolina at Chapel Hill; MBA, Fairleigh Dickinson University; PhD, Duke University.

**Peter Brewer (2013)**

Adjunct Lecturer of Accounting  
BS, Penn State University; MA, University of Virginia; PhD, University of Tennessee.

**Peter Brockway (2017)**

Adjunct Professor of the Practice, Executive in Residence

BBA, Stetson University; MBA, Harvard Business School.

**Ann Brooks (2020)**

Senior Lecturer of Accounting  
BBA, MAcc, University of New Mexico.

**John A. Butler (2017)**

Professor of the Practice of Accounting  
BBA, University of Notre Dame; MBA, University of Texas at Austin.

**Jeff Camm (2015)**

Inmar Presidential Chair in Business Analytics & Professor of Business Analytics  
BS, Xavier University; PhD, Clemson University.

**Thomas G. Canace (2009)**

PWC Fellow for Teaching Excellence, Associate Professor of Accounting  
BS, St. Joseph's University; MBA, Duke University; PhD, University of South Carolina.

**Anna Ciani (2010)**

Associate Professor of Accounting  
BS, Villanova University; MA, St. Joseph's College; MA, Wake Forest University; PhD, Duke University.

**Jennifer Claggett (2020)**

Assistant Professor of Accounting  
BS, University of North Carolina at Chapel Hill; MS, University of North Carolina at Greensboro; PhD, University of Georgia.

**Jon Clift (2014)**

Affiliate Professor of the Practice of Entrepreneurship  
BS, University of North Carolina at Greensboro; MEM, Duke University.

**Pat H. Dickson (2006)**

Dale & Karen Sisel Faculty Professor of Management  
BS, MS, Mississippi College; PhD, University of Alabama.

**Audrey Douglas-Cooke (2023)**

Adjunct Assistant Professor of Management  
BS, Georgetown University; MHA, Central Michigan University; PhD, Trident University.

**Lisa Dragoni (2015)**

Associate Professor of Management  
BA, Franklin & Marshall College; MA, The George Washington University; PhD, University of Maryland.

**Jonathan E. Duchac (1993)**

Delmer P. Hylton Professor of Accounting  
BBA, MAcc, University of Wisconsin at Madison; PhD, University of Georgia.

**Mark E. Evans (2014)**

Dale K. Cline Associate Professor of Accounting  
BBA, MBA, Radford University; PhD, Duke University.

**Kenneth D. Ford (2018)**

Assistant Professor of Finance  
BSBA, University of Nebraska; MBA, University of North Carolina at Chapel Hill; PhD, University of Arkansas.

**Michael P. Fox (2019)**

Adjunct Professor of the Practice of Marketing  
BA, Western Kentucky University.

**Katherine A. Frear (2021)**

Associate Teaching Professor of Management  
BA, Michigan State University; MA, PhD, University of North Carolina at Charlotte.

**Michael T. Geier (2023)**

Adjunct Assistant Professor of Management  
MS, University of Applied Sciences, Germany; MBA, Wingate University; DBA, California Intercontinental University.

**Jason Goddard (2008)**

Adjunct Professor of the Practice of Finance  
BS, MBA, University of North Carolina at Greensboro.

**Haresh Gurnani (2015)**

Thomas H. Davis Chair in Business & Professor of Operations Management  
BE, Indian Institute of Technology, New Delhi; MS, PhD, Carnegie Mellon University.

**Sean T. Hannah (2012)**

J. Tylee Wilson Chair in Business Ethics and Professor of Management  
BA, California State University; MBA, MA Syracuse University; MA, Marine Corps University; PhD, University of Nebraska.

**Frederick H. deB. Harris (1990)**

Professor of Business Economics  
BA, Dartmouth College; PhD, University of Virginia.

**J. Kline Harrison (1990)**

Vice Provost for Global Affairs & Kemper Professor of Business  
BS, University of Virginia; PhD, University of Maryland.

**Kenneth C. Herbst (2007)**

Board of Visitors Fellow in Marketing, Associate Professor of Marketing  
BA, Wake Forest University; MA, PhD, University of North Carolina at Chapel Hill.

**Katherine S. Hoppe (1993)**

Adjunct Teaching Professor of Business  
BA, Duke University; MBA, Texas Christian University; PhD, University of North Carolina at Greensboro.

**Philip Howard (2016)**

Joseph M. Bryan Fellow in Banking & Finance & Assistant Professor of Finance  
BS, MS, PhD, University of North Carolina at Chapel Hill.

**Jennifer Hudson (2006)**

Lecturer of Accounting  
BS, Wake Forest University.

**Sobia S. Hussanini (2017)**

Adjunct Professor of the Practice of Management  
BA, Duke University; MHA, Saint Louis University.

**Charalambos L. Iacovou (2001)**

F. M. Kirby Chair in Business Excellence & Professor of Management Information Systems  
BS, University of Vermont; PhD, University of British Columbia.

**Timothy R. Janke (2007)**

Professor of the Practice of Business Law  
BS, University of North Carolina at Chapel Hill; LL.M., JD, Oglethorpe University; MBA, Wake Forest University.

**Mark Johnson (2014)**

Fellow in Investments & Portfolio Management & Teaching Professor of Finance  
BS, Florida State University; MSF, Florida International University; MSFE, PhD, University of New Orleans.

**Amol M. Joshi (2020)**

Bern Beatty Fellow & Associate Professor of Management  
BS, Georgia Institute of Technology; MS, MBA, Dartmouth College; PhD, University of North Carolina at Chapel Hill.

**John P. Karabelas (2018)**

Assistant Professor of the Practice of Management Information Systems  
BS, Virginia Polytechnic Institute and State University; MS, George Washington University.

**Justin Kent (2022)**

Adjunct Assistant Professor of Management  
BS, MBA, Brigham Young University; PhD, University of North Carolina at Chapel Hill.

**Tim K. Keyes (2021)**

Adjunct Assistant Teaching Professor of Business Analytics  
BS, Ashland College; MS, Miami University; MS, PhD, University of Cincinnati.

**Benjamin T. King (2006)**

Professor of the Practice of Management  
BA, University of Virginia; MBA, Wake Forest University.

**Thad Lewallen (2013)**

Adjunct Lecturer of Management  
BA, Lenoir Rhyne University; MS, University of North Carolina at Greensboro.

**Jia Li (2017)**

Associate Professor of Marketing  
PhD, Washington University.

**Ayalew A. Lulseged (2023)**

Adjunct Associate Professor of Accounting  
BA, Addis Ababa University; MBA, MS, Katholieke Universiteit Leuven; PhD, Louisiana State University.

**Amy P. Macrina (2020)**

Adjunct Associate Teaching Professor of Business Analytics  
BA, Utica College of Syracuse University; MA, PhD, University at Albany.

**Martin Malloy (2020)**

Faculty Director of the Wall Street Prep Track Program & Professor of the Practice of Finance  
BS, Manhattan College.

**Charles F. Mansfeld III (2021)**

Adjunct Professor of the Practice of Business Analytics  
BS, Massachusetts Institute of Technology; MBA, Wake Forest University.

**Bill Marcum (1996)**

Wall Street Partners Fellow & Associate Professor of Finance  
BA, Furman University; BA, MA, University of North Carolina at Greensboro; PhD, University of North Carolina at Chapel Hill.

**R. Justin Martin (2020)**

Coca-Cola/Citibank/Calloway Faculty Fellow & Assistant Teaching Professor of Management Information Systems

BS, MS, PhD, University of North Carolina at Charlotte.

**Gordon E. McCray (1994)**

AT&T Fellow and Associate Professor of Management Information Systems  
BS, Wake Forest University; MBA, Stetson University; PhD, Florida State University.

**Shannon D. McKeen (2017)**

Professor of the Practice of Business Analytics  
BA, Williams College; MBA, Dartmouth College.

**Patrick R. McMullen (2003)**

Associate Professor of Quantitative Methods  
BS, University of Louisville; MBA, Butler University; PhD, University of Oregon.

**Norma R. Montague (2010)**

John B. McKinnon Professor & Associate Professor of Accounting  
BA, MA, North Carolina State University; PhD, University of South Florida.

**Sherry E. Moss (2005)**

Benson Pruitt Professor in Business & Professor of Management  
BS, PhD, Florida State.

**Robert C. Nash (1997)**

Thomas K. Hearn Jr. Professor of Finance  
BS, The Citadel; MBA, University of South Carolina; PhD, University of Georgia.

**Steve H. Nickles (1995)**

C.C. Hope Chair of Financial Services and Law and Professor of Law  
BA, MPA, JD, Arkansas; LLM, JSD, Columbia.

**Gokce Palak (2023)**

Associate Teaching Professor of Operations Management  
BS, Bogazici University, Turkey; MS, Colorado State University; PhD, Mississippi State University.

**Ajay Patel (1993)**

Thomas S. Goho Chair of Finance and Professor of Finance  
BSc, St. Joseph's College; MBA, University of Baltimore; PhD, University of Georgia.

**Paula E. Payton (2019)**

Adjunct Associate Teaching Professor of Business Analytics  
BA, University of Vermont; MA, University of Chicago; PhD, Grande Ecole de Commerce NEOMA Business School, Mont-Saint-Aignan, France.

**Stacie Petter (2022)**

Professor of Management Information Systems  
BS, Berry College; MBA, PhD, Georgia State University.

**Matthew T. Phillips (2009)**

Exxon-Calloway Fellow & Teaching Professor of Business Law  
BA, JD, Wake Forest University; MDiv, Duke University.

**Jonathan P. Pinder (1990)**

Associate Professor of Quantitative Methods  
BS, North Carolina State University; PhD, University of North Carolina at Chapel Hill.

**Barbara R. Prestwood (2017)**

Adjunct Lecturer of Management Information Systems  
BS, Western Carolina University; MBA, High Point University.



**Annette L. Ranft (2022)**

Sisel Distinguished Dean of Business & Professor of Management  
BS, Appalachian State University; MS, Georgia Institute of Technology;  
PhD, University of North Carolina at Chapel Hill.

**Lauren C. Reid (2019)**

Lambert Family Accounting Fellow & Associate Professor of Accounting  
BS, MS, Wake Forest University; PhD, University of Tennessee.

**Elizabeth Ricks (2021)**

Adjunct Assistant Professor of the Practice of Business Analytics  
BS, West Virginia University; MSBI, St. Joseph's University.

**Michelle Roehm (1997)**

Peter C. Brockway Chair of Strategic Management and Professor of  
Marketing  
BS, MS, University of Illinois at Urbana-Champaign; PhD, Northwestern  
University.

**Dominick D. Rolle (2023)**

Adjunct Assistant Professor of Management  
BA, University of Virginia; MBA, Wake Forest University; MA, PhD, Emory  
University.

**Fahad Saleh (2020)**

Nunnenkamp-Cinelli Faculty Fellow & Associate Professor of Finance  
BSc, Cornell University; MSc, Columbia University; PhD, New York  
University.

**Scott M. Shafer (1998)**

Professor of Operations Management  
BS, BBA, PhD, University of Cincinnati.

**Stephan Shipe (2019)**

Assistant Teaching Professor of Finance  
BBA, University of North Florida; PhD, Florida State University.

**Whitney L. Simpson (2017)**

Associate Professor of the Practice of Accounting  
AB, Davidson College; Master of Taxation, University of South Carolina.

**Christopher M. Smith (2019)**

Associate Teaching Professor of Business Analytics  
BS, United States Military Academy; MS, Missouri University of Science  
and Technology; MSE, University of Texas at Austin; PhD, University of  
Virginia.

**Bryan Starrett (2016)**

Adjunct Professor of the Practice of Business Law  
BS, Wake Forest University; JD, University of Virginia School of Law.

**Michelle D. Steward (2004)**

Caron-Lightcap Faculty Fellow & Associate Professor of Marketing  
BA, MBA University of West Florida; PhD, Arizona State University.

**Deon Strickland (2008)**

Glenn Orr Fellow & Teaching Professor of Finance  
AB, Harvard University; MBA, Boston College; PhD, University of North  
Carolina at Chapel Hill.

**Ron Stunda (2022)**

Adjunct Professor of Accounting  
BS, The Pennsylvania State University; MBA, The University of Alabama;  
PhD, Florida State University.

**John Sumanth (2013)**

James Farr Faculty Fellow in Leadership & Organizational Development &  
Associate Professor of Management  
BS, Miami; MBA, Florida; PhD, University of North Carolina at Chapel Hill.

**Pat Sweeney** Professor of the Practice of Management

BS, United States Military Academy of West Point; MMAS, United States  
Army Command and General Staff College; MA, PhD, University of North  
Carolina at Chapel Hill .

**Tilan Tang (2022)**

Associate Teaching Professor of Finance  
BS, BA, Shanghai Jiao Tong University; MA, Florida State University; PhD,  
Michigan State University.

**Troy Tarwater (2022)**

Adjunct Professor of the Practice of Marketing  
BS, University of Kansas.

**J. Bren Varner (2006)**

Senior Lecturer of Management  
BS, Wake Forest University; MBA, University of Virginia.

**Amy Wallis (2012)**

Teaching Professor of Management  
BA, University of Scranton; MS, PhD, Virginia Commonwealth University.

**Julie H. Wayne (2003)**

David C. Darnell Presidential Chair in Principled Leadership & Professor of  
Management  
BS, Furman University; MS, PhD, Georgia at Athens.

**Jim Westerman (2008)**

Adjunct Professor of Management  
BS, MBA, Florida State University; PhD, University of Colorado at Boulder.

**James B. Willis (2013)**

Dr. Dale Martin Fellow & Professor of the Practice of Accounting  
BS, Master of Taxation, Virginia Commonwealth University.

**Ya Wen Yang (2009)**

Associate Professor of Accounting  
BBA, Tunghai University; MBA, University of Illinois; PhD, University of  
Tennessee.

**Brian E. Young (2019)**

Bern Beatty Fellow & Associate Teaching Professor of Finance  
BS, University of Texas; MBA, Southern Methodist University; PhD,  
Arizona State University.

**Ali Zeytoon-Nejad (2019)**

Assistant Teaching Professor of Business Economics  
BA, MS, University of Iran; MS, PhD, North Carolina State University.

## Emeriti

*Dates following names indicate period of service.*

**Umit Akinc (1982-2016)**

Thomas H. Davis and Professor Emeritus of Business  
BS, Middle East Tech. (Ankara); MBA, Florida State; PhD, UNC-Chapel Hill

**John P. Anderson (1984-2010)**

Professor Emeritus of Counseling  
BS, MS, PhD, Georgia Tech; MBA, Alabama (Birmingham); MAEd, Wake  
Forest University

John L. Andronica (1969-2008)  
Professor Emeritus of Classical Languages  
BA, Holy Cross; MA, Boston College; PhD, Johns Hopkins

Terry A. Baker (1998-2022)  
Professor Emeritus of School of Business  
BA, Miami; MS, Illinois; MBA, Chicago; PhD, Kentucky

Rajaram B. Baliga (1989-2018)  
Professor Emeritus of Business  
BE, University of Madras; PGDBA, Indian Institute of Management; DBA, Kent State

Sarah E. Barbour (1985-2019)  
Professor Emeritus of Romance Languages  
BA, Maryville; Diplôme de Langue et de Civilisation Françaises, Paris; MA, PhD, Cornell

James P. Barefield (1963-2004)  
Wake Forest Professor Emeritus of History  
BA, MA, Rice; PhD, Johns Hopkins

Richard C. Barnett (1961-1994)  
Professor Emeritus of History  
BA, Wake Forest University; MEd, PhD, UNC-Chapel Hill

John V. Baxley (1968-2004)  
Wake Forest Professor Emeritus of Mathematics  
BS, MS, Georgia Tech; PhD, University of Wisconsin

Michael Berry (1995-2023)  
Professor Emeritus of Health & Exercise Science  
BS, Jacksonville State University; MA, Southeastern Louisiana University; PhD, Texas A&M University

Debbie Best (1974-2023)  
William L. Poteat Chaired Professor Emeritus of Psychology  
BA, MA, Wake Forest University; PhD, UNC-Chapel Hill

Robert R. Bliss (2004-2019)  
Professor Emeritus of Business  
BS, Purdue; MBA, PhD, University of Chicago

Susan Harden Borwick (1982-2019)  
Professor Emerita of Music  
BM, BME, Baylor University; PhD, UNC-Chapel Hill

Stephen B. Boyd (1985-2022)  
John Allen Easley Professor Emeritus of Study of Religions  
BA, University of Tennessee; MDiv, Th.D., Harvard Divinity School

Holly Brower (2005-2021)  
Professor Emerita of School of Business  
BS, Wake Forest University; MS, Iowa State University; PhD, Purdue University

David G. Brown (1990-2003)  
Provost Emeritus  
AB, Denison; PhD, Princeton

Robert A. Browne (1980-2022)  
Professor Emeritus of Biology  
BS, MS, Dayton University; PhD, Syracuse University

Jennifer Burg (1993-2023)  
Professor Emeritus of Computer Science

BA, Elizabethtown College; MA (English), MA (French), University of Florida; PhD, University of Central Florida

Richard D. Carmichael (1971-2018)  
Professor Emeritus of Mathematics & Statistics  
BS, Wake Forest University; MA, PhD, Duke

Christa G. Carollo (1985-2005)  
Senior Lecturer Emerita of German  
BA, UNC-Greensboro; MA, Duke

Jonathan H. Christman (1983-2016)  
Associate Professor Emeritus of Theatre and Dance  
AB, Franklin and Marshall; MFA, University of Massachusetts (Amherst)

John E. Collins (1970-2007)  
Professor Emeritus of Religion  
BS, MS, Tennessee; MDiv, Southeastern Baptist Theo. Seminary; MA, PhD, Princeton

William E. Conner (1988-2022)  
Professor Emeritus of Biology  
BA, University of Notre Dame; MS, PhD, Cornell University

Leon H. Corbett Jr. (1968-2002)  
Vice President and Counsel Emeritus  
BA, JD, Wake Forest University

Nancy J. Cotton (1977-2002)  
Professor Emerita of English  
BA, Texas; MA, Wisconsin; PhD, Columbia

Allin Cottrell (1989-2023)  
Professor Emeritus of Economics  
BA, Oxford (Merton College); PhD, Edinburgh

William L. Davis (1996-2022)  
Professor Emeritus of School of Business  
BA, Carson-Newman College; MA, Wake Forest University; PhD, Ohio State

Mary K. DeShazer (1982, 1987-2014)  
Professor Emerita of English and Women's, Gender, and Sexuality Studies  
BA, Western Kentucky; MA, Louisville; PhD, Oregon

Arun P. Dewasthali (1975-2012)  
Associate Professor Emeritus of Business  
BS, Bombay; MS, PhD, Delaware

Ronald V. Dimock Jr. (1970-2015)  
Thurman D. Kitchin Professor Emeritus of Biology  
BA, New Hampshire; MS, Florida State; PhD, California (Santa Barbara)

Patricia Dixon (1986-2018)  
Senior Lecturer Emerita of Music  
BM, NC School of the Arts; MM, UNC-Greensboro

Robert H. Dufort (1961-1999)  
Professor Emeritus of Psychology  
BA, PhD, Duke

John S. Dunkelberg (1983-2001)  
Kemper Professor Emeritus of Business (School of Business)  
BS, Clemson; MBA, PhD, South Carolina

Yomi Durotoye (1994-2016)

Associate Teaching Professor Emeritus of Politics and International Affairs

BS, University of Ibadan; MA, Georgia State; PhD, Duke

John R. Earle (1963-2001)

Professor Emeritus of Sociology

BA, Wake Forest University; MA, PhD, UNC-Chapel Hill

Paul D. Escott (1988-2018)

Reynolds Professor Emeritus of History

BA, Harvard; MA, PhD, Duke

Andrew V. Ettin (1977-2013)

Professor Emeritus of English

BA, Rutgers; MA, PhD, Washington (St. Louis)

Herman E. Eure (1974-2013)

Professor Emeritus of Biology

BS, Maryland State; PhD, Wake Forest University

David K. Evans (1966-1998)

Professor Emeritus of Anthropology

BS, Tulane; PhD, California (Berkeley)

Stephen Ewing (1971-2009)

Professor Emeritus of Business (School of Business)

BS, Howard Payne; MBA, Baylor; PhD, Texas Tech

David Finn (1995-2023)

Professor Emeritus of Sculpture

BS, Cornell University; MFA, Massachusetts College of Art

Jay Ford (1998-2023)

Professor Emeritus of Religious Studies

MTS, Vanderbilt University; MA, PhD, Princeton University

Donald E. Frey (1972-2011)

Professor Emeritus of Economics

BA, Wesleyan; MDiv, Yale; PhD, Princeton

Mary Friedman (1987-2021)

Professor Emerita of Spanish and Italian

BA, Wellesley; MA, PhD, Columbia University

Caroline Sandlin Fullerton (1969-1990)

Lecturer Emerita of SCTA (Theatre Arts)

BA, Rollins; MFA, Texas Christian

Candelas S. Gala (1978-2018)

Charles E. Taylor Professor Emerita of Romance Languages

BA, Salamanca (Spain); MA, PhD, University of Pittsburgh

Carole Gibson (1980-2021)

Professor Emerita of Biology

BS, University of Hartford; PhD, Syracuse University

Kathleen M. Glenn (1974-1998)

Wake Forest Professor Emerita of Romance Languages

BA, MA, PhD, Stanford

Thomas S. Goho (1977-2007)

Thomas S. Goho Chair Emeritus of Finance (School of Business)

BS, MBA, Penn State; PhD, UNC-Chapel Hill

Louis Goldstein (1979-2021)

Professor Emeritus of Music

BM, Oberlin College; MFA, California Institute of the Arts; DMA, Eastman School of Music

William C. Gordon (2002-2012)

Professor Emeritus of Psychology

BA, MA, Wake Forest University; PhD, Rutgers

David Hagy (1995-2021)

Professor Emeritus of Music

BM, Indiana University; MM, MMA, DMA, Yale University

Claire Holton Hammond (1978-2013)

Professor Emerita of Economics

BA, Mary Washington; PhD, Virginia

J. Daniel Hammond (1978-2019)

Professor Emeritus of Economics

BA, Wake Forest University; PhD, University of Virginia

Phillip J. Hamrick Jr. (1956-1995)

Professor Emeritus of Chemistry

BS, Morris Harvey; PhD, Duke

Catherine T. Harris (1980-2019)

Professor Emerita of Sociology

BA, Lenoir-Rhyne University; MA, Duke University; PhD, University of Georgia

Elmer K. Hayashi (1973-2004)

Professor Emeritus of Mathematics

BA, California (Davis); MS, San Diego State; PhD, Illinois

Roger A. Hegstrom (1969-2001)

Wake Forest Professor Emeritus of Chemistry

BA, St. Olaf; AM, PhD, Harvard

Donna A. Henderson (1996-2019)

Professor Emerita of Sociology

BA, Meredith University; MAT, James Madison University; PhD, University of Tennessee

Marcus B. Hester (1963-2006)

Professor Emeritus of Philosophy

BA, Wake Forest University; PhD, Vanderbilt

E. Clayton Hipp Jr. (1991-2016)

Senior Lecturer Emeritus of Business

BA, Wofford; MBA, JD, South Carolina

Alix Hitchcock (1989-2013)

Instructor Emerita of Art

BFA, UNC-Greensboro; MA, New York

George M. Holzwarth (1983-2004)

Professor Emeritus of Physics

BA, Wesleyan; MS, PhD, Harvard

Fred L. Horton Jr. (1970-2011)

Albritton Professor Emeritus of the Bible (Department of Religion)

BA, UNC-Chapel Hill; BD, Union Theological Seminary; PhD, Duke

Fredric T. Howard (1966-2009)

Professor Emeritus of Mathematics

BA, MA, Vanderbilt; PhD, Duke

Michael L. Hughes (1984-2022)

Professor Emeritus of History  
BA, Claremont McKenna College; MA, PhD, University of California (Berkeley)

Patricia Adams Johansson (1969-1998)  
Associate Dean of the College Emerita and Lecturer Emerita of English  
BA, Winston-Salem State; MA, Wake Forest University

David J. John (1982-2021)  
Professor Emeritus of Computer Science  
BS, Emory and Henry College; MS, PhD, Emory University

Claudia Kairoff (1986-2022)  
Professor Emerita of English  
BA, Notre Dame of Maryland; MA, University of Virginia; PhD, Brandeis

Judy Kem (1987-2020)  
Professor Emerita of French Studies  
BA, Western Kentucky University; MA, University of Louisville; PhD, University of North Carolina Chapel Hill

Charles H. Kennedy (1985-2017)  
Associate Professor Emeritus of Business  
BA, Eckerd; AM, MPP, PhD, Duke

Ralph C. Kennedy III (1976-2021)  
Professor Emeritus of Philosophy  
BA, PhD, University of California (Berkeley)

William C. Kerr (1970-2008)  
Professor Emeritus of Physics  
BS, Wooster; PhD, Cornell

Lee G. Knight (1979-2018)  
Professor Emeritus of Business  
BS, Western Kentucky; MA, PhD, University of Alabama

Dilip K. Kondepudi (1987-2019)  
Professor Emeritus of Chemistry  
BS, Madras (India); MS, Indian Institute of Technology (Bombay); PhD, University of Texas at Austin

Kathleen A. Kron (1991-2021)  
Professor Emeritus of Biology  
BS, MS, Michigan State University; PhD, University of Florida

Raymond E. Kuhn (1968-2018)  
William L. Poteat Professor Emeritus of Biology  
BS, Carson-Newman; PhD, University of Tennessee

James Kuzmanovich (1972-2014)  
Professor Emeritus of Mathematics  
BS, Rose Polytechnic; PhD, Wisconsin

Hugo C. Lane (1973-2013)  
Professor Emeritus of Biology  
Licenciate of the Biological Sciences, Doctorate of the Biological Sciences, Geneva

Page H. Laughlin (1987-2022)  
Professor Emerita of Art  
BA, University of Virginia; MFA, Rhode Island School of Design

Michael S. Lawlor (1986-2014)  
Professor Emeritus of Economics

BA, Texas (Austin); PhD, Iowa State

Candyce C. Leonard (1996-2014)  
Professor Emerita of Communication  
BA, Texas Wesleyan; MA, MEd, Louisville; PhD, Indiana (Bloomington)

David B. Levy (1976-2021)  
Professor Emeritus of Music  
BM, MA, Eastman School of Music; PhD, University of Rochester

Charles M. Lewis (1968-2016)  
A.C. Reid Professor Emeritus of Philosophy  
BA, Wake Forest University; ThM, Harvard; PhD, Vanderbilt

Stanley W. Mandel (1998-2019)  
Professor Emeritus of Business  
BS, Tulane; MBA, Kellogg GSM; PhD, Texas Tech

Milorad R. Margitić (1978-2005)  
Professor Emeritus of Romance Languages  
MA, Leiden (Netherlands); PhD, Wayne State

Dale R. Martin (1982-2018)  
Professor Emeritus of Business  
BS, MS, Illinois State; DBA, Kentucky

George "Rick" Matthews (1979-2020)  
Professor Emeritus of Physics  
BS, PhD, University of North Carolina Chapel Hill

Darlene May (2005-2021)  
Professor Emerita of Arabic

Jill Jordan McMillan (1983-2006)  
Professor Emerita of Communication  
BA, Baylor; MA, Arkansas; PhD, Texas

Gordon A. Melson (1991-2006)  
Dean of the Graduate School of Arts & Sciences Emeritus  
BS, PhD, Sheffield (England) and Professor Emeritus of Chemistry

Jack R. Meredith (1995-2017)  
Professor Emeritus of Business  
BS, Oregon State; MBA, PhD, California (Berkeley)

J. Kendall Middaugh II (1987)  
Associate Professor of Management  
BBA, MBA George Washington; PhD, Ohio State

Joseph O. Milner (1969-2014)  
Professor Emeritus of Education  
BA, Davidson; MA, PhD, UNC-Chapel Hill

John C. Moorhouse (1969-2006)  
Archie Carroll Professor Emeritus of Ethical Leadership  
BA, Wabash; PhD, Northwestern (Department of Economics)

Patrick E. Moran (1989-2010)  
Associate Professor Emeritus of Chinese (East Asian Languages and Cultures)  
BA, MA, Stanford; MA, National Taiwan University; PhD, Pennsylvania

Thomas E. Mullen (1957-2000)  
Dean of the College Emeritus and Professor Emeritus of History  
BA, Rollins; MA, PhD, Emory University

Jim Narus (1988-2021)  
Professor Emeritus of School of Business  
MA, MBA, Connecticut University; PhD, Syracuse University

Joel Newman (1976-2017)  
Professor Emeritus of Law

Debbie W. Newsome (1999-2021)  
Professor Emerita of Counseling  
BA, Oklahoma Baptist University; MEd, Wake Forest University; PhD,  
University North Carolina - Greensboro

Ronald E. Nofle (1967-2014)  
Professor Emeritus of Chemistry  
BS, New Hampshire; PhD, Washington

James L. Norris (1989-2021)  
Professor Emeritus of Mathematics and Statistics  
BS, MS (Science), MS (Statistics), North Carolina State University; PhD,  
Florida State University

Gillian Rose Overing (1979-2019)  
Professor Emerita of English  
BA, Lancaster (England); MA, PhD, State University of New York (Buffalo)

Perry L. Patterson (1986-2013)  
Professor Emeritus of Economics and Lecturer Emeritus of Russian  
BA, Indiana University; MA, PhD, Northwestern

Mary L.B. Pendergraft (1988-2022)  
Professor Emerita of Classics  
BA, PhD, UNC-Chapel Hill

Philip J. Perricone (1967-2003)  
Professor Emeritus of Sociology  
BS, MA, Florida; PhD, Kentucky

Robert J. Plemmons (1990-2013)  
Reynolds Professor Emeritus of Mathematics and Computer Science  
BS, Wake Forest University; PhD, Auburn

James T. Powell (1988-2015)  
Associate Professor Emeritus of Classical Languages  
BA, Emory; MPhil, MA, PhD, Yale

Jenny Puckett (1995-2013)  
Lecturer Emerita in Romance Languages  
BA, Wake Forest University; MA, Middlebury

Teresa Radomski (1977-2021)  
Professor Emerita of Music  
BM, Eastman School of Music; MM, University of Colorado

Mary Lynn B. Redmond (1989-2018)  
Professor Emerita of Education  
BA, EdD, UNC-Greensboro; MEd, UNC-Chapel Hill

Bruce G. Resnick (1995-2018)  
Professor Emeritus of Finance  
BBA, Wisconsin (Oshkosh); MBA, Colorado; DBA, Indiana

Suzanne Reynolds (1981-2020)  
Professor Emerita of School of Law

Paul M. Ribisl (1973-2013)  
Charles E. Taylor Professor Emeritus of Health and Exercise Science

BS, Pittsburgh; MA, Kent State; PhD, Illinois

Charles L. Richman (1968-2006)  
Professor Emeritus of Psychology  
BA, Virginia; MA, Yeshiva; PhD, Cincinnati

Leonard P. Roberge (1974-2002)  
Professor Emeritus of Education  
BA, New Hampshire; MA, Atlanta; EdD, Maine

Donald P. Robin (1997-2009)  
J. Tylee Wilson Professor Emeritus of Business Ethics (School of  
Business)  
BS, MBA, PhD, Louisiana State

Luis Roniger (2004-2021)  
Professor Emeritus of Politics and International Affairs  
Licenciado, Universidad Nacional de Buenos Aires; MA, PhD, Hebrew  
University of Jerusalem

Brooke Saladin (1983-2018)  
Professor Emeritus of Business  
BS, PhD, Ohio State; MBA, Bowling Green State

Wilmer D. Sanders (1954-1957, 1964-1992)  
Professor Emeritus of German  
BA, Muhlenberg; MA, PhD, Indiana

Timothy F. Sellner (1970-2003)  
Professor Emeritus of German  
BA, PhD, Michigan; MA, Wayne State

Cathy Seta (1987-2020)  
Professor Emerita of Psychology  
BA, MA, PhD, University of North Carolina Greensboro

Kurt C. Shaw (1987-2018)  
Associate Professor Emeritus of Russian  
BA, Missouri; MA, PhD, University of Kansas

Howard W. Shields (1958-2001)  
Professor Emeritus of Physics  
BS, UNC-Chapel Hill; MS, Pennsylvania State; PhD, Duke

Wayne Silver (1985-2023)  
Professor Emeritus of Biology  
BA, University of Pennsylvania; PhD, Florida State University

Robin Simon (2009-2021)  
Professor Emerita of Sociology

Jeanne M. Simonelli (1999-2013)  
Professor Emerita of Anthropology  
BA, MA, PhD, Oklahoma; MPH, Oklahoma University Health Sciences  
Center

Michael L. Sinclair (1968-2006)  
Professor Emeritus of History  
BA, Wake Forest University; AM, PhD, Stanford

Earl Smith (1996-2012)  
Rubin Professor Emeritus of American Ethnic Studies and Professor  
Emeritus of Sociology  
BA, SUNY (Stony Brook); MA, PhD, Connecticut

Margaret Supplee Smith (1979-2011)



Harold W. Tribble Professor Emerita of Art  
BS, Missouri; MA, Case Western Reserve; PhD, Brown

Cecilia H. Solano (1977-2017)  
Associate Professor Emerita of Psychology  
BA, Harvard; MA, PhD, Johns Hopkins

David H. Stroupe (1990-2016)  
Associate Professor Emeritus of the Practice in English  
BS, Wake Forest University; MA, UNC-Chapel Hill

Thomas C. Taylor (1971-2003)  
Professor Emeritus of Accountancy (School of Business)  
BS, MA, UNC-Chapel Hill; PhD, Louisiana State

Stan Thomas (1983-2023)  
Associate Professor Emeritus of Computer Science  
BS, Davidson College; PhD, Vanderbilt University

Clark Thompson (2001-2021)  
Professor Emeritus of Philosophy  
BA, JD, PhD, University of Virginia

Ronald Thompson (2000-2021)  
Professor Emeritus of School of Business  
BMath, University of Waterloo; MBA, McMaster; PhD, University of Western Ontario

Harry B. Titus Jr. (1981-2013)  
Professor Emeritus of Art  
BA, Wisconsin (Milwaukee); MFA, PhD, Princeton

Ralph B. Tower (1980-2014)  
Wayne Calloway Professor Emeritus of Taxation  
BA, PhD, UNC-Chapel Hill; MBA, Cornell

George W. Trautwein (1983-1996)  
Director of Instrumental Ensembles Emeritus (Department of Music)  
BMus, Oberlin; MMus, Cleveland Institute; MusD, Indiana

Robert W. Ulery Jr. (1971-2011)  
Professor Emeritus of Classical Languages  
BA, MA, PhD, Yale

Robert L. Utley Jr. (1978-2013)  
Associate Professor Emeritus of Humanities  
BA, Wake Forest University; MA, PhD, Duke

Sarah L. Watts (1987-2011)  
Professor Emerita of History  
BA, Oklahoma College of Liberal Arts; MA, PhD, Oklahoma

David S. Weaver (1977-2002)  
Professor Emeritus of Anthropology  
BA, MA, Arizona; PhD, New Mexico

Peter D. Weigl (1968-2009)  
Professor Emeritus of Biology  
BA, Williams; PhD, Duke

David P. Weinstein (1989-2015)  
Professor Emeritus of Politics and International Affairs  
BA, Colorado College; MA, Connecticut; PhD, Johns Hopkins

Ulrike Weithaus (1991-2021)  
Professor Emerita of Study of Religions

Colloquium at Kirchliche Hochschule (Berlin, Germany); MA, PhD, Temple University

Byron R. Wells (1981-2016)  
Professor Emeritus of Romance Languages  
BA, MA, Georgia; PhD, Columbia

Helga Welsh (1993-2023)  
Professor Emeritus of Politics & International Affairs  
MA, PhD, University of Munich

George Page West (1995-2020)  
Professor Emeritus of School of Business

Larry E. West (1969-2010)  
Professor Emeritus of German  
BA, Berea; PhD, Vanderbilt

M. Stanley Whitley (1990-2013)  
Professor Emeritus of Romance Languages  
BA, Wake Forest University; MA, PhD, Cornell

Jack Wilkerson (1989-2023)  
D. Wayne Calloway Professor Emeritus of Accountancy  
BS, Bob Jones University; PhD, University of Texas at Austin

Alan Williams (1974-2020)  
Professor Emeritus of History  
BA, Stanford University; PhD, Yale University

John G. Williard (1958-1994)  
Vice President and Treasurer Emeritus  
BS, UNC-Chapel Hill

David C. Wilson (1984-85, 1987-2015)  
Associate Professor of the Practice Emeritus of Mathematics  
BS, Wake Forest University; MAT, Emory

Edwin G. Wilson (1951-2002)  
Provost Emeritus and Professor Emeritus of English  
BA, Wake Forest University, AM, PhD, Harvard

Donald H. Wolfe (1968-2000)  
Professor Emeritus of Theatre  
BS, MS, Southern Illinois; PhD, Cornell

John H. Wood (1985-2022)  
Reynolds Professor Emeritus of Economics  
BS, Ohio; MA, Michigan State University; PhD, Purdue University

J. Ned Woodall (1969-2003)  
Professor Emeritus of Anthropology  
BA, MA, Texas; PhD, Southern Methodist

Raymond L. Wyatt (1956-1992)  
Professor Emeritus of Biology  
BS, Wake Forest University; MA, PhD, UNC-Chapel Hill

# THE GRADUATE SCHOOL OF ARTS AND SCIENCES

## Mission of the Graduate School

The mission of the WFU Graduate School of Arts and Sciences is to train and mentor future leaders in research, teaching and innovation for serving humanity. This embodies the Graduate School's vital role as an engine of discovery that fuels the nation's scholarly and creative enterprise. The Graduate School contributes to the academic reputation of the university by educating the next generation of teachers and scholars and by providing mentors and role models for educating undergraduates. A strong graduate program also helps support faculty research and is critical for faculty recruitment and retention.

We seek to instill in our students a sense of professionalism, which includes the ethical behavior inherent in their professional role, as well as respect for their colleagues, their field, and for society as a whole. We want our students to be critical, independent thinkers and good citizens. They should be motivated to apply their scholastic efforts to enlighten and improve the wellbeing of society. Thus the Graduate School is a key link for collaboration between departments and schools and for achieving WFU's goal of becoming a collegiate university and major academic medical center.

Our values are steadfast and consist of critical thinking, service, diversity, discovery, mentoring, and ethics. These are integral to all our activities in the classroom, the laboratory or other research environments, the broader communities of which we are a part.

Our vision is for the Graduate School to be a diverse community of excellence. We achieve our vision and fulfill our mission through strategic activities that build pillars of excellence in:

- Student experience: to create an optimized learning and mentoring experience that prepares students to lead in any career path.
- Research: to provide high-quality research partnerships for promoting innovation, discovery and creation of value to the community.
- Faculty and staff support: to enable seamless, effective, aligned services for maximizing time and resources for instruction and research.
- Internal and external communication: to celebrate the prominence and value of the Graduate School and the University.

The Graduate School confers the Master of Arts, Master of Arts in Education, Master of Arts in Human Services, Master of Fine Arts, and Master of Science degrees in the arts and sciences and biomedical science, and the Doctor of Philosophy degree. The Graduate School also offers a MD/MS, MD/PhD, PhD/MMS, as well as a MD/MA in bioethics jointly with the School of Medicine, and a PhD/MBA program jointly with the School of Business. In addition, the Graduate School offers an MDiv/MA in bioethics, counseling, or sustainability as well as a MDiv/MAED jointly with the School of Divinity; and a JD/MA in bioethics, religious studies or sustainability jointly with the School of Law. Certificates are offered in Bioethics, Clinical and Population Translational Science, Curriculum, Instruction, and Assessment, Data Science, Interpreting and Translation Studies, Medieval and Early Modern Studies, Structural and Computational Biophysics, and Sustainability.

## History of the Graduate School

*In accord with the prevailing custom among American colleges during the antebellum period, Wake Forest granted honorary master's degrees to selected alumni.*

By 1862, when the College closed temporarily because of the Civil War, twenty-nine such degrees had been awarded. The first announcement of a program of study leading to an earned graduate degree at Wake Forest was made in 1866. Between 1871, when the first degrees earned under the plan were awarded to John Bruce Brewer (grandson of Samuel Wait) and Franklin Hobgood, and 1951, 383 Master of Arts and Master of Science degrees were granted. In 1949 the School of Arts and Sciences discontinued admitting applicants for the Master of Arts degree because the rapid increase in the size of the undergraduate student body following World War II had overloaded the faculty. The School of Medicine did not interrupt its graduate program. The first Master of Science degree conferred by the school after it moved to Winston-Salem was awarded in 1943, and the degree was offered regularly thereafter by the departments of Anatomy, Biochemistry, Microbiology, Pharmacology, and Physiology.

During the fifteen years the College and the School of Medicine were located in different towns, the study of graduate education continued on both campuses. The self-study report adopted by the faculty of the School of Arts and Sciences immediately prior to its move to Winston-Salem recommended that graduate study leading to the Master's degree be resumed as soon as practicable. In 1958 the administration of the School of Medicine, in view of an increasing demand for graduate instruction in basic medical and clinical sciences, appointed a Committee on Graduate Studies for the purpose of reorganizing the graduate program.

As a result of these two parallel studies and in recognition of the need for an institution-wide approach to graduate education, the trustees, on January 13, 1961, established the Division of Graduate Studies and authorized it to grant the Master of Arts degree in the School of Arts and Sciences and the Master of Science and Doctor of Philosophy degrees in the School of Medicine. The first PhD degree was awarded in 1964. In 1967 the Master of Arts in Education degree was added to the graduate program in arts and sciences. A program, leading to the Master of Arts in Liberal Studies, was begun in the summer of 1987. The first PhD program on the Reynolda campus was begun in 1970.

## Administration

The Graduate School is administered by two Deans (one on each campus), and a Graduate Council composed of ex-officio administrative officials, twelve faculty members elected by the Graduate School faculty, and two graduate students elected by the Graduate Student Association. Six of the twelve are members of the College of Arts and Sciences (Reynolda campus) and six are members of the Wake Forest School of Medicine faculty (Bowman Gray campus).

## Statement of Mission and Purpose

Wake Forest is a university dedicated to the pursuit of excellence in the liberal arts and in graduate and professional education. Its distinctiveness in its pursuit of its mission derives from its private, coeducational, and residential character; its size and location; and its Baptist heritage. Each of these factors constitutes a significant aspect of the unique character of the institution.

The University is now comprised of seven constituent parts: Wake Forest College, the Graduate School of Arts and Sciences, the School of Law,

the School of Medicine, the School of Business, the School of Divinity, and the School of Professional Studies. It seeks to honor the ideals of liberal learning, which entail commitment to transmission of cultural heritages; teaching the modes of learning in the basic disciplines of human knowledge; developing critical appreciation of moral, aesthetic and religious values; advancing the frontiers of knowledge through in-depth study and research; and applying and utilizing knowledge in the service of humanity.

Wake Forest has been dedicated to the liberal arts for over a century and a half; this means education in the fundamental fields of human knowledge and achievement, as distinguished from education that is technical or narrowly vocational. It seeks to encourage habits of mind that ask “why,” that evaluate evidence, that are open to new ideas, that attempt to understand and appreciate the perspectives of others, that accept complexity and grapple with it, that admit error, and that pursue truth. Wake Forest College has by far the largest student body in the University, and its function is central to the University’s larger life. The College and the Graduate School are most singularly focused on learning for its own sake; they therefore serve as exemplars of specific academic values in the life of the University.

Beginning as early as 1894, Wake Forest accepted an obligation to provide professional training in a number of fields, as a complement to its primary mission of liberal arts education. This responsibility is fulfilled in the conviction that the humane values embodied in the liberal arts are also centrally relevant to the professions. Professional education at Wake Forest is characterized by a commitment to ethical and other professional ideals that transcend technical skills. Like the Graduate School, the professional schools are dedicated to the advancement of learning in their fields. In addition, they are specifically committed to the application of knowledge to solving concrete problems of human beings. They are strengthened by values and goals which they share with the College and Graduate School, and the professional schools enhance the work of these schools and the University as a whole by serving as models of service to humanity.

Wake Forest was founded by private initiative, and ultimate decision-making authority lies in a privately appointed Board of Trustees rather than in a public body. Funded to a large extent from private sources of support, it is determined to chart its own course in the pursuit of its goals. As a co-educational institution it seeks to “educate together” persons of both sexes and from a wide range of backgrounds—racial, ethnic, religious, geographical, socio-economic and cultural. Its residential features are conducive to learning and to the pursuit of a wide range of co-curricular activities. It has made a conscious choice to remain small in overall size; it takes pride in being able to function as a community rather than a conglomerate. Its location in the Piedmont area of North Carolina engenders an ethos that is distinctively Southern, and more specifically North Carolinian. As it seeks further to broaden its constituency and to receive national recognition, it is also finding ways to maintain the ethos associated with its regional roots.

Wake Forest is proud of its Baptist and Christian heritage. For more than a century and a half, it has provided the University an indispensable basis for its mission and purpose, enabling Wake Forest to educate thousands of ministers and lay people for enlightened leadership in their churches and communities. Far from being exclusive and parochial, this religious tradition gives the University roots that ensure its lasting identity and branches that provide a supportive environment for a wide variety of faiths. The Baptist insistence on both the separation of church and state and local autonomy has helped to protect the University from interference and domination by outside interests, whether these be commercial,

governmental, or ecclesiastical. The Baptist stress upon an uncoerced conscience in matters of religious belief has been translated into a concern for academic freedom. The Baptist emphasis upon revealed truth enables a strong religious critique of human reason, even as the claims of revelation are put under the scrutiny of reason. The character of intellectual life at Wake Forest encourages open and frank dialogue and provides assurance that the University will be ecumenical and not provincial in scope, and that it must encompass perspectives other than the Christian. Wake Forest thus seeks to maintain and invigorate what is noblest in its religious heritage.

## Nondiscrimination Statement

Wake Forest University is committed to diversity, inclusion and the spirit of its motto, *Pro Humanitate*. In adherence with applicable laws and as provided by University policies, the University prohibits discrimination in its employment practices and its educational programs and activities on the basis of race, color, religion, national origin, sex, age, sexual orientation, gender identity and expression, genetic information, disability and veteran status.

The following person has been designated to handle inquiries regarding the University’s non-discrimination policies:

Title IX Coordinator  
Section 504/ADA Coordinator  
titleixcoordinator@wfu.edu  
Reynolda Hall 307 Winston-Salem, NC 27106  
336-758-7258

Assistant Vice President Human Resources  
AskHR@wfu.edu  
2958 Reynolda Road, Winston-Salem, NC 27106  
(336)758-4700

Deputy Title IX Coordinators have also been designated and represent various University schools/divisions. Contact information for each Deputy Coordinator can be obtained from the University’s Title IX Coordinator.

Inquiries concerning the application of anti-discrimination laws may be referred to the individuals listed above or to the Office for Civil Rights, United States Department of Education. For further information on notice of non-discrimination, visit the Office of Civil Rights website (<https://ocras.ed.gov/contact-ocr/>) for the address and phone number of the U. S. Department of Education office that serves your area, or call 1-800-421-3481.

## Libraries Overview

The libraries of Wake Forest University support instruction and research at the undergraduate level and in the disciplines awarding graduate degrees. The libraries of the University hold membership in the Association of Southeastern Research Libraries.

The Wake Forest University libraries include the Z. Smith Reynolds (ZSR) Library (<https://zsr.wfu.edu/>), located on the Reynolda Campus and supports the undergraduate College, the Wake Forest School of Business, the Graduate School of Arts and Sciences, and the School of Divinity. The Law Library (<http://library.law.wfu.edu/>), housed in the Worrell Professional Center on the Reynolda Campus, serves the School of Law. The Coy C. Carpenter Library (<https://school.wakehealth.edu/Carpenter->

Library/) serves the Wake Forest School of Medicine and is located on the Bowman Gray Campus.

## Collections

The three library collections total over 2.7 million titles, including over 1.7 million e-books, more than 150,000 electronic journals and over 15,000 DVDs as well as streaming media and other formats. The ZSR Library serves as a congressionally designated selective federal depository. The Law Library holds over 45,000 volumes and the Coy C. Carpenter Library holds over 35,000 volumes. The three libraries share an online search portal, which provides access to books, electronic resources, journals and databases. Through interlibrary loan service (<https://zsr.wfu.edu/delivers/ill/>), students, faculty and staff may obtain materials from other libraries at no charge.

## Z. Smith Reynolds Library

The Z. Smith Reynolds Library (ZSR) provides comprehensive reference and research services (<https://zsr.wfu.edu/research/>) in-person and online. Research Librarians work with individual classes across the disciplines on research papers and library users can request personal research sessions (<https://zsr.wfu.edu/research/support/sessions/>) with Research Librarians at all phases of their research process. Library faculty also teach elective courses in the fundamentals of research and information literacy and upper-level courses geared towards research in the disciplines and special topics in information. The Digital Initiatives & Scholarly Communication (<https://zsr.wfu.edu/digital-scholarship/>) librarians and staff support and empower faculty scholarship through digital tools, methods, publication, and preservation.

Special Collections & Archives (SCA) (<https://zsr.wfu.edu/special/about/>) in the ZSR Library is the repository for the Baptist Historical Collection of North Carolina, Manuscripts, the Rare Book Collection, and the University Archives (<https://zsr.wfu.edu/special/collections/archives/>). The Baptist Historical Collection contains significant books, periodicals, manuscripts, and church records relating to North Carolina Baptists, as well as the personal papers of prominent ministers, educators, and government officials with ties to Wake Forest. SCA's Manuscripts include the papers of alumnus Harold Hayes (editor of *Esquire* magazine in the 1960s and 1970s) and other alumni, the Maya Angelou Film & Theater Collection, and the records of the Irish Dolmen Press. The Rare Books Collection, which includes the collections of Charles H. Babcock, Charles Lee Smith, and other donors, has collection strengths in 18th-20th century British, American, and Irish literature, African-American history and literature, and the history of material texts. SCA maintains the University Archives which serves as the primary repository for the historical records of Wake Forest University. The University Archives collects, describes, preserves, and exhibits University records (including electronic and born-digital) that contain historical, administrative, legal, or fiscal value. The records include documentation of the student experience, departmental records, and the papers of faculty. All are welcome to use the SCA collections, many of which are available online in SCA Digital Collections (<https://zsr.wfu.edu/special/collections/digital/>). Please contact [archives@wfu.edu](mailto:archives@wfu.edu) for access to the collections by appointment or submitting a specific question.

## Spaces

The Z. Smith Reynolds library has group study rooms equipped with large screen monitors and individual study carrels that can be booked online (<https://wfu.libcal.com/reserve/>). Publicly available Windows and Macintosh computers are available in the Scholars Commons, and media viewing stations are available in the Media Room. Multimedia equipment,

Chromebooks, tablets, and other technology devices may be reserved for checkout. Reference (<https://zsr.wfu.edu/research/support/>) and online chat (<https://zsr.wfu.edu/chat/>) are available to help library visitors to find resources and research assistance. The library has a 118-seat auditorium that is available for use by Wake Forest community groups for programs, lectures, and film screenings.

ZSR houses the Information Systems Service Desk (<https://is.wfu.edu/>), the Center for the Advancement of Teaching (<https://cat.wfu.edu/>), and The Writing Center (<http://writingcenter.wfu.edu/>). The Center for the Advancement of Teaching is a resource center for Wake Forest faculty at all stages of their careers. The Writing Center provides help to guide students through their writing process.

## Access

ZSR library is committed to creating an accessible, enriching, and welcoming community space for all.

The library's hours vary by semester and can be found at <https://zsr.wfu.edu/calendar/>. A room located to the right of the entrance to the library and may be accessed by keycard when the library is closed, offering access to multifunctional printers/copiers/scanners, and the library's bank of touchless smart lockers for pickup of requested materials. The study room on the left of the entrance houses the Coffee Shop (<https://dining.wfu.edu/locations/starbucks-zsr-library/>). Check out the hours and events calendar (<https://zsr.wfu.edu/calendar/>) to stay up to date. See a full description of the ZSR Library resources and services at [zsr.wfu.edu](https://zsr.wfu.edu) (<https://zsr.wfu.edu/>).

## Bowman Gray Campus and Innovation Quarter

All faculty, staff and students in the Wake Forest University Graduate School of Arts and Sciences have full and unrestricted access to the Coy C. Carpenter Library of Wake Forest School of Medicine at its main facility on the first floor of the Gray Building. The Library is centrally located within the Wake Forest-affiliated hospital (Wake Forest Baptist Medical Center), and most of the resources are available online.

## Technology Information Technology / Academic Computing

Information Systems (<https://is.wfu.edu/>) supports University instruction, research, and administrative needs through computing and telecommunications services. The University's computing resources serve both academic and business needs. Wake Forest's network infrastructure includes a 10-gigabit-per-second Ethernet backbone, a mixture of 100-Megabit and 1-Gigabit-per-second switched connectivity to the desktop, and pervasive wireless connectivity in all campus buildings and select outdoor locations.

All students are given a WFU account. This account is maintained as long as the student is enrolled and provides access to networked computer resources such as electronic mail, client software packages, various courseware applications, and administrative services. Students are able to reset their forgotten password or change their expired password through a self-service password management portal, [account.wfu.edu](https://account.wfu.edu/pwm/public/) (<https://account.wfu.edu/pwm/public/>). Eduroam provides a secured WiFi network for visiting students to use their home institution's WiFi credentials to access WiFi network services. Our students can take



advantage of this service by using their Wake Forest credentials when visiting other eduroam participating institutions.

Students have the option to bring their own computer device or purchase a laptop through the WakeWare (<http://wakeware.wfu.edu>) program. WakeWare provides students the opportunity to purchase a specially selected laptop configured to run academic technology at a negotiated price, bundled with extended warranties and protection, and provided with on-campus support. WakeWare evaluates new models, as available, to offer the most up-to-date technology to our students. WakeWare (<http://wakeware.wfu.edu/>) laptops have been thoroughly tested to ensure compatibility with academic software.

The Service Desk, a service center, located on the main floor of the Z. Smith Reynolds Library provides on-campus support for all IT-related questions and assistance. The Tech Shop, located in the Service Desk, is an authorized Apple, Dell, and Lenovo ThinkPad service center. With extended Service Desk hours, the online help portal, AskDeac (<https://help.wfu.edu/>), as well as Live Chat, there are extensive options for getting IT help. In addition, the IS website (<https://is.wfu.edu/>) provides timely announcements and in depth service-related content.

All students have access to licensed software and tools, via [software@WFU](mailto:software@WFU) (<http://software.wfu.edu>), for coursework, degree projects, and research; including SPSS, a statistical package used for data analysis, forecasting, and financial modeling; Maple; and Matlab, an interactive environment for algorithm development, data visualization, and data analysis.

Students also have access to computing resources outside the University. The University is a member of:

- The Inter-University Consortium for Political and Social Research (ICPSR), located at the University of Michigan. Membership in ICPSR provides faculty and students with access to a large library of data files, including public opinion surveys, cross-cultural data, financial data, and complete census data.
- EDUCAUSE, a national consortium of colleges and universities concerned with computing issues.
- Eduroam, a global wireless network access service for research and education, accessed using Wake Forest credentials.

Information Systems maintains an extensive array of online resources, including the Wake Information Network (WIN), Banner, and more, that support University admissions, student registration, grade processing, and other academic applications.

For advanced software with high computing requirements, WFU offers cloud-based virtualization. Engineering, among other departments, utilize a performance Workspace to run software, such as AutoCAD and COMSOL, needed for their Capstone Projects. The Wake Forest University Distributed Environment for Academic Computing (DEAC) cluster, a Linux-based High Performance Computing cluster provides supercomputing services academic research and coursework. These systems are available to students 24 hours a day through the Wake Forest University Network.

Students have unlimited access and full-time support using the One Button Studio (<https://is.wfu.edu/services/one-button-studio/>), a fully automated video production facility, located in Z. Smith Reynolds Library behind the IS Service Desk. Wake Forest also has a student run Makerspace, named the WakerSpace (<https://is.wfu.edu/academic-technology/wakerspace/>). The space allows students to not only build physical projects using technology such as 3D printers, laser cutters,

and solder stations, but also to learn skills such as podcasting, knitting, sewing, and woodworking through workshop partnerships with Facilities, Information Systems, and other resources across campus. By offering both academic and non-academic programs, the WakerSpace serves a broad range of interests across campus.

Information Systems offers cable television and streaming services. All residence hall rooms are equipped with cable TV connections and/or the ability to stream cable TV. Cable and/or streaming services provide access to campus information, news, weather, select HDTV channels and DVR recording via Stream2 (<https://is.wfu.edu/services/stream2/>).

## Calendars

### 2023-2024 Academic Calendar

#### On Campus Programs

Fall Semester 2023		
Date	Day	Event
August 28	Monday	Classes begin
September 1	Friday	Last day to add first part-of-term classes
September 8	Friday	Deadline to submit Intent to Graduate Form for December graduation
September 11	Monday	Last day to add full-term classes
September 13	Wednesday	Last day to drop first part-of-term classes
September 26	Tuesday	Deadline for students with "I" grade to submit work to instructor
October 2	Monday	Last day to drop full-term classes
October 11	Wednesday	"I" and "NR" grades changed to "F" for enrolled students
October 12-15	Thursday - Sunday	Fall Break
October 17	Tuesday	Classes end first part-of-term
October 18	Wednesday	Classes begin second part-of-term
October 24	Tuesday	Last day to add second part-of-term classes
November 3	Friday	Last day to drop second part-of-term classes
November 3	Friday	Deadline to submit thesis or dissertation to Graduate School office for review of format to graduate in December
November 6 - 10	Monday - Friday	Registration for Spring 2024
November 22 - 26	Wednesday - Sunday	Thanksgiving Holiday
December 1	Friday	Last day to defend to graduate in December
December 8	Friday	Classes end



<b>December 8</b>	<b>Friday</b>	<b>Deadline for December graduation requirements including: Submit ETD Student Advisor Agreement to Graduate School office; Submit ETD (electronic thesis or dissertation) to ProQuest; Submit exit survey to Graduate School office</b>
December 11 - 16	Monday - Saturday	Final Examinations
December 30	Friday	Graduation

### Spring Semester 2024

Date	Day	Event
January 17	Monday	Classes begin
<b>January 19</b>	<b>Friday</b>	<b>Deadline to submit Intent to Graduate Form for May graduation</b>
January 23	Tuesday	Last day to add first part-of-term classes
January 31	Wednesday	Last day to add full-term classes
February 2	Friday	Last day to drop first part-of-term classes
February 15	Thursday	Deadline for students with "I" grade to submit work to instructor
February 21	Wednesday	Last day to drop full-term classes
March 1	Friday	"I" and "NR" grades changed to "F" for enrolled students
March 5	Tuesday	Classes end first part-of-term
March 6	Wednesday	Classes begin second part-of-term
March 9 - 17	Saturday - 2 <sup>nd</sup> Sunday	Spring Break
March 19	Tuesday	Last day to add second part-of-term classes
<b>March 22</b>	<b>Friday</b>	<b>Deadline to submit thesis or dissertation to Graduate School office for review of format to graduate in May</b>
TBD		Registration for Summer 2024
March 29	Friday	Last day to drop second part-of-term classes
April 1 - 5	Monday - Friday	Registration for Fall 2024
<b>April 12</b>	<b>Friday</b>	<b>Last day to defend to graduate in May</b>

<b>April 19</b>	<b>Friday</b>	<b>Deadline for May graduation requirements including: Submit ETD Student Advisor Agreement to Graduate School office; Submit ETD (electronic thesis or dissertation) to ProQuest; Submit exit survey to Graduate School office</b>
May 1	Wednesday	Classes end
May 3-4, 6-7, 9-10	Fri-Sat, Mon-Tues, Thurs-Fri	Final Examinations
May 18	Saturday	Hooding and Commencement Ceremony
May 20	Monday	Commencement

## 2023 Summer Calendar (On Campus)

### Summer Session I

#### May 22 – June 20, 2023

Date	Day	Event
<b>March 13 – May 25</b>		<b>Online Registration</b>
May 22	Monday	Classes begin
May 25	Thursday	Last day to add Summer Session I classes
May 29	Monday	Memorial Day - no classes
May 31	Wednesday	Last day to add full summer classes
June 2	Friday	Last day to drop Summer Session I classes
<b>June 9</b>	<b>Friday</b>	<b>Deadline to file statement of intent to graduate in August</b>
June 19	Monday	Juneteenth Holiday - no classes
June 22	Thursday	Last day to drop Full Summer classes
June 27	Thursday	Last day of Summer Session I classes
June 28	Wednesday	Final examinations begin for Summer Session I
June 29	Thursday	Final examinations end for Summer Session I

### Summer Session II

#### July 6 – August 11, 2022

Date	Day	Event
<b>March 13 – May 25</b>		<b>Online Registration</b>
July 6	Thursday	Classes begin
<b>July 7</b>	<b>Friday</b>	<b>Deadline to submit thesis to Graduate School office for review of format to graduate in August</b>
July 11	Tuesday	Last day to add Summer Session II classes

July 18	Tuesday	Last day to drop Summer Session II classes
<b>July 28</b>	<b>Friday</b>	<b>Deadline to defend to graduate in August</b>
<b>August 9</b>	<b>Wednesday</b>	<b>Deadline for August graduation requirements including: Submit ETD Student Advisor Agreement to Graduate School office; Submit ETD (electronic thesis or dissertation) to ProQuest; Submit exit survey to Graduate School office</b>
August 9	Wednesday	Last day of classes for Summer Session II and Full Summer
August 10	Thursday	Final Examinations begin for Summer Session II and Full Summer
August 11	Friday	Final examinations end for Summer Session II and Full Summer
August 21	Monday	Graduation

## 2023-2024 Academic Calendar

### Counseling Program (Online)

#### Fall Semester 2023

Date	Day	Event
August 14-27	Monday-Sunday	Student Orientation Course for New Students
<b>August 28</b>	<b>Monday</b>	<b>First Class Day</b>
<b>September 1</b>	<b>Friday</b>	<b>Last day to add part-of-term 1 courses</b>
<b>September 8</b>	<b>Friday</b>	<b>Deadline to submit Intent to Graduate Form for December graduation</b>
<b>September 11</b>	<b>Monday</b>	<b>Last day to add full semester courses</b>
September 13	Wednesday	Last day to drop without academic penalty (part-of-term 1)
September 15	Friday	Last day for withdrawal with pro rata refund (part-of-term 1) Deadline to submit intent to Graduate, December
October 2	Monday	Last day to drop without academic penalty (full semester)
October 8	Sunday	Last day for withdrawal with pro rata refund (full semester)
<b>October 15</b>	<b>Sunday</b>	<b>Last Class Day (part-of-term 1)</b>
<b>October 16</b>	<b>Monday</b>	<b>First Class Day (part-of-term 2)</b>

<b>October 20</b>	<b>Friday</b>	<b>Last day to add part-of-term 2 courses</b>
November 1	Wednesday	Last day to drop without academic penalty (part-of-term 2)
November 6	Monday	Last day for withdrawal with pro rata refund (part-of-term 2)
<b>November 20-26</b>	<b>Monday-Sunday</b>	<b>Thanksgiving Break</b>
December 8	Friday	Deadline to meet December Graduation Requirements – including exit survey and graduation fee
<b>December 10</b>	<b>Sunday</b>	<b>Last Class Day</b>
December 14-17	Thursday-Sunday	Residency I (Cohort 33), Residency II (Cohort 30)
<b>December 30</b>	<b>Friday</b>	<b>Graduation</b>

#### Spring Semester 2024

Date	Day	Event
January 1-14	Monday-Sunday	Student Orientation Course for New Students
<b>January 15</b>	<b>Monday</b>	<b>First Class Day</b>
<b>January 19</b>	<b>Friday</b>	<b>Last day to add part-of-term 1 courses</b>
<b>January 19</b>	<b>Friday</b>	<b>Deadline to submit Intent to Graduate Form for May Graduation</b>
<b>January 29</b>	<b>Monday</b>	<b>Last day to add full semester courses</b>
January 31	Wednesday	Last day to drop without academic penalty (part-of-term 1)
February 2	Friday	Last day for withdrawal with pro rata refund (part-of-term 1)
February 19	Monday	Last day to drop without academic penalty (full semester)
February 25	Sunday	Last day for withdrawal with pro rata refund (full semester)
<b>March 3</b>	<b>Sunday</b>	<b>Last Class Day (part-of-term 1)</b>
<b>March 4</b>	<b>Monday</b>	<b>First Class Day (part-of-term 2)</b>
<b>March 8</b>	<b>Friday</b>	<b>Last day to add part-of-term 2 courses</b>
<b>March 11-17</b>	<b>Monday-Sunday</b>	<b>Spring Break</b>
March 25	Monday	Last day for withdrawal with pro rata refund (part-of-term 2)
March 27	Wednesday	Last day to drop without academic penalty (part-of-term 2)

<b>April 19</b>	<b>Friday</b>	Deadline to meet May Graduation Requirements – including exit survey and graduation fee
<b>April 28</b>	<b>Sunday</b>	<b>Last Class Day</b>
May 2-5	Thursday-Sunday	Residency I (Cohort 34), Residency II (Cohort 31)
May 18	Saturday	Hooding and Commencement Ceremony
May 20	Monday	Commencement

## 2023 Summer Calendar

### Counseling Program (Online)

#### Summer Semester 2023

Date	Day	Event
April 22-May 5	Monday-Sunday	Student Orientation Course for New Students
<b>May 6</b>	<b>Monday</b>	<b>First Class Day</b>
<b>May 10</b>	<b>Friday</b>	<b>Last day to add part-of-term 1 courses</b>
<b>May 20</b>	<b>Monday</b>	<b>Last day to add full semester courses</b>
May 22	Wednesday	Last day to drop without academic penalty (part-of-term 1)
May 24	Friday	Last day for withdrawal with pro rata refund (part-of-term 1)
June 7	Friday	Deadline to submit Intent to Graduate Form for August Graduation
June 10	Monday	Last day to drop without academic penalty (full semester)
June 13	Thursday	Last day for withdrawal with pro rata refund (full semester)
<b>June 23</b>	<b>Sunday</b>	<b>Last Class Day (part-of-term 1)</b>
<b>June 24</b>	<b>Monday</b>	<b>First Class Day (part-of-term 2)</b>
<b>June 28</b>	<b>Friday</b>	<b>Last day to add part-of-term 2 courses</b>
July 10	Wednesday	Last day to drop without academic penalty (part-of-term 2)
July 15	Thursday	Last day for withdrawal with pro rata refund (part-of-term 2)
<b>August 7</b>	<b>Wednesday</b>	<b>Deadline to meet August Graduation Requirements – including exit survey and graduation fee</b>
August 11	Sunday	<b>Last Class Day</b>

August 15-18	Thursday-Sunday	Residency I (Cohort 35), Residency II (Cohort 32)
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<b>August 21</b>	<b>Wednesday</b>	<b>Graduation</b>
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## Procedures

*All students are responsible for familiarizing themselves with the portions of this bulletin that pertain to their course of study. Statements concerning courses and expenses are not to be regarded as irrevocable contracts between the student and the institution. The university reserves the right to change the schedule of classes and the cost of instruction at any time within the student's term of residence.*

## Admissions

### How to Apply

Information on the application process, as well as a link to the online application may be found on the Graduate School's website at <http://graduate.wfu.edu/admissions> (<http://graduate.wfu.edu/admissions/>).

### Eligibility

Undergraduate seniors and graduates of accredited U.S. colleges and universities or recognized foreign institutions may apply for admission to the Graduate School. Undergraduates must complete their degree requirements prior to entering the Graduate School.

Whatever their previous academic training may have been, all applicants should have superior records. This requirement is usually interpreted as at least a B average or standing in the upper quarter of the class or both.

## Students with Disabilities

Wake Forest University will consider the application of any qualified student, regardless of disability, based on the selection criteria established by the University which includes personal and academic merit. Upon matriculation, all students will be required to meet the same standards for graduation.

The University endeavors to provide facilities which are in compliance with all laws and regulations regarding access for individuals with disabilities. Additionally, special services are available to reasonably accommodate students with disabilities. For more information on assistance for graduate students, please visit the Center for Learning, Access, and Student Success (<https://class.wfu.edu>).

## Admission Categories

**Regular Status in a Degree Program.** A person with a superior undergraduate record (at least a B average or upper quarter of the class and with the appropriate courses), satisfactory GRE scores (where required), TOEFL or IELTS scores (for international students), and/or good recommendations may apply for regular admission.

**Provisional Status in a Degree Program.** Provisional admission may be granted in certain circumstances and is limited to not more than one semester of full-time study or its equivalent in part-time study.

**Unclassified Non-Degree Graduate Status.** Applicants seeking courses for graduate credit, but not wishing to formally seek a graduate degree, may apply for admission as an unclassified or non-degree seeking student. Applicants are required to complete an application, submit the application fee, meet the immunization requirements, and submit an

official transcript showing a baccalaureate degree. Instructor approval is required for each course prior to enrollment.

## Classification of Admitted Students

**Full-Time Status.** A student who devotes full-time effort to a graduate program as outlined by his or her faculty committee with a minimum of 9 semester hours of coursework in fall, spring, and summer terms, including thesis research, is considered a full-time student.

**Part-Time Status.** A student registered for less than the above amount of coursework is considered a part-time student. Each program will determine whether it is possible to pursue a degree on a part-time basis.

## Continuous Enrollment

Degree-seeking students must have continuous enrollment through the semester in which they graduate. Continuous enrollment may be achieved by registering for courses, including research, internship, or project hours, or by registering for Grad Fee. Failure to maintain continuous enrollment may result in a student being administratively withdrawn from the Graduate School.

## Cost of Attendance

Detailed Cost of Attendance is available for Reynolda students at: <http://grad.financialaid.wfu.edu/cost-of-attendance/>

## Tuition Schedule

Fee	Amount
Full-time (minimum 9 hours)	\$38,650
Part-time	\$1,650 (per hour)
On-line Programs	\$1,650 (per hour)
Summer Session 2023 Graduate Programs	\$1,650 (per hour)
Summer Session 2023 Online Counseling Programs	\$1,610 (per hour)

## Fees

Fee	Amount
Wellness Fee (can be waived)	\$394
Audit Fee	\$150 (per hour)
Student Continuation Fee	\$150 (per semester)
Application Fee	\$80
Technology Fee	\$75

## Tuition Concession

There is a tuition concession plan for faculty and staff of the University and for the spouses of faculty and eligible staff members. If the Graduate School offers a faculty or staff member a scholarship, that scholarship is designated for tuition and the tuition concession benefit will be applied to net remaining tuition and fees after the tuition scholarship has been applied. For further information, contact the Human Resources office.

## Tuition for Courses Taken on the Bowman Gray Campus

During fall and spring terms, full-time graduate students may take graduate courses on the Bowman Gray campus without additional tuition. Summer terms are excluded.

## University Fees

A Student Health fee of \$275/semester is charged for all full-time students, excluding on-line programs. A Technology fee of \$75/semester is charged to all students, excluding on-line programs. A Student Wellness fee of \$197/ semester is charged to full-time students, excluding on-line programs; this fee can be waived in WIN.

## Past Due Balances

A student carrying a past-due balance may be restricted from:

- Registering for future semesters
- Receiving an official transcript of academic record
- Receiving regalia and participating in the Hooding ceremony
- Receiving a diploma
- Returning from leave of absence
- Being reinstated as a student

## Financial Aid

Full-tuition scholarships, partial-tuition scholarships, fellowships, graduate assistantships, teaching assistantships, and research assistantships are available to qualified students. Assistantships and fellowships may include tuition scholarships as well as a stipend. Students receiving a stipend may be required to work up to 20 hours weekly and carry a normal course load.

Acceptance of an assistantship or fellowship carries with it the obligation to perform duties assigned by the student's department. Some students may be assigned duties outside the department of study. Unsatisfactory performance may result in the withdrawal of the stipend.

Assistantships and fellowships are potentially renewable, but the total number of years a student working toward the master's degree may not exceed two.

The residence life and housing office has a limited number of hall director and compliance advisor positions available to qualified graduate students. Interested students are urged to contact the Office of Residence Life and Housing for more information by visiting the employment section of [www.wfu.edu/housing](http://www.wfu.edu/housing) (<http://www.wfu.edu/housing/>).

The Graduate School may award educators teaching full-time in public schools or state-approved, non-public schools a one-half scholarship of the cost of part-time tuition. This policy covers only educators who have a current contract and teach either in grades kindergarten through 12th or in community college institutions.

## Student Loans

Students may submit a FAFSA to determine eligibility for the Federal Direct Unsubsidized loan program. A graduate student must be enrolled at least half-time as a degree seeking student to be considered for federal

student aid. The Wake Forest University Graduate School of Arts & Sciences FAFSA school code is: E00429.

A student must be in good academic standing and must be making satisfactory academic progress toward the degree to be eligible for a student loan. Unclassified (non-degree seeking), certificate program students, and provisionally accepted students are not eligible for federal financial aid.

## Graduate School Scholarship Awards

A limited number of merit-based scholarships are available for highly qualified students. Any student interested in awards should contact their program director for additional information.

## Policy on External Compensation

A student supported on a stipend from the Graduate School, faculty grant, student fellowship, or other sources may be allowed to engage in additional compensatory work with permission from his or her advisor, provided the work does not delay or interfere with the duties required for timely completion of the degree. A student who receives a tuition scholarship may engage in outside compensatory work without approval from the Graduate School. All students will be monitored for satisfactory academic progress.

## Satisfactory Academic Progress

To determine continuing financial aid eligibility, the financial aid committee evaluates the student's satisfactory academic progress at the end of each term. The receipt of federally controlled aid requires half# time enrollment (4.5 or more hours) in a degree seeking program during the fall and spring semesters. In addition to the enrollment requirements, a minimum cumulative grade point average of 3.0 on work attempted in the Wake Forest University Graduate School of Arts and Sciences is required. Certain programs have higher academic requirements, which are communicated directly to the students by the programs. More detailed information can be found at: <https://grad.financialaid.wfu.edu/policies/>. The Dean may revoke institutionally controlled financial aid for violation of University regulations, including its Honor Code, or for violation of federal, state, or local laws.

## Enrollment and Procedures

### Student Rights and Responsibilities

The graduate faculty has adopted a formal statement regarding student rights and responsibilities. The statement is a guideline to be used by students with respect to an Honor Code which applies to both teaching and research endeavors. It also includes clearly defined procedures for the handling of student grievances should they arise. This statement may be accessed in the Student Handbook found on the Graduate School website on the following page under the heading **Rules and Policies**: <https://graduate.wfu.edu/reynolda-campus-homepage/>

### Honor Code & Grievance Procedures

The Honor Code provides guidance for student conduct with respect to academic pursuits. The faculty liaison on the Reynolda campus is the Associate Dean for Students. This policy may be accessed at the Graduate School website on the following page under the heading **Rules and Policies**: <https://graduate.wfu.edu/reynolda-campus-homepage/>.

## Graduate School Non-Academic Code of Conduct

The Graduate Faculty has adopted a formal policy to provide guidance for students with respect to non-academic conduct. This policy may be accessed at the Graduate School website on the following page under the heading **Rules and Policies**:

<https://graduate.wfu.edu/reynolda-campus-homepage/>.

## Patents Policy

During a student's course of study, he or she may participate in research or other work which leads to an invention or discovery. These inventions or discoveries are the property of the University. The University's Inventions and Patent Policy is applicable to student inventions with respect to the definition of inventions covered, resolution of disputes, and the division of proceeds, including the determination of the inventor(s) share of any proceeds. Under this policy, a program exists to determine patentability and commercial value of each invention. Further information can be found at the Office of Research and Sponsored Programs' website under WFU Reynolda Campus Policies <https://research.wfu.edu/office-information/policies/>.

## Copyright Policy

The Copyright Policy of Wake Forest University is intended to:

1. Encourage research and teaching by rewarding the authors of intellectual works, assisting them in implementing their ideas, and by providing a system for the encouragement of scholarship and creative activity;
2. Serve the public interest by providing means through which intellectual works may be made available to the public; and
3. Protect the rights of the University, its faculty, its staff, and its students regarding intellectual works developed at the University.

Further information can be found at the Office of Research and Sponsored Programs' website at <https://is.wfu.edu/copyright-policy/>.

## Course Registration

### Repeating a Course

A graduate student may repeat a course in which a B- or lower grade has been received. The course may be counted only one time for credit. The higher grade earned will be counted in calculation of grade point average. Both grades will appear on the transcript. In addition, federal financial aid rules dictate that federal aid can only be used twice for the same graded course.

### Adding/Dropping a Course

During the Add/Drop period, a student may drop a course without penalty or notation on the transcript. After the Add/Drop period, a student may drop a course with the approval of the Dean of the Graduate School, the program, and the student's faculty advisor. Dropped courses are not counted in determining the grade point average. Students are responsible for officially dropping courses to be eligible for a refund of tuition. Nonpayment for courses for which a student is registered or non-attendance in a registered course does not release the student from financial obligation, nor does it result in a student being dropped from the course.



Auditing a Course

Auditing a course consists of participation in a course without receiving a letter grade or credit hours. When space is available after registration of students enrolled for credit, others may request permission of the instructor to enter the course as auditors. No additional charge is made to full-time students; however, an audit fee is assessed for non-degree seeking students. An auditor is subject to attendance regulations and other requirements of performance established by the instructor. Although an auditor receives no credit, a notation of audit is made on the transcript.

Transfer Credit

Transfer of graduate credits earned at other universities

A graduate course that was completed at another college or university may be considered for transfer credit, provided that the course was taken at an accredited institution in the United States, the course was not taken as part of a previously earned degree, and the grade earned is equivalent to a B or higher. The maximum number of hours that may be transferred toward a master's degree is six and is not limited for PhD degree candidates.

Transfer of graduate credits earned in a graduate degree program at Wake Forest University

A graduate course that was completed in another graduate or professional program may be considered for transfer, provided that the course was not counted toward the first degree and a grade of B or higher was earned. The maximum number of hours that may be transferred is six.

Students intending to follow their mentor and enroll at Wake Forest University

A student intending to follow their mentor from another institution must apply using the standard application processes. Credits may be transferred if the criteria described for the transfer of credits earned at other universities are met, and the student has not yet advanced to candidacy. A student who has advanced to candidacy prior to enrolling at Wake Forest University should also remain a student at their current institution.

Grading

Grade of I

The grade of "I" (incomplete) may be assigned only when a student fails to complete the work of a course because of illness or some other emergency. If the work recorded as "I" is not completed within 30 days after the student enters his/her next semester, not counting the summer session, the grade automatically becomes "F". The instructor must report the final grade to the registrar within 45 days after the beginning of that semester. In no case is a graduate degree awarded to a student who has an "I" on record. Incomplete forms are available at <https://prod.wp.cdn.aws.wfu.edu/sites/275/2019/01/IncompleteGradePolicy.pdf>.

Grade of NR

The grade of NR (Not Reported) must be resolved within forty-five days after the beginning of the student's next enrolled term or will automatically become an F or Unsatisfactory. A degree will not be awarded to a student who has an NR on their record.

Grade of U (Unsatisfactory) in Thesis/ Dissertation Research

A student who receives a U in research may be placed on academic probation even if the student's cumulative GPA is above 2.5. A student who receives a grade of U in research in two consecutive semesters may be dismissed from the Graduate School by the Dean upon recommendation of the program.

Minimum Grade Requirements

A student whose cumulative grade point average (GPA) falls below 2.5 may be placed on academic probation. The student will have one semester to bring their GPA to 2.5 or greater; otherwise, may be dismissed from the Graduate School by the Dean. The GPA is obtained by dividing the total number of grade points earned by the total number of hours attempted, including hours for courses in which the grade earned is an F. Satisfactory/unsatisfactory and pass/fail grades do not factor into the GPA calculation.

Grades Assigned	Grade Points
A Excellent	4.00
A-	3.67
B+	3.33
B Good	3.00
B-	2.67
C+	2.33
C Low Pass	2.00

Grades Assigned	Description
F	Failed (counted as hours attempted)
I	Incomplete (becomes passing grade or F)
P	Pass
S	Satisfactory
U	Unsatisfactory
AUD	Audit
DRP	Official Drop (not counted as hours attempted)
NC	No credit
NR	Grade not reported (becomes passing grade or F)
WD	Withdrew (not counted as hours attempted)
WP	Withdrew passing (not counted as hours attempted)
WF	Withdrew failing (not counted as hours attempted)

Individual programs may require a higher GPA than 2.5 for ongoing enrollment and is stated in their program policies. A student may be dismissed from the Graduate School by the Dean upon recommendation of the program if the student is failing to make adequate progress in research.

PhD candidates must have a GPA of 3.0 at the time of the preliminary examination. The minimum GPA required for graduation is 3.0 for awarded degrees and earned certificates.

## Changes in Status

### Leave of Absence

A leave of absence allows an enrolled student to interrupt his or her studies for a compelling reason, for example, a medical condition or a personal matter. A leave of absence is defined as a temporary separation from the Graduate School. To be eligible for a leave of absence, students should be in good academic standing, fulfilling research, service and course obligations. Students must submit a Request for a Leave of Absence form to the Graduate School office. The form also requires international students to obtain approval from the International Student and Scholar Services office.

The maximum time for a leave of absence is one year and will not be granted retroactively. A student must withdraw from current registered course(s) before requesting a leave. A leave of absence is only granted between terms.

Students must submit a request to return to the Graduate School office at least one month prior to the beginning of that term. If a decision has been made not to return the student should inform the Graduate School office. Failure to petition to return will result in withdrawal and the student will need to reapply for admission.

Unless allowed by the funding agency or source supporting the student's stipend, a student may not qualify for stipend support during a leave of absence. In all cases, the guidelines provided by the supporting agency will apply. Students are encouraged to consult the agency program officials to determine the specific guidelines governing leaves of absence.

Approved leaves automatically extend milestone deadlines by the length of the leave. This includes university and departmental requirements such as the qualifying exam deadline and prospectus deadline for PhD students, and the degree deadline. Leaves do not exempt students from meeting the residency requirement.

Students may not fulfill any degree requirements including work on a thesis, dissertation, or other degree requirements during the time on leave.

In order to facilitate communication between the student and the Graduate School, access to the campus network will be continued during the leave but will be deactivated if the student does not return.

Students must consult with their health insurance provider about the status of their policy while on leave. Students who have contracted for health insurance through the university should immediately contact the Student Health Insurance Coordinator. Health insurance is subject to federal and state laws and regulations.

Students on an approved leave are not eligible for federal financial aid, including Federal Direct Loans. In some cases, student loans may not be deferred for the entirety of a leave. Students should contact the Financial Aid office for more information.

## Accommodation for Students of Faculty who Leave the Institution

In the case where a student has advanced to candidacy, and their faculty advisor leaves the institution prior to completion of their degree, the Thesis/Dissertation Committee is responsible for recommending an appropriate plan for the completion of the degree. The plan should address the following: support of stipend and research funding (including lab space), designation of a primary mentor, and designation of a manager to carry out the plan. This plan must be submitted within six weeks of the faculty member's resignation and approved by the Dean.

In the case where a student has advanced to candidacy and chooses to leave the institution with their faculty advisor, the student will be required to register for Grad Fee until degree completion. In the case where a student has not yet advanced to candidacy and chooses to leave the institution with their faculty advisor, the student will be required to withdraw and transfer to the new institution.

## Withdrawal from the University

Students planning to withdraw must complete the withdrawal form (<https://prod.wp.cdn.aws.wfu.edu/sites/275/2017/12/Withdrawal.pdf>), which requires obtaining appropriate signatures and submission to the Graduate School office. Students who leave without following this procedure will receive a grade of F, or U if appropriate, in each course in progress. Students who were issued a Graduate School laptop are required to return it to Information Systems. Students will receive tuition refunds according to the stated schedule. Withdrawals must be approved, and students must turn in their identification card and laptop before claiming refunds. Recipients of Title IV federal financial aid should refer to the Return of Financial Aid Funds Policy and the Schedule of Adjustments for Withdrawal at <http://grad.financialaid.wfu.edu/policies/>. A student who withdraws by the drop date as established by the academic calendar will have a grade of WD (withdrawn) assigned for courses in progress. A student who withdraws after the drop date will be assigned a grade of WP (withdraw-passing) or WF (withdraw-failing) for each course in progress. The withdrawal date for a student enrolled on campus will be determined by the date of last active participation. The withdrawal date for a student enrolled in an on-line program will be determined by the last time the student participated in an online discussion or made contact with a faculty member. Simply logging into a course is not determinative of participation in the course.

## Reinstatement

A student who has withdrawn and plans to return within one academic year must request reinstatement to the Graduate School office at least one month prior to the semester in which they want to re-enter. To be reinstated the student must be in good academic standing and receive approval from the graduate program and the Dean of the Graduate School. The time spent while withdrawn will not count in the maximum time allotted for the degree. After one academic year students planning to re-enter must reapply for admission by the application deadline and must be recommended by the program and accepted by the Dean of the Graduate School.

If a student is approved for readmission within a five-year period, previous coursework may count towards the degree requirements with the recommendation of the program and the approval of the Dean. If the student re-enters after a five-year period, previous courses will not count towards the degree requirements.

## Administrative Withdrawal

A student may be administratively withdrawn under the following circumstances:

- Failure to pay tuition
- Tenure exceeds the maximum length
- Failure to maintain continuous enrollment
- Failure to attend classes or conduct research for a significant period
- Honor code determination recommends withdrawal
- Non-academic code of conduct determination recommends withdrawal

## Dismissal

A student who is failing to make satisfactory academic progress, determined based on the GPA, multiple Unsatisfactory research grades, or as determined by the program, may be dismissed from the Graduate School.

## Refunds

### Refund of Charges Policy and Return of Financial Aid Funds Policy

A student who officially withdraws or is granted continuous enrollment status during a semester may be entitled to a refund of tuition and dining charges depending on the student's date of withdrawal, and/or date of continuous enrollment status. Online Counseling Programs are refunded according to the Refund Policy for Online Counseling Programs.

Tuition refunds are based on the date of official withdrawal or the effective date of continuous enrollment status. Please refer to the official "Schedule of Refunds for Withdrawal or Continuous Enrollment" for the respective semester of enrollment. Refunds will be reduced by the amount of any outstanding charges on a student's account. If refunded charges leave a credit balance on the student account, the student is responsible for completing an online student refund request at (<http://finance.wfu.edu/sfs/student-refund/>) or the credit balance will remain on the student account and will be applied for future semesters. If the credit is a direct result of Title IV aid, the credit is automatically refunded to the student.

Vehicle registration fees will not be refunded unless the issued permit is returned to Transportation and Parking Services before the first day of class. Students graduating or studying abroad for spring semester may receive a prorated refund of the vehicle registration fee by returning the issued permits to the Transportation and Parking Services office.

### Schedule of Refunds for Withdrawal or Continuous Enrollment

#### Fall & Spring Semesters

Official Date	Tuition Refunded
Before semester begins	100% tuition, less deposit
First week of semester	85%
Second week of semester	75%
Third week of semester	50%
Fourth week of semester	30%
Fifth week of semester	20%
After fifth week of semester	0%

#### Summer Sessions I & II (6 week sessions)

Official Date	Tuition Refunded
First three days of session	100% tuition, less deposit
Fourth day of session	75%
Fifth day of session	50%
Sixth day of session	25%
After sixth day of session	0%

#### Full Summer Session (12 week session)

Official Date	Tuition Refunded
First five days of session	100% tuition, less deposit
Sixth - Ninth day of session	75%
Tenth - Twelfth day of session	50%
Thirteenth - Fifteenth day of session	25%
After fifteenth day of session	0%

There are no refunds for mandatory fees after the first class day in a semester as reflected in the academic calendar.

Students are responsible for officially dropping courses to be eligible for an adjustment. Nonpayment for classes for which you are registered or non-attendance in a registered class does not release you from financial obligation and will not drop you from the class.

A student using scholarships, grants, or loans to help pay educational expenses, whose account was paid-in-full prior to withdrawal, is likely to owe the University after withdrawal. Return of Title IV funds are handled in accordance with federal law. Students should consult the Office of Financial Aid for more information.

Tuition, fees, housing, dining and all other charges will not be refunded when a student is suspended or expelled from the University as a result of a conduct or honor code violation. Return of Title IV funds are handled in accordance with federal law.

\* Refunds will be reduced by the amount of any outstanding charges on a student's account.

## Pursuant to The Veterans Benefits and Transition Act of 2018

GI Bill® and VR&E beneficiaries (Chapter 33 and Chapter 31 beneficiaries) may attend a course of education or training for up to 90 days from the date the beneficiary provides:

A certificate of eligibility, or a "statement of benefits" obtained from the VA's eBenefits web site, or a valid VAF 28-1905 form for Chapter 31 authorization purposes, provided that the student beneficiary provides such documentation to the appropriate VA Certifying Official no later than the first day of a course of education, and provided that the student provides any additional payment amount due that is the difference between the amount of the student's financial obligation and the anticipated amount of the VA education disbursement to Wake Forest University.

This policy allows a student to attend the course until the VA provides payment to Wake Forest University. Wake Forest University will not impose a penalty, or require the beneficiary to borrow additional funds to cover tuition and fees due to late payments from the VA.

## University Disruption Refund Policy

Circumstances may arise during a semester that cause significant disruptions to University operations and result in the University closing the campus. These circumstances include, without limitation, extreme weather, fire, natural disaster, war, labor disturbances, loss of utilities, riots or civil commotions, epidemic, pandemic, public health crisis, power of government, or any other circumstance like or unlike any circumstance mentioned above, which is beyond the reasonable control or authority of the University.

In the event of a significant disruption to University operations either:

- During a semester that results in the University closing campus for the remainder of the semester;
- At the beginning of a semester that delays or prevents the University opening campus; or
- During a semester that results in the University closing campus temporarily during the semester

The University will issue refunds for housing and dining charges and wellness and parking fees to students where applicable and according to the refund schedule below. There will be no refunds for tuition or Student Health, Student Activity, or any other fees paid by or on behalf of students. Refunds (if applicable) will be calculated at the end of the semester.

This policy applies to significant disruptions where the University closes campus. It does not apply where students officially withdraw from the University or are officially granted continuous enrollment status during a semester. Refunds, if any, in those circumstances are governed by the University's Refund of Charges Policy.

### Fall & Spring Semesters - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	85%
2	78%
3	71%
4	64%
5	57%
6	50%
7	43%
8	36%
9	29%
10	22%
11	15%
12	10%
13	No Refund
14	No Refund
15	No Refund
16	No Refund

### Summer Sessions I & II (6 week sessions) - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	75%
2	50%
3	25%
4	No Refund
5	No Refund
6	No Refund

### Full Summer Session (12 week session) - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	85%
2	75%
3	65%
4	55%
5	45%
6	35%
7	25%
8	15%
9	No Refund
10	No Refund
11	No Refund
12	No Refund

The statements concerning expenses are given as information to prospective students. They should not be regarded as forming a contract between the student and the University. The costs of instruction and other services outlined here are those in effect on the date this material was printed. Wake Forest University may change the cost of instruction and other services at any time.

## Student Wellness

### Student Health Service

The mission of Student Health Service (SHS) is to ***promote and advance the health and wellbeing for all students***. A physician-directed medical staff offers primary care services, urgent care, illness care, physical examinations, counseling, limited psychiatric care, allergy injections, immunizations, radiology, gynecological services, pharmacy, laboratory, sports medicine clinic, referral to specialists, and medical information and vaccinations related to travel to international destinations.

### Student Health Portal

Students can schedule most appointments online through the Student Health Portal (<https://wfu.studenthealthportal.com/PyramedPortal/>).

The portal serves as a secure place to make appointments, view published labs, print off a copy of your immunization history on file, print receipts, and securely communicate with our clinic. Notifications

of appointment reminders and secure messages from the clinic will be sent to your WFU email address. Students should book an appointment before coming to our clinic either through the Student Health Portal, or by contacting us at [apptshs@wfu.edu](mailto:apptshs@wfu.edu) or 336.758.5218. SHS cannot guarantee the availability of a medical provider if you choose to come to the clinic without an appointment.

## Medical Charges

Most services at SHS are covered by the Student Health Fee (learn more (<https://shs.wfu.edu/services/fees/>)). In addition, there are discounted "fee-for-service" charges for medications, laboratory tests, observation care, procedures, and some supplies. Payment can be made via cash, check, Deacon OneCard, Student Blue Insurance (<https://shi.wfu.edu/>), or the charge can be transferred to the student's account in Office of Financial and Accounting Services. Each student is given a copy of the medical charges incurred on the date of service which can be used for insurance filing. SHS does not participate in nor file insurance claims on behalf of the patient.

## Radiology

Through a partnership with Atrium Health/Wake Forest Baptist, SHS offers on site X-rays. Through this arrangement, Atrium Health, Wake Forest Baptist will be able to bill your medical insurance for these services. All billing will be handled by Atrium Health/Wake Forest Baptist and the remaining portion after your insurance processes the claim will be your responsibility.

### Confidentiality

Student medical records are confidential. Medical records and information contained in the records may be shared with therapists and physicians who are involved in the student's care, and otherwise will not be released without the student's permission except as allowed by law. Students who wish to have their medical records or information released to other parties should complete a release of information form at the time of each office visit or service.

## Class Excuses

The responsibility for excusing students from class rests with the faculty. Consequently SHS does not issue excuse notes for students. Students who are evaluated at SHS are encouraged to discuss their situations with their professors. A receipt documenting visits is available to students at checkout. Information concerning hospitalization and prolonged illnesses is sent, with the student's permission, to the appropriate Dean.

## Student Insurance Program

Health insurance is required as a condition of enrollment for all degree-seeking\* students at Wake Forest University. Students who demonstrate comparable coverage to WFU's health insurance plan and meet our criteria may waive the coverage provided by WFU. \*Specific information about the policy plan, process instructions and full information regarding eligibility can be found at [shi.wfu.edu](https://shi.wfu.edu) (<https://shi.wfu.edu/>).

## Inclement Weather

When the University is closed due to inclement weather, SHS may have limited staff and may be able to provide care only for injuries and urgent illnesses. Appointments may be rescheduled.

## Retention of Medical Records

Student medical records are retained for 10 years after the last treatment, after which time they are destroyed. Immunization records are kept longer.

\*

Certain part-time students are not eligible.

## Student Health Information and Immunization Form

All new undergraduate and graduate students are required to be up to date with required vaccines. You and your healthcare physician need to complete the health information and immunization forms (HIIF) available in your Student Health Portal (<https://wfu.studenthealthportal.com/PyramedPortal/>). For steps to upload your documentation visit the Student Health website (<https://shs.wfu.edu/new-students/immunization-requirements/#20230414143115>).

## Immunization Policy

North Carolina State Law (G.S. 130A-152) and Wake Forest University policy require documentation of certain immunizations for students attending Wake Forest. Students must submit certification of the immunizations set forth below or request and receive approval for a medical or religious exemption PRIOR TO REGISTRATION.

The statute applies to all students except the following:

Students residing off-campus and registering for any combination of:

- Off-campus courses
- Evening courses (classes beginning after 5 p.m.)
- Weekend courses
- No more than four day credit hours in on-campus courses

**Read the complete immunization policy** at [go.wfu.edu/shs-vaccine](https://go.wfu.edu/shs-vaccine) (<https://go.wfu.edu/shs-vaccine/>)

## Counseling Center

The University Counseling Center, located in 117 Reynolda Hall (Reynolda Campus), provides short-term counseling and consultation to currently enrolled Reynolda Campus students. All services are confidential, and no fees are charged to students.

The Center offers counseling for a variety of concerns including depression, anxiety, personal adjustment, disordered eating, managing stress, sexuality, and relationship issues.

The Center is open Monday-Friday from 8:30 a.m. to 5:00 p.m. whenever the University is operating. A crisis counselor is available by phone after-hours and on weekends 365 days a year by calling the University Counseling Center: 336-758-5273. For more information visit <https://counselingcenter.wfu.edu/>.

## Requirements for Degrees Degrees Offered

The Graduate School of Arts and Sciences offers graduate programs leading to the Master of Arts, Master of Arts in Education, Master of Arts in Human Services, Master of Fine Arts, Master of Science, and Doctor of Philosophy degrees.



## Degree Completion

Each degree requires a minimum of 30 semester credit hours. The minimum GPA required for graduation is 3.0 for awarded degrees and earned certificates. The total allowable time for completion of master's degrees must not exceed six years. The total allowable time for completion of doctoral degrees must not exceed seven years.

## Thesis/Dissertation Committee Composition

**For Master's degrees:** When required a thesis is written under the supervision of the student's advisory committee. The committee must have no fewer than three members, including the advisor from the program, a second reader from within the program who serves as the committee chair, and a third reader from outside the program or from the student's area of concentration.

**For the PhD degree:** The examining committee for the dissertation must have no fewer than five members, including the program director, or a graduate faculty member chosen by the program director, the student's advisor, another member of the department, a representative from a related area from within or outside the department, and a member from outside of the major department; this last member represents the Graduate Council and serves as the chair of the committee.

**For all degrees:** All members of the student's advisory or examining committee should be members of the graduate faculty. With the approval of the advisor, a student may recommend a person who is not on the graduate faculty to serve as a voting member. The program director or advisor must justify the participation of this person based on research, publications, and/or professional activities in an email to the Dean of the Graduate School requesting approval. This email should include the proposed committee members' curriculum vitae.

## Final Examination Assessment

The defense must take place by the stated deadline on the academic calendar, or the student will be required to register for a subsequent semester to have their degree conferred. The examination validates the work stated in the thesis/dissertation and demonstrates knowledge in the related areas. The possible committee decisions are unconditional pass, pass upon rectifying minor deficiencies, pass upon rectifying major deficiencies, and fail. If a student fails, they may be reexamined only once.

### Unconditional Pass

If all committee members agree that the student has passed unconditionally, there is consensus to pass the examination. The committee chair will sign and submit the ballot to the Graduate School office.

### Pass Upon Rectifying Minor Deficiencies

If reservations are expressed by committee members, the chair of the committee will ensure that the reservations are communicated to the student and the Dean by signing and submitting the ballot to the Graduate School office. The student and the advisor are jointly responsible for ensuring that the thesis/dissertation is modified to address the committee's reservations.

### Pass Upon Rectifying Major Deficiencies

If reservations are expressed by committee members, the chair of the committee will ensure that the reservations are communicated

to the student and the Dean by signing and submitting the ballot to the Graduate School office. The student and the advisor are jointly responsible for ensuring that the thesis/dissertation is modified to address the committee's reservations.

### Fail

If, in the opinion of more than one member of the examining committee, the student has failed the examination, there is no consensus to pass. The chair of the committee will advise the student that the thesis/dissertation fails to meet the requirements of the Graduate School. The chair will ensure that the student knows the reason(s) for failure and will submit the ballot to the Graduate School office. If the student resubmits or submits a new thesis/dissertation for consideration, at least three members will be drawn from the original committee. If the modified or new thesis/dissertation fails to meet the requirements, the student will be dismissed.

## Requirements for Master's Degrees

Programs of study leading to the master's degree are offered in Bioethics, Biology, Chemistry, Communication, Computer Science, Counseling, Documentary Film, Education, English, Health and Exercise Science, Interpreting and Translation Studies, Liberal Arts Studies, Mathematics and Statistics, Physics, Psychology, Religious Studies, and Sustainability.

### Residence Requirements

In general, a minimum of one academic year of full-time work (or the equivalent in Wake Forest online instruction) is required.

### General Course Requirements

Required coursework must be taken for a grade and cannot be taken as Pass/Fail. GRD courses cannot be used toward degree requirements. Students should consult with individual programs for specific course requirements.

### Foreign Language or Special Skills Requirement

Some programs may require students to demonstrate a reading knowledge of an appropriate foreign language or competency in one or more special skills. Students should consult with individual programs for special skills requirements.

### Admission to Degree Candidacy

A student is admitted to degree candidacy by the Dean after recommendation by the program. The student must have satisfactorily met any foreign language or special skills requirement and is expected to complete the degree requirements during the semester candidacy has been approved.

### Thesis Requirement

Students should verify with their program if a thesis is required. If applicable, six of the hours required for the degree are allocated to thesis research. Thesis research courses are graded S (Satisfactory) or U (Unsatisfactory). If a U is assigned, the course must be repeated, and an S earned before the degree can be awarded. A student who receives a grade of U in research in two semesters may be dismissed from the Graduate School upon recommendation of the program.

## Requirements for the Doctor of Philosophy Degrees

Programs of study leading to the Doctor of Philosophy degree are offered in Biology, Chemistry, and Physics.

### Residence Requirement

In general, a minimum of three years of full-time study, of which at least two must be in full-time residence at the University (or the equivalent in Wake Forest online instruction) is required.

### Course Requirements and Advisory Committee

The number of required courses is not prescribed by the Graduate School. Students should consult individual programs for specific requirements.

Courses required by programs cannot be taken as Pass/Fail. The advisory committee is appointed by the program director and consists of the student's advisor and a minimum of two other members of the graduate faculty.

### Foreign Language or Special Skills Requirement

Some programs may require students to demonstrate either a reading knowledge of one or more appropriate foreign languages, or competence in one or more special skills. Students should consult with individual programs for special skills requirements.

### Preliminary Examination

The preliminary examination, conducted by the program, is typically administered near the end of the student's second year and must be passed at least twelve months prior to degree completion. The examining committee must include at least three members, one of whom represents a related concentration area. The written examination(s) should cover all areas of concentration and collateral studies. There may also be an oral examination in which any faculty member invited may participate. The committee passes or fails the student and notifies the Graduate School of the results. In case of failure, the committee may recommend that the candidate be dropped from the program. A reexamination may be allowed after six months from the date of the first examination. A student may be reexamined only once. PhD candidates must have a GPA of 3.0 at the time of the preliminary examination.

### Admission to Degree Candidacy

A student is admitted to degree candidacy by the Dean after recommendation by the program. The student must have satisfactorily met any foreign language or special skills requirement and is expected to complete the degree requirements during the semester candidacy has been approved.

### Dissertation Requirement

Under the supervision of an advisor committee, the candidate prepares a dissertation embodying the results of investigative efforts in the field of concentration. Dissertation research courses are graded S (Satisfactory) or U (Unsatisfactory). If a U is assigned, the course must be repeated, and an S earned before the degree can be awarded. A student who receives a grade of U in research in two semesters may be dismissed from the Graduate School upon recommendation of the program.

## Programs

### Degree Programs

- Bioethics (BIE)
  - Bioethics, MA
- Biology (BIO)
  - Biology, MS
  - Biology, PhD
- Chemistry (CHM)
  - Chemistry, MS
  - Chemistry, PhD
- Communication (COM)
  - Communication, MA
- Computer Science (CSC)
  - Computer Science, MS
- Counseling (CNS)
  - Counseling, MA
- Documentary Film Program (DOC)
  - Documentary Film, MA
  - Documentary Film, MFA
- Education (EDU)
  - Education, MAED
- English (ENG)
  - English, MA
- Health and Exercise Science (HES)
  - Health and Exercise Science, MS
- Interpreting and Translation Studies (ITS)
  - Interpreting and Translation Studies, MA
- Liberal Arts Studies (LBS)
  - Liberal Arts Studies, MA
- Mathematics (MTH)
  - Mathematics, MS
- Physics (PHY)
  - Physics, MS
  - Physics, PhD
- Psychology (PSY)
  - Psychology, MA
- Religious Studies (REL)
  - Religious Studies, MA
- Statistics (STA)
  - Statistics, MS
- Sustainability (SUS)
  - Sustainability, MA

### Dual Degrees

- Bioethics, BA/BS & MA Five Year Program
- Bioethics, JD/MA
- Bioethics, MD/MA
- Bioethics, MDiv/MA
- Computer Science, BS & MS Five Year Program
- Counseling, MDiv/MA
- Education, MDiv/MAED
- MD/PhD
- PhD/MBA
- Religious Studies, JD/MA

- Sustainability, JD/MA
- Sustainability, MDiv/MA

## Certificates

- Bioethics, Certificate
- Curriculum, Instruction, and Assessment, Certificate
- Data Science, Certificate
- Interpreting and Translation Studies, Certificates
- Medieval and Early Modern Studies, Certificate
- Structural and Computational Biophysics (SCB), Certificate
- Sustainability, Certificate

Contact information for all programs and certificates of study may be found on our website at Reynolda Campus Academic Programs and Contacts (<https://graduate.wfu.edu/reynolda-campus-academic-programs-and-contacts/>).

## Degree Programs

- Bioethics (BIE)
  - Bioethics, MA
- Biology (BIO)
  - Biology, MS
  - Biology, PhD
- Chemistry (CHM)
  - Chemistry, MS
  - Chemistry, PhD
- Communication (COM)
  - Communication, MA
- Computer Science (CSC)
  - Computer Science, MS
- Counseling (CNS)
  - Counseling, MA
- Documentary Film Program (DOC)
  - Documentary Film, MA
  - Documentary Film, MFA
- Education (EDU)
  - Education, MAED
- English (ENG)
  - English, MA
- Health and Exercise Science (HES)
  - Health and Exercise Science, MS
- Interpreting and Translation Studies (ITS)
  - Interpreting and Translation Studies, MA
- Liberal Arts Studies (LBS)
  - Liberal Arts Studies, MA
- Mathematics (MTH)
  - Mathematics, MS
- Physics (PHY)
  - Physics, MS
  - Physics, PhD
- Psychology (PSY)
  - Psychology, MA
- Religious Studies (REL)
  - Religious Studies, MA
- Statistics (STA)

- Statistics, MS
- Sustainability (SUS)
  - Sustainability, MA

## Bioethics (BIE)

### Master of Arts

#### Overview

Bioethics provides an educational opportunity at the graduate level for current and future professionals and others throughout the country interested in bioethics, including healthcare providers, researchers in biomedicine and the life sciences, lawyers, and professionals in religion, health and research administration, and the biotechnology industry. The goal of the MA in Bioethics is to equip graduates to practice and teach about bioethics as integral to the work of medicine and biotechnology, healthcare, and the basic sciences, and to undertake exemplary bioethics-related research and scholarship. The program encompasses clinical ethics, research ethics, and health policy and administration.

The program has two characteristic emphases: **bioethics in social context**, and **bioethics and biotechnology**. First, a general emphasis on the social, cultural, and policy contexts that shape all bioethics questions and issues is visible throughout the curriculum. Although the importance of incorporating the humanities, the social sciences, and even the arts may seem obvious, this is not a component of most bioethics education elsewhere. Second, a focus on bioethics and biotechnology takes advantage of Wake Forest University's strong and growing presence in this area. Research and clinical practice in nanomedicine, genomics, pharmacogenetics, molecular and cell therapies, and the like is ongoing not only here at Wake Forest University but elsewhere in North Carolina.

The program has particular emphases without declaring particular specializations. This is in part because bioethics education is by its nature fundamentally generalist. Students receive broad exposure to ideas, discussion, scholarly literature, and experience, as well as a set of intellectual skills to be developed and practiced widely before being turned to special areas of interest.

Students are required to follow the student handbook of the school(s) through which they are enrolled. To continue in a dual or five year program, a student must remain in good academic standing with the respective School (Wake Forest College, Divinity, Law or Medicine) and the Graduate School of Arts and Sciences.

The degree requires 30 credit hours; 24-26 hours of coursework with an average grade of B or above plus either 4 hours of capstone project (BIE 795) OR 6 hours of thesis research (BIE 791/792). All MA students must take BIE 703 (3 hours) and BIE 706/BIE 707 (3 hours). Additionally, all MA students must take two of the three following courses: BIE 702 (3 hours), BIE 704 (3 hours), and BIE 705 (3 hours). The remaining 12-14 hours may be in either 600 or 700 level Bioethics courses. With program permission, up to 6 of the those hours may be from non-Bioethics graduate level courses. All work must be completed within six years of the date of initial enrollment in the graduate program.

For additional degree requirements, see Requirements for Degrees.

### Programs

- Bioethics, MA
- Bioethics, BA/BS & MA Five Year Program
- Bioethics, JD/MA

- Bioethics, MD/MA
- Bioethics, MDiv/MA
- Bioethics, Certificate

## Courses

### **BIE 619. Concepts of Health and Disease. (2-3 h)**

Concepts of health and disease and shape discussions in bioethics and health policy. This course examines and critically evaluates competing conceptions of health and disease. The implications of adopting different understandings of health and disease for bioethics and health policy will be explored. Permission of Instructor required (POI)

### **BIE 690. Special Topics. (1-3 h)**

Study of bioethics topics not covered in the regular curriculum. Topics may be drawn from any theory or content area in the field of bioethics. May be repeated for a maximum of 6 hours. Permission of instructor required (POI)

### **BIE 701. Historical Foundations of Bioethics. (2, 3 h)**

This elective explores the origins of bioethics thought, through examination of core concepts in philosophy, moral theory, social and cultural studies and law and policy. Topics may include, for instance the ancient Greeks, Confucius, and key religious teaching on health, the civil rights movement; the history of scientific medicine; and the legal conceptualization of medical practice. This course expands and extends students' knowledge of the contemporary history of bioethics as incorporated into various aspects of their required courses. Permission of instructor required (POI)

### **BIE 702. Biomedical Research Ethics. (3 h)**

A historical and conceptual survey of ethical, regulatory, and policy issues in biomedical research. Emphasis will be place on research involving human subjects. Master of Arts students are required to take any 2 of the following 3 courses: BIE 702, 704, or 705. Permission of instructor required (POI)

### **BIE 703. Bioethics Theory. (3 h)**

An investigation of the main theoretical approaches to contemporary bioethics and their philosophical foundations. Each approach will be examined critically and students will explore how each approach informs analysis of contemporary issues in bioethics. Permission of Instructor required (POI)

### **BIE 704. Public Policy, Medicine and Justice. (3 h)**

An examination of the organization of medicine and biomedical science in the United States today. The relationships between scientific and medical institutions and the implementation of public policies will be critically analyzed in light of the requirements of the principle of justice. Topics include conflicts of interest, broadly understood, within and between institutional and professional actors; the regulation of medical practice; access to health care; and the balance between the public good and market forces. Master of Arts students are required to successfully complete any 2 of the following 3 courses: BIE 702, 704, or 705. Permission of Instructor required (POI)

### **BIE 705. Clinical Ethics. (3 h)**

This course will focus on "ethics at the bedside" and will make extensive use of case studies. The course begins with sessions on the role of ethics in health care, the theoretical tools of bioethics, and the relationships among law, culture, and clinical ethics. The course reviews the moral foundations of therapeutic relationships, and concludes with examining moral issues encountered in health care at the beginning and at the end of life. Master of Arts students are required to successfully complete any 2 of the following 3 courses: BIE 702, 704, or 705. Permission of Instructor required (POI)

### **BIE 706. Learning and Doing Bioethics: Methods, Professionalism, and Communication. (3 h)**

A seminar on bioethics topics of interest featuring Wake Forest University and invited external faculty, with additional student presentations. Participants engage with presenters and scholarly literature on a variety of aspects of bioethics, including, but not limited to, the scholarly and professional practice of bioethics, the role of empirical scholarship in bioethics and related disciplines, the relationship of bioethics to advocacy and policy, and bioethics communication and mediation. Permission of Instructor required (POI)

### **BIE 707. Learning and Doing Bioethics: Methods, Professionalism, and Communication. (3 h)**

A seminar on bioethics topics of interest featuring Wake Forest University and invited external faculty, with additional student presentations. Participants engage with presenters and scholarly literature on a variety of aspects of bioethics, including, but not limited to, the scholarly and professional practice of bioethics, the role of empirical scholarship in bioethics and related disciplines, the relationship of bioethics to advocacy and policy, and bioethics communication and mediation. Permission of Instructor required (POI)

### **BIE 708. Research Methods. (2 h)**

An introduction to the methods, concepts and tools used in quantitative and qualitative empirical research in bioethics. Students will develop skills in the design, conduct, interpretation, and evaluation of bioethics research. Permission of Instructor required (POI)

### **BIE 711. Current Topics in Clinical and Biomedical Research Ethics. (2, 3 h)**

An in-depth critical examination of selected topics of current interest in clinical and research ethics. Topics are identified by staff and students. Examples of pertinent topics include human pluripotent stem cell research; assisted-reproduction; research without consent; the sale of human organs; pandemic and biodefense preparedness; synthetic body parts and transhumanism; genetic enhancement; regenerative medicine and biogerontology. May be repeated for credit up to a maximum of 6 hours. Permission of Instructor required (POI)

### **BIE 713. Medical Liability and Treatment Relationships. (2, 3 h)**

An examination of the relationships between law and medicine, including the legal regulation of medical practice, concepts of medical malpractice, informed consent, confidentiality and privacy, and institutional liability. The ethical implications of the intersection of law and medicine will be critically analyzed. This course is cross listed as LAW 524. Permission of instructor required (POI)

**BIE 715. Bioethics and Religion. (2, 3 h)**

This course explores fundamental themes, methods, and issues in religious bioethics. It seeks to determine the ways that religious approaches offer distinctive, complementary or overlapping perspectives with secular approaches. Specific topics will include assisted reproductive technologies, family planning and abortion, genetic therapy and enhancement, withholding life-sustaining treatment, suicide and euthanasia and justice issues in the allocation of health care resources. The course will combine lectures and discussions with analysis of cases. Permission of Instructor required (POI)

**BIE 721. Research Independent Study. (1-3 h)**

Students may work with a faculty member on a project of mutual interest. May be repeated for credit up to a maximum of 6 hours. Permission of Instructor required (POI)

**BIE 722. Research Independent Study. (1-3 h)**

Students may work with a faculty member on a project of mutual interest. May be repeated for credit up to a maximum of 6 hours. Permission of Instructor required (POI)

**BIE 725. Health Care Law & Policy. (2, 3 h)**

This course examines the public policy and legal dimensions of the financing and regulation of health care delivery. Its focus is on how medical institutions (hospitals, insurers, HMOs) are structured and regulated, and how these institutions relate to their physicians and patients. Ongoing debate over health care reform is a main focus. The dominant theme is how law shapes and responds to the rapid economic and structural changes that are taking place in the health care sector. This course is cross-listed as LAW 525. Permission of Instructor required (POI)

**BIE 731. Bioethics at Work: The IRB. (1-3 h)**

Provides students with the opportunity to experience and understand human research oversight by attending Institutional Review Board (IRB) meetings, reviewing submitted protocols, and considering the ethical issues arising therein. Students assigned to a single IRB for a single semester will receive 1 credit. They will attend monthly meetings, meet periodically with course faculty and staff, and meet with IRB senior staff at the beginning and end of the semester. Students are also required to maintain and submit a journal of commentary on meetings and protocols and the ethical issues arising therein and an end of semester paper. Initial enrollment must be concurrent with enrollment in BIE 702: Biomedical Research Ethics. Additional credits may be earned by students who attend the meetings of more than one IRB or who continue attendance during the summer terms and/or in the fall semester. Course may be repeated up to a maximum of 3 hours. Co-requisite - BIE 702. Permission of Instructor required (POI)

**BIE 733. Bioethics at Work: The Clinical Context. (1-3 h)**

This course is designed to introduce students to central clinical ethics activities in health care facilities, including ethics consultation, ethics policy development and review, and continuing education in bioethics. In addition to weekly seminar classes, students will attend meetings of the Wake Forest Baptist Medical Center Clinical Ethics Committee and its standing subcommittees and continuing education conferences in bioethics. Students will meet with a variety of health care professionals to learn about their contributions to clinical ethics, will observe the process of clinical ethics consultation at WFBMC, and will study and practice ethics consultation skills. P-BIE 705. Permission of Instructor required (POI)

**BIE 737. Genetics and Bioethics. (3 h)**

An exploration of some of the ethical issues generated by the acquisition and application of knowledge about the human genome. Topics include eugenics, confidentiality, gene therapy, genetic testing of minors, genetic testing of adults, and ownership of genetic information. Permission of Instructor required (POI)

**BIE 739. Neuroethics. (3 h)**

This course explores some of the major philosophical and ethical issues that arise with the advancement in neuroscience research and neurology case. The course is divided into two areas of neuroethics: (1) the ethics of neuroscience and (2) the neuroscience of ethics. The ethics of neuroscience investigates the ethical implications of the application of neurotechnology for individuals and society, and the neuroscience of ethics attempts to answer traditional ethical questions through neuroscience. In the first half of the course, we will examine some ethical issues (e.g. mind reading, memory manipulation, BCI, AI, and cognitive enhancement) that arise in the applied and clinical contexts of neurotechnology and neurological disease. In the second half, we will consider the ethical, legal, and philosophical implications (e.g. free will, consciousness, personal identity, and criminal law) of neuroscientific discoveries and claims. This course is cross-listed in the Divinity School (THS 739). Permission of instructor required (POI)

**BIE 741. Narrative and Bioethics. (3 h)**

This team-taught course provides bioethics students with an overview of the different ways in which narratives of diverse types are instrumental to bioethics thinking. Four to six faculty will teach individual course units of 2-3 sessions, addressing topics including but not limited to: illness narratives; bioethics in fiction and film; performable case studies addressing bioethics issues; the voice of the medical case presentation; narrative reading and narrative writing; bioethics in the news; and the ethics of "thick description." Involvement of multiple faculty enables critical reflection on narrative from a variety of disciplinary perspectives common to bioethics. Permission of Instructor required (POI)

**BIE 757. Biotechnology Law & Policy. (2, 3 h)**

This course surveys a range of legal and public policy topics in biotechnology, such as: FDA regulation of drugs and devices, regulation of medical research, products liability, insurance coverage of pharmaceuticals, intellectual property, and genetics. This course is cross-listed with the School of Law (LAW 657). Permission of Instructor required (POI)

**BIE 790. Biotechnology and Ethics. (3 h)**

With the convergence of medicine, nanotechnology, computer science, molecular biology, genetic engineering, and business, biotechnologies are emerging not only as an important provider of life-saving and life-enhancing treatments but also a fast-growing and very profitable industry. This course explores some of the major ethical issues related to the current and proposed uses of biotechnologies with particular attention to the reasons and arguments that are often used to support various views on the use of biotechnology. This course is cross listed in the Divinity School. Permission of Instructor required (POI)

**BIE 791. Thesis Research. (1-6 h)**

Research directed toward fulfilling the thesis requirement. May be repeated for up to a total of 6 credits. P-POI.

**BIE 792. Thesis Research. (1-6 h)**

Research directed toward fulfilling the thesis requirement. May be repeated for up to a total of 6 credits. P-POI.



**BIE 795. Capstone Project. (1-4 h)**

Work towards completing a capstone project. P- at least nine BIE credits or at least six credits of core courses (BIE 702, 703, 704, 705, 706/707), unless otherwise approved. Permission on Instructor required (POI)

## Faculty

Program Co-Directors Nancy King and Mark Hall

## Bioethics, MA

### Degree Requirements

The degree requires 30 credit hours; 24-26 hours of coursework with an average grade of B or above plus either 4 hours of capstone project (BIE 795) OR 6 hours of thesis research (BIE 791/792).

All MA students must take BIE 703 (3 hours) and BIE 706/BIE 707 (3 hours). Additionally, all MA students must take two of the three following courses: BIE 702 (3 hours), BIE 704 (3hours), BIE 705(3 hours). The remaining 12-14 hours may be in either 600 or 700 level Bioethics courses. With program permission, up to 6 of those hours may be from non-Bioethics graduate level courses.

For additional degree requirements, see Requirements for Degrees.

## Biology (BIO)

### Master of Science, Doctor of Philosophy Overview

The Department of Biology offers programs of study leading to the MS and PhD degrees. For admission to graduate work, the department requires an undergraduate major in the biological sciences or the equivalent, plus at least four semesters of courses in the physical sciences. Any deficiencies in these areas must be removed prior to admission to candidacy for a graduate degree.

Research opportunities include behavioral ecology, biochemistry and molecular biology, biological oceanography, biomechanics, cell biology, ecology, epigenetics, evolution, genomics, microbiology, neurobiology, physiology, population genetics, sensory biology, and systematics. For specific faculty interests and descriptions of field sites and research resources, please visit the departmental website <http://biology.wfu.edu>.

At the master's level, the department emphasizes broad training rather than narrow specialization, and combines coursework with thesis research. At the doctoral level, few specific requirements are prescribed. Individual programs are designed for each student at both levels under the guidance of the student's faculty adviser, advisory committee and departmental graduate committee. Enrollment in the graduate program is open only to students whose interests are reflected by the areas of expertise represented by the faculty. Prospective applicants are encouraged to correspond with faculty members whose areas of research interest are compatible with their own. Additional information is available from the Biology Program Director.

Study leading to the MS degree was inaugurated in 1961. The PhD degree program began in September 1970. A departmental graduate committee consisting of Biology department faculty and an appointed graduate student representative oversees all aspects of the graduate program from application review to acceptance to matriculation.

## Programs

- Biology, MS
- Biology, PhD
- MD/PhD
- PhD/MBA
- Structural and Computational Biophysics (SCB), Certificate

## Courses

**BIO 601. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 602. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 603. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 604. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 605. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 607. Biophysics. (3 h)**

Introduction to macromolecules with studies of important biophysical tools, such as sedimentation, centrifugation, electrophoresis, X-ray crystallography, absorption and emission light spectroscopy, fluorescence, single molecule techniques and a survey of membrane biophysics. Also listed as PHY 607.

**BIO 608. Biomechanics. (3 h)**

Analyzes the relationship between organismal form and function using principles from physics and engineering. Solid and fluid mechanics are employed to study design in living systems.

**BIO 608L. Biomechanics Lab. (1 h)**

Laboratory study of biomechanics. P or C-BIO 608.

**BIO 609. Comparative Anatomy. (4 h)**

Study of the vertebrate body from an evolutionary, functional, and development perspective. Labs emphasize structure and function, primarily through the dissection of representative vertebrates.

**BIO 610. Community Ecology and Global Change. (4 h)**

An advanced ecology course covering mechanisms that determine the dynamics and distribution of plant and animal assemblages and their responses to and roles in global change. Lectures focus on ecological principles and theory. Lab includes local field trips and discussion of the primary literature. Weekend field trips to Outer Banks and mountains.

**BIO 611. Ecology & Conservation Biology of Coral Reefs. (4 h)**

In-depth study of the various biotic and abiotic components that come together to structure ecosystem function and biodiversity at all spatial scales in one of Earth's most productive and diverse environments, yet one most threatened by human use and climate change. Lab component is a one-week field trip over Spring Break.

**BIO 613. Herpetology. (4 h)**

Lecture course on the biology of reptiles and amphibians, emphasizing the unique morphological, physiological, and behavioral adaptations of both groups, and their evolutionary histories and relationships. Two local field trips are planned.

**BIO 614. Evolution. (3 h)**

Study of the evolutionary analysis of biological change in populations, lineages, and the history of Earth. Explores reconstruction of evolutionary histories, adaptation, complexity, and biodiversity through primary literature.

**BIO 614L. Evolution Lab. (1 h)**

Introduces evolutionary analytic methods and interpretation of trait and molecular data through practical tutorials. P or C-BIO 614.

**BIO 615. Population Genetics. (3 h)**

Study of the amount and distribution of genetic variation in populations of organisms, and of how processes such as mutation, recombination, and selection affect genetic variation. Lectures present both an introduction to theoretical studies and discussion of molecular and phenotypic variation in natural populations.

**BIO 615L. Population Genetics Lab. (1 h)**

Introduces quantitative modeling of population genetic dynamics, and experiments using populations of organisms. P or C-BIO 615.

**BIO 616. Biology of Birds. (4 h)**

Lecture plus lab course emphasizing ecological and evolutionary influences on the physiology, behavior, diversity, and population biology of birds, and case studies in conservation biology.

**BIO 617. Plant Physiology & Development. (3 h)**

Examines the growth, development, and physiological processes of plants. The control of these processes is examined on genetic, biochemical, and whole plant levels.

**BIO 617L. Plant Physiology and Development Lab. (1 h)**

Consists of structured experiments and an independently designed research project. P or C-BIO 617.

**BIO 619. Biology of Soils. (3 h)**

A survey of soil structure and biodiversity, with a detailed study of ecological interactions within soil communities and the impact of the soil biota on soil formation, nutrient cycling, and bioremediation within pristine, managed, and damaged soils.

**BIO 619L. Biology of Soils Lab. (1 h)**

Laboratory study of physical, chemical, and biological methods for analyzing the soil habitat. P or C-BIO 619.

**BIO 623. Animal Behavior. (3 h)**

Survey of laboratory and field research on animal behavior.

**BIO 623L. Animal Behavior Lab. (1 h)**

Laboratory study of animal behavior. P or C-BIO 623L.

**BIO 624. Hormones and Behavior. (3 h)**

Exploration of the mechanisms of hormonal influences on behavior.

**BIO 627. Mycology: Biology of Fungi. (4 h)**

Introduces fungi, their evolution and natural taxonomy; cell and molecular biology; genetics, mating and development; primary and secondary biochemistry; and their interactions with other organisms and the environment. Lab introduces culturing, microscopic and molecular techniques.

**BIO 630. Land and Natural-Resources Management. (3 h)**

Provides a fundamental understanding of land and resource management. The major focus is on federal oversight and policies but state, local, non-profit, and international aspects are included.

**BIO 632. Microbiology. (4 h)**

Overview of the biology of microorganisms with emphasis on prokaryotes. Topics include cell structure and function, genetics and evolution, metabolic and ecological diversity, and medical microbiology. Lab emphasizes inquiry-based study of environmental microorganisms through a blend of classical and modern techniques.

**BIO 634. Parasitology. (4 h)**

Survey of protozoan, helminth, and arthropod parasites with a focus on cellular biology, life cycles, host-parasite relationships, and public health implications. Laboratory emphasizes microscopy-based techniques for examining parasite morphology and intracellular structures.

**BIO 636. Development. (3 h)**

A study of the molecular, cellular, and anatomical aspects of embryonic development of invertebrate and vertebrate organisms.

**BIO 636L. Development Lab. (1 h)**

Laboratory study of the molecular, cellular, and anatomical aspects of embryonic development of invertebrate and vertebrate animals. P or C-BIO 636.

**BIO 639. Animal Cognition. (3 h)**

A survey of learning, reasoning and social cognition in animals, with an emphasis on species other than widely-used models such as rodents or primates. Classes are initially mostly lecture, and then mostly discussion of empirical studies from the primary literature.

**BIO 640. Ecology. (4 h)**

Interrelationships among living systems and their environments, structure and dynamics of major ecosystem types, contemporary problems in ecology. Weigl.

**BIO 641. Marine Biology. (3 h)**

Introduction to marine organismal and habitat diversity and marine ecological processes.

**BIO 641L. Marine Biology Lab. (1 h)**

Develops practical knowledge of marine environments through extensive field work. P or C-BIO 641.

**BIO 642. Oceanography. (4 h)**

Introduces the geological, physical, chemical, and biological processes that govern the global oceans and their role in climate change. Lab focus is on tools and research questions pertinent to the field of biological oceanography and includes a five-day trip over Fall Break.

**BIO 646. Neurobiology. (3 h)**

Introduces the structure and function of the nervous system including the neural basis of behavior.

**BIO 646L. Neurobiology Lab. (1 h)**

Laboratory emphasizing electrophysiological techniques with experiments from the cellular to the behavioral level. Students will design and complete their own projects. P or C-BIO 646.

**BIO 648. Physiological Plant Ecology. (3 h)**

Provides a fundamental understanding of how plants have adapted to the stresses of their habits, particularly in harsh or extreme environments such as deserts, the alpine, the arctic tundra, and tropical rain forests.

**BIO 648L. Physiological Plant Ecology Lab. (1 h)**

Physiological plant ecology lab. P or C-BIO 648.

**BIO 649. Tropical Biodiversity of the Amazon and Andes. (4 h)**

Intensive field course in tropical biodiversity focusing on ecosystems, natural resource management, and conservation. Students will travel to major tropical biomes in the vast tropical wildernesses of Andean and Amazonian Peru. Lectures emphasize the basic ecological principles important in each ecosystem. Field-based labs focus on student-designed projects. Offered in the summer only. POI required.

**BIO 652. Developmental Neuroscience. (4 h)**

Examines the development of neural structures and the plasticity of the mature nervous system. Laboratory covers the basics of embryology, immunocytochemistry, and primary neuron culture.

**BIO 653. Functional Neuroanatomy. (3 h)**

Focuses on the functional organization of the vertebrate central nervous system, including regions, systems, and circuits, with emphasis on application to current topics, neuropathology, and clinical cases.

**BIO 656. Ecology and Resource Management of Southeast Australia. (4 h)**

Intensive field-oriented course focusing on ecosystems, natural resource management and environmental conservation of southeastern Australia. Students travel to major biomes including sub-tropical rainforests, coral reefs, and the Australian urban environment. Labs are field-based with some consisting of study-designed field projects. Taught only in summers in Australia.

**BIO 660. Metabolic Diseases. (3 h)**

Explores genetic and biochemical pathways in the context of inborn errors of metabolism.

**BIO 662. Immunology. (3 h)**

Study of the components and protective mechanisms of the human immune system, including innate and acquired immunity.

**BIO 663. Sensory Biology. (3 h)**

Lecture course that examines a variety of sensory systems. Emphasis is on sensory physiology, although other aspects of sensory systems, e.g. molecular biology and anatomy, are also covered. Silver.

**BIO 663L. Sensory Biology Lab. (1 h)**

Laboratory emphasizing electrophysiological and behavioral techniques to examine sensory systems. Students will design and complete their own projects. P or C-BIO 663.

**BIO 665. Biology of the Cell. (3 h)**

Lecture and lab course on recent advances in cell biology. Lectures emphasize analysis and interpretation of experimental data in the primary literature, focusing on topics such as the large scale architecture of the cell, targeting of macromolecules, cell-cell communication, cell signaling, and the control of cell division. The labs introduce basic techniques in cell biology and leads to an independent project. Tague.

**BIO 665L. Biology of the Cell Lab. (1 h)**

Laboratory course introducing basic techniques in cell biology, leading to an independent project. P or C-BIO 665.

**BIO 667. Virology. (3 h)**

Designed to introduce students to viruses, viral/host interactions, pathogenicity, methods of control and their use in molecular biology, including gene therapy. Curran, Lord.

**BIO 669. Cancer Biology. (3 h)**

Analysis of molecular and cellular mechanisms that transform normal cells, trigger abnormal proliferation, and lead to tumor formation. Emphasis is on the biological basis of cancer, with some exploration of clinical and social consequences.

**BIO 670. Biochemistry: Macromolecules and Metabolism. (3 h)**

Lecture course introducing the principles of biochemistry, with an emphasis on the experimental approaches that elucidated these principles. Major topics include structure, function, and biosynthesis of biological molecules, analysis of enzyme function and activity, bioenergetics, and regulation of metabolic pathways. Muday.

**BIO 670L. Biochemistry Lab. (1 h)**

Overview of biochemical approaches to study structure and function of macromolecules. Cannot receive credit for both BIO 670L and 671L. P or C-BIO 670.

**BIO 671L. Advanced Biochemistry Lab. (1 h)**

Emphasizes approaches for isolation and analysis of enzymes. Cannot receive credit for both BIO 670L and 671L. P or C-BIO 671.

**BIO 672. Advanced Molecular Biology. (3 h)**

Presents molecular mechanisms by which stored genetic information is expressed including the mechanisms for and regulation of gene expression, protein synthesis, and genome editing. Emphasizes analysis and interpretation of experimental data from the primary literature.

**BIO 672L. Advanced Molecular Biology Lab. (1 h)**

Introduces modern methods of molecular biology to analyze and manipulate expression of genes and function of gene products. P or C-BIO 672.

**BIO 674. Neuropharmacology. (3 h)**

An introduction to how pharmacological agents affect cellular and molecular functions in the nervous system of normal and disease states. Lecture and case studies will be used to examine topics including drugs targeting mood and emotion, memory and dementia, and movement disorders. Drugs of abuse and the neurological basis of addiction will also be evaluated.

**BIO 679. Introduction to Geographic Information Systems (GIS). (4 h)**

Lecture and laboratory course that introduces the concepts and uses of GIS as a mapping and analytical tool. Lectures cover the history of GIS, GIS data structures and sources of data, map projections, GIS tools, applications, and resources. Exercises include example of GIS applications in environmental modeling, socio-demographic change and site suitability analyses.

**BIO 680. Biostatistics. (3 h)**

Introduction to inferential methods in biology. Focuses on recognizing, quantifying, and communicating uncertainty in biological data. Topics include summarizing data, making predictions, and testing hypotheses. Special emphasis on communicating statistics to scientific and general audiences.

**BIO 681. Epigenetics. (3 h)**

Studies the molecular mechanisms for inheritance of genome modifications. Uses primary literature to explore the environmental and developmental signals that influence epigenetic controls of gene expression and disease.

**BIO 681L. Epigenetics Lab. (1 h)**

Provides hands-on experiences with genome editing and molecular genetics to address the function and expression of genes. P or C-BIO 681.

**BIO 682. Molecular Signaling. (3 h)**

Examines the molecular and biochemical mechanisms by which hormones, neurotransmitters, and other signaling molecules act to change growth, development, and physiological and behavioral responses of organisms with a focus on discussion of primary literature.

**BIO 683. Genomics. (3 h)**

Examines the architecture, expression, and evolution of genomes. Uses current primary literature to examine the functional and evolutionary dynamics of genomes and the modern analytic techniques used to investigate genome-wide phenomena.

**BIO 683L. Genomics Lab. (1 h)**

Introduces analytic methods and interpretation of genome wide data through practical tutorials. P or C-BIO 683.

**BIO 685. Bioinformatics. (3 h)**

Introduction to computational approaches essential to modern biological inquiry. Approaches may include large biological dataset analyses, sequence similarity and motif searches, and analysis of high-throughput genomic technologies. Emphasizes interdisciplinary interaction and communication. Also listed as CSC 685 and PHY 685.

**BIO 686. Genetics & African Diaspora. (3 h)**

Study of modern human population divergence from a genomic perspective, focusing on the role of parasites in driving evolutionary adaptations. Explores the intersection of genetic diversity, health and disease in humans of the African diaspora.

**BIO 687. Computational Systems Biology. (3 h)**

Introduction of concepts and development of skills for comprehension of systems biology problems, including both biological and computational aspects. Topics may include genome-wide transcriptomic analysis, protein interaction networks, large-scale proteomics experiments, and computational approaches for modeling, storing, and analyzing the resulting data sets. Emphasizes interdisciplinary interaction and communication.

**BIO 688. Methods in Molecular Genetics. (4 h)**

Hybrid lecture/laboratory course gives students a hands-on introduction to a diverse array of techniques commonly used in molecular genetics laboratories.

**BIO 701. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 702. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 703. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 704. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 705. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 706. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 707. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 708. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 711. Directed Study in Biology. (1 h)**

Reading and/or laboratory problems carried out under and by permission of a faculty member. Staff.

**BIO 712. Directed Study in Biology. (1 h)**

Reading and/or laboratory problems carried out under and by permission of a faculty member. Staff.

**BIO 715. Foundations of Physiology. (1-4 h)**

Covers classical and current topics and techniques in comparative physiology. Format varies from seminar to a full laboratory course. Staff.

**BIO 716. Signal Transduction. (2 h)**

Focuses on the mechanisms of inter- and intra-cellular communications. Topics range from receptors to signaling molecules to physiological responses. Largely based on the primary literature and requires student presentation of primary research articles. C. Browne, Muday, Tague.

**BIO 717. Developmental Mechanism. (2 h)**

Seminar course examining the molecular, biochemical, and cellular mechanisms of animal and/or plant development. Relevant topics selected from the current literature are discussed in lecture and presentation formats. C. Browne, Tague, Muday.

**BIO 718. Gene Expression. (2 h)**

Seminar covers gene expression in eukaryotic and prokaryotic systems. Topics range from transcription to translation to other aspects of gene regulation. Emphasis is on the experimental basis of understanding the mechanisms of gene expression. Students present, in seminar format, appropriate papers from literature. All students participate in discussion and evaluation of presentations. Tague, C. Browne, Curran, Muday.

**BIO 720. Integrative Biology I. (3 h)**

Inquiry into the fundamentals of scientific thought and practice in the biological sciences. Course will emphasize key biological theories and contemporary techniques in the context of current literature. Each semester will be based on three thematic areas chosen by a committee of faculty and students to encompass a breadth of areas of biological knowledge and integrate biological subdisciplines.

**BIO 721. Integrative Biology II. (3 h)**

Inquiry into the fundamentals of scientific thought and practice in the biological sciences. Course will emphasize key biological theories and contemporary techniques in the context of current literature. Each semester will be based on three thematic areas chosen by a committee of faculty and students to encompass a breadth of areas of biological knowledge and integrate biological subdisciplines.

**BIO 725. Plant Genetics. (1, 2 h)**

Covers various aspects of plant genetics in a seminar format. Topics range from classical Mendelian genetics to genomics and bioinformatics, depending on the interests of the students. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentation. Muday, Tague.

**BIO 726. Plant Physiology. (1, 2 h)**

Covers various aspects of plant physiology and hormones in a seminar format. Topics range from auxin transport to properties of light within the leaf. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentations. Muday, Smith.



**BIO 727. Plant Evolution. (1, 2 h)**

Covers various aspects of plant evolution in a seminar format. Topics range from problems in phylogeny reconstruction and patterns of diversity to major evolutionary innovations in various plant groups. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentations. Kron, Silman.

**BIO 728. Plant Ecology. (1, 2 h)**

Covers various aspects of plant ecology in a seminar format. Topics vary depending on graduate student interest. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentations. Silman, Smith.

**BIO 735. Foundations of Evolutionary Genetics. (2 h)**

Inquiry into the fundamental concepts in genetic evolution through discussion of foundational primary literature. Topics explored include population genetic processes, speciation and extinction.

**BIO 740. Physiological Ecology. (4 h)**

Introduction to evolutionary/ecological physiology, with emphasis on the interactions between organisms and major abiotic factors of the environment including water balance-hydration, gaseous exchange-respiration, temperature tolerance-thermal physiology. Dimock.

**BIO 757. Techniques in Mathematical Biology. (3 h)**

Offers students a framework for understanding the use of mathematics in both biological theory and empirical research. Emphasis is on practical applications of mathematical techniques, and learning by doing. A central goal is to give students tools to use in their own research. Topics covered include continuous and discrete population models, matrix models, stochastic models, life-history theory, and fitting models for data. Mathematical skills are taught and refreshed, but knowledge of basic calculus is required. Silman, Anderson, Baxley.

**BIO 767. Foundations of Ecology. (3 h)**

A graduate seminar focusing on understanding the seminal developments in the field of ecology and then tracing their intellectual impacts on the modern literature.

**BIO 775. Microscopy for the Biological Sciences. (4 h)**

An introduction to the various types of light, confocal, and electron microscopy. Students will learn technical and theoretical aspects of microscopy, methods of sample preparation, digital image acquisition and analysis and the preparation of publication quality images. The course will emphasize practical applications of microscopy, microscopy experimental design, and hands-on use of microscopes and digital imaging systems. Students will be expected to design and conduct a microscopy project and present their results to the class. Additionally, students will be expected to participate in class discussions regarding newly emerging microscopy techniques in various biological disciplines.

**BIO 778. Advanced Ecology. (4 h)**

Covers current research in the field of ecology with a focus at the community level. Experimental design, data analysis, and interpretation are emphasized. Silman.

**BIO 781. Statistical Models and Data in R. (4 h)**

Provides an introduction to statistical modeling and data management in the R computer language. The course objectives are to introduce student to: (i) methodologies for the design and analysis of ecological and organismal experiments, (ii) programming with an emphasis on good coding and data management habits, and (iii) producing figures and reproducible workflows for publication.

**BIO 783. Teaching Skills & Instructional Development. (3 h)**

Introduction to teaching college-level science courses. Emphasis is on: defining and achieving realistic course goals; mechanics of selecting, developing and refining topics for lecture or laboratory; effective presentation strategies; and creating an active learning environment. Students develop a teaching portfolio containing course syllabi, lecture outlines, and student-ready laboratory materials. Format combines didactic lectures, individual projects, and group discussions and critiques. Course meets for two, 2-hour periods each week. D. Johnson.

**BIO 785. Teacher-Scholar Professional Development I. (1 h)**

Training in professional skills for early-career biological scientists through interactive discussion and exercises. Topics include scientific ethics and professional practices, scientific publishing, and scientific communication.

**BIO 786. Teacher-Scholar Professional Development II. (1 h)**

Training in professional skills for early-career biological scientists through interactive discussion and exercises. Topics include grant preparation and submission, professional bias and discrimination in the sciences, career paths, and job interviewing.

**BIO 789. Research Seminar. (1 h)**

Introduction to scientific presentation skills through active participation in scientific seminars and symposiums, discussion, and exercises. May be repeated for credit.

**BIO 791. Thesis Research I. (1-9 h)**

Staff.

**BIO 792. Thesis Research II. (1-9 h)**

Staff.

**BIO 891. Dissertation Research I. (1-9 h)**

Staff.

**BIO 892. Dissertation Research II. (1-9 h)**

Staff.

## Faculty

Program Director James B. Pease

Chair Erik C. Johnson

Reynolds Professor Susan E. Fahrbach

Andrew Sabin Family Foundation Presidential Chair in Conservation

Biology Miles R. Silman

Charles H. Babcock Chair of Botany William K. Smith

Charles M. Allen Professor of Biology Gloria K. Muday

Professors David J. Anderson, T. Michael Anderson, Miriam A. Ashley-

Ross, James F. Curran, Susan E. Fahrbach, Wayne L. Silver, Clifford W.

Zeyl

Associate Professors Sarah M. Esstman, Ke Reid, James B. Pease, Brian W. Tague

Assistant Professors Regina J. Cordy, Josh Currie, Sheri A.

Floge, Nicholas Kortessis

Teaching Professors A. Daniel Johnson, Pat C.W. Lord

Associate Teaching Professors Diana R. Arnett, Anna Kate Lack

Assistant Teaching Professor Andrew St. James

## Biology, MS

### Master of Science Degree Requirements

The degree requires 30 credit hours; 24 hours of coursework with an average grade of B or above plus 6 hours of thesis research. At least 12 of the 24 hours must be in courses numbered 700 or above. The remaining 12 hours may be in either 600 or 700 level courses. Three courses are



required of all students: BIO 720 (3 hours), BIO 721 (3 hours), and one 3-4 hour Biology course in a practical technique.

For additional degree requirements, see Requirements for Degrees.

## Biology, PhD

### Doctor of Philosophy Degree Requirements

Students have no minimum required number of course hours beyond the three required courses below. Other courses taken are selected in consultation with the Advisory Committee. The degree requires an average grade of B or above, plus a minimum of 6 hours of dissertation research. Three courses are required of all students: BIO 720 (3 hours), BIO 721 (3 hours), and one 3-4 hour Biology course in a practical technique.

For additional degree requirements, see Requirements for Degrees.

## Chemistry (CHM)

### Master of Science, Doctor of Philosophy Overview

The Department of Chemistry offers programs of study leading to the MS and PhD degrees. Opportunities for study in courses and through research are available in analytical, biological, inorganic, organic, and physical chemistry. Research plays a major role in the graduate program. Since the number of graduate students is limited, the research program of the individual student is enhanced by close daily contact with the faculty.

All applicants for graduate work in the department are expected to offer as preparation college level fundamental courses in general, analytical, organic, inorganic, and physical chemistry; physics; and mathematics through one year of calculus. During registration all new graduate students take qualifier examinations covering the fields of analytical, biological, inorganic, organic, and physical chemistry. Programs of study are in part determined by the results of these examinations, and deficiencies are to be remedied during the student's first academic year.

For the MS degree, the student is expected to undertake a broad program of coursework at an advanced level and to complete successfully an original investigation. This investigation must be of the highest quality but necessarily limited in scope. Students who hold assistantships typically spend 2-3 years in residence for the completion of this degree.

For the PhD degree, individual programs are designed for each student under the guidance of the student's faculty adviser and advisory committee and with the approval of the graduate committee.

The University preliminary examination requirement is satisfied by successful completion of a series of written cumulative examinations and by presentation of a research proposals, namely the planned dissertation research project. Each student is to present at least one departmental seminar on the results of his or her dissertation research. The student must present a dissertation and pass an examination on it as prescribed by the Graduate School, and other University requirements must be satisfied.

The chemistry program participates in the Interdisciplinary Graduate Track in Structural and Computational Biophysics. For more information, refer to the pages in this bulletin regarding the program.

The original graduate program, which led to the MS degree, was discontinued in 1949. The present MS program was begun in 1961, the PhD in 1972.

Graduate courses offered by the Department of Chemistry are from the following list. Not all courses are offered every year.

## Programs

- Chemistry, MS
- Chemistry, PhD
- MD/PhD
- PhD/MBA
- Structural and Computational Biophysics (SCB), Certificate

## Courses

### CHM 621. Intermediate Organic Chemistry. (3 h)

Survey of advanced topics in organic chemistry including stereochemistry, conformational analysis, reaction mechanisms, organometallic chemistry and asymmetric synthesis.

### CHM 623. Organic Analysis. (4 h)

The systematic identification of organic compounds.

### CHM 624. Medicinal Chemistry. (3 h)

This course is an introduction to drug targets, mechanism, design, and synthesis. Topics of study include the review of biomolecular structure and function; druggable/targetable enzymes and signaling networks; the replisome- and transcriptome as targets; molecular and cellular pharmacology, molecular mechanism of action at the target level; drug metabolism and pharmacokinetics/pharmacodynamics. A significant portion of the course will be devoted to drug discovery, which includes design, SAR, optimization, synthetic methodologies, computer-assisted drug design; QSAR; prodrugs and "bench-to-bedside", approaches.

### CHM 625. Organic Synthesis. (4 h)

Reagents for and design of synthetic routes to organic molecules.

### CHM 626. Organic Synthesis. (4 h)

Reagents for and design of synthetic routes to organic molecules.

### CHM 634. Chemical Analysis. (3, 4 h)

Theoretical and practical applications of modern methods of chemical analysis. C-CHM 641.

### CHM 641. Physical Chemistry. (3, 4 h)

Fundamentals of physical chemistry.

### CHM 642. Physical Chemistry. (3, 4 h)

Fundamentals of physical chemistry.

### CHM 644. Physical Chemistry. (3, 4 h)

Fundamentals of physical chemistry.

### CHM 648. Electronic Structure Theory and Computational Chemistry. (3 h)

Introduction to quantum mechanical foundation of electronic structure theory and its application to problems in computational chemistry.

### CHM 651. Special Topics in Biochemistry. (3 h)

Fundamentals of biochemistry, with particular emphasis on mechanistic analysis of metabolic pathways, enzymatic activity, and drug action.

**CHM 656. Chemical Spectroscopy. (1.5 h)**

Fundamental aspects of the theory and application of chemical spectroscopy, as found in the areas of analytical, inorganic, organic, and physical chemistry. Emphasis varies. Seven week courses. P-CHM 642 or 644, 661 or POI. May be repeated for credit.

**CHM 657. Chemical Spectroscopy. (1.5 h)**

Fundamental aspects of the theory and application of chemical spectroscopy, as found in the areas of analytical, inorganic, organic, and physical chemistry. Emphasis varies. Seven week courses. P-CHM 642 or 644, 661 or POI. May be repeated for credit.

**CHM 661. Inorganic Chemistry. (3, 4 h)**

Principles and reactions of inorganic chemistry. C-CHM 641.

**CHM 662. Nanochemistry in Energy and Medicine. (3 h)**

New optoelectronic science and technologies, often involving nanotechnologies, photochemistry, and laser are revolutionizing many fields for solar energy conversion has inspired many researchers across different chemical, physical and engineering disciplines. Implementation of new laser-based optical techniques, photochemistry, and nanotechnology concepts have enabled dramatic progress in biomedical science where their potential is still developing rapidly. The goal of this course is to familiarize students with advanced topics in nanomaterials science, nanosynthesis, photochemistry, energy conversion, optoelectronics, and biomedical photonics. In this course nanomaterials structures, nanodevices, and time-resolved (fs-ms) photochemical processes involved in energy conversion and biomedical applications will be discussed. The energy and optoelectronic materials sections cover a broad range of different systems including organic, inorganic molecular materials, polymers, and semiconductors, applied in energy conversion and optoelectronics. The photochemical processes in these optoelectronic systems will be described. This includes light-driven optical, electronic, and chemical processes in a broad range of materials such as organic molecular materials, metal-organic dyes, polymers and semiconductors, that govern the behavior of optoelectronic and photovoltaic devices. Practical applications, device schemes, different generations, and recent progress in the field will be overviewed. The use of ultrafast laser techniques for the photochemical understanding of optoelectronic materials and interfaces will be covered. The application of nanomaterials and laser spectroscopy techniques in biomedical imaging (biomedical photonics) will be discussed. This includes nanodevices such as biosensors, drug delivery/release systems, for biomedical applications. The laser biomedical imaging techniques and optoelectronic approaches for clinically monitoring of early disease states and molecular diagnostics will be discussed.

**CHM 664. Materials Chemistry. (3 h)**

A survey of inorganic-, organic-, bio-, and nano-materials, including hybrid materials and applications.

**CHM 664L. Materials Chemistry Lab. (1 h)**

Synthesis of inorganic and organic based materials and their characterization. Lab-four hours.

**CHM 666. Chemistry and Physics of Solid State Materials. (3 h)**

Design, synthesis, structure, chemical and physical properties, and the application of solid state materials.

**CHM 670. Biochemistry: Macromolecules and Metabolism. (3 h)**

A lecture course introducing the principles of biochemistry, with emphasis on the experimental approaches that elucidated these principles. Major topics include structure, function, and biosynthesis of biological molecules, analysis of enzyme function and activity, bioenergetics, and regulation of metabolic pathways.

**CHM 673. Biochemistry Protein and Nucleic Acid Structure and Function. (3 h)**

Special topics in biochemistry including catalytic mechanisms of enzymes and ribozymes, use of sequence and structure databases, and molecular basis of disease and drug action. P-CHM 670 or POI.

**CHM 676. Biophysical Chemistry. (3 h)**

Introduction to a variety of technologies (e.g. thermochemistry, electrochemistry, spectrometry, and spectroscopy) for determining physical properties of biomolecules. From these properties, the biological function can be more readily understood and leveraged for medical gain. In addition to problem sets, students will have opportunities to hone science communication skills through a writing assignment and oral presentation. P-CHM 670 or POI.

**CHM 681. Chemistry Seminar & Literature. (0.5 h)**

Discussions of contemporary research and introduction to the chemical literature and acquisition of chemical information. May be repeated for credit. Pass/Fail only.

**CHM 682. Chemistry Seminar & Literature. (0.5 h)**

Discussions of contemporary research and introduction to the chemical literature and acquisition of chemical information. May be repeated for credit. Pass/Fail only.

**CHM 701. Advanced Physical Chemistry. (3 h)**

An accelerated survey of classical and statistical thermodynamics, chemical kinetics, and quantum chemistry.

**CHM 711. Directed Study in Chemistry. (1, 2 h)**

Reading and/or lab problems carried out under supervision of a faculty member. P-Permission of graduate committee. May be repeated for credit if topic varies.

**CHM 712. Directed Study in Chemistry. (1, 2 h)**

Reading and/or lab problems carried out under supervision of a faculty member. P-Permission of graduate committee. May be repeated for credit if topic varies.

**CHM 721. Advanced Organic Chemistry. (3 h)**

An accelerated survey of organic reactions and mechanisms.

**CHM 722. Physical Organic Chemistry. (3 h)**

Physical methods for determining structure-activity correlations and reaction.

**CHM 723. Transition-Metal Organic Chemistry. (3 h)**

Introduction to principles of bonding in organometallic chemistry and organometallic reaction mechanisms. Uses of transition-metal complexes in organic synthesis.

**CHM 724. Organic Synthesis. (3 h)**

Modern principles of organic synthesis and retrosynthetic analysis. Stereoselective synthesis of complex natural products.

**CHM 725. Structure Identification in Organic Chemistry. (3 h)**

Theory and use of spectroscopic techniques for structural identification of organic compounds.

**CHM 726. Reactive Intermediates. (3 h)**

Mechanistic and preparative photochemistry. Structure and chemistry of excited states, free radicals, carbenes, and selected ions.

**CHM 735. Spectrochemical Analysis. (3 h)**

Principles of atomic and molecular spectrometric methods; discussion of instrumentation, methodology, and applications.

**CHM 736. Chemical Separations. (3 h)**

Theory and practice of modern separation methods with emphasis on gas and liquid chromatographic techniques.

**CHM 737. Electrochemical Processes. (3 h)**

Principles of electrochemical methods, ionic solutions, and electrochemical kinetics.

**CHM 738. Statistics for Analytical Chemistry. (3 h)**

Practical investigation of the statistical procedures employed in modern analytical chemistry.

**CHM 739. Special Topics in Analytical Chemistry. (3 h)**

The study of topical fields of research in analytical chemistry, with a focus on one or more specialties, such as ICP-MS; fluorescence, LIBS; Raman spectroscopy; nanoparticles in analysis; biosensors; or others. May be repeated for credit if course content differs.

**CHM 740. Drug Discovery, Design, and Development - Molecules to Medicines. (3 h)**

Conducted as a combination of lectures, reading assignments, and student-led discussions. Examines drug discovery and development pathways from target and lead compound identification through metabolic and toxicology studies, clinical trials, FDA approval, and marketing. Regulatory processes, intellectual property, and ethical issues are also considered. Taught by WFU faculty from both the Reynolda and Bowman Gray campuses and colleagues in the pharmaceutical and biotechnology industries, students work in teams to present case studies on the discovery, development, and marketing of recently approved pharmaceuticals. Also listed as BAMB 740. P-Organic chemistry and biochemistry.

**CHM 745. Statistical Thermodynamics. (3 h)**

The application of statistical mechanics to chemistry to understand and predict the thermodynamic properties.

**CHM 746. Chemical Kinetics. (3 h)**

Kinetics and mechanisms of chemical reactions; theories of reaction rates.

**CHM 747. Self-Organization in Nonequilibrium Chemistry. (3 h)**

Study of the phenomena of self-organization, such as oscillations, multistability, propagating waves, and formation of spatial patterns. Kinetic systems with autocatalysis will be studied using bifurcation theory and other methods of non-linear systems.

**CHM 751. Biochemistry of Nucleic Acids. (1.5-3 h)**

Advanced survey of the structure, reactivity, and catalytic properties of RNA and DNA, including modern experimental techniques. Current literature will be presented and critically evaluated.

**CHM 752. Protein Chemistry. (1.5-3 h)**

Advanced survey of protein biochemistry with an emphasis on structural families, enzyme catalytic mechanisms, expression and purification methods, and biophysical and structural experimental techniques.

**CHM 753. Chemical Biology. (3 h)**

Survey of the origins and emerging frontiers of chemical biology, with a focus on the impact of chemical methods on our understanding of biology. Topics include protein design, chemical genetics, and methods in genomics and proteomics research.

**CHM 755. Biomolecular Mass Spectrometry: Fundamentals and Applications. (1.5-3 h)**

Designed for graduate and advanced undergraduates focusing on the principles of mass spectrometry and use in the analysis of small molecules, peptides, proteins, and nucleic acids. Covers sample preparation, data acquisition and interpretation, database searching, and quantification of molecules using a variety of techniques.

**CHM 756. Biomolecular NMR. (1.5 h)**

One half-semester course designed for graduate and advanced undergraduates focusing on NMR of small oligonucleotides and proteins. Covers sample preparation, data acquisition and processing as well as generating solution structures from NMR data. A student should have command of 1D acquisition and processing as well as experience with 2D acquisition and processing before taking this class. All computational exercises will involve some familiarity with UNIX operating system. P-POI.

**CHM 757. Macromolecular Crystallography. (1.5 h)**

This is a one-half semester course designed for graduate and advanced undergraduates focusing on structural characterization of macromolecules utilizing x-ray crystallography. The course will cover sample preparation, diffraction theory, data acquisition and processing as well as structure solution and refinement techniques. P-CHM 356A/656 highly recommended.

**CHM 761. Chemistry of the Main Group Elements. (3 h)**

Principles of bonding, structure, spectroscopy, and reactivity of compounds of the main group elements. Synthesis and applications of organometallic compounds of the main group.

**CHM 762. Coordination Chemistry. (3 h)**

Theory, structure, properties, and selected reaction mechanisms of transition metal complexes. Design and synthesis of ligands and their applications in bioinorganic chemistry.

**CHM 764. Chemical Applications of Group Theory and Symmetry. (3 h)**

Symmetry, group theory, bonding, and spectroscopy. Applications to structure, stereoisomers, multicenter bonding and symmetry-controlled reactions.

**CHM 765. Bioinorganic Chemistry. (3 h)**

The inorganic chemistry of life. a) Metals in biocatalysis: elucidation of structure and function of metalloenzymes by various spectroscopic and molecular biology methods; biomimetic ligands; synthetic models of active sites. b) Metals and toxicity. c) Inorganic compounds in therapy and diagnosis.

**CHM 771. Quantum Chemistry. (3 h)**

The quantum theory and its application to the structure, properties, and interactions of atoms and molecules. Theoretical and computational approaches.

**CHM 791. Thesis Research I. (1-9 h)**

Staff.

**CHM 792. Thesis Research II. (1-9 h)**

Staff.

**CHM 829. Tutorial in Organic Chemistry. (3 h)****CHM 830. Heterocyclic Chemistry. (3 h)**

Survey of the major groups of heterocyclic compounds. Modern applications of heterocycles.

**CHM 831. Principles of Chemical Carcinogenesis. (3 h)**

Fundamental chemistry of carcinogenesis. Survey of the chemistry and structure of carcinogenic compounds. Defense and chemotherapeutics.

**CHM 832. Theoretical Organic Chemistry. (3 h)**

Molecular orbital treatment of structure and reactivity of organic molecules with emphasis on the applications of MO theory in pericyclic and photochemical reactions.

**CHM 833. Advanced Reaction Mechanisms. (3 h)**

Detailed analysis of mechanisms with emphasis on characterization of transition state structure.

**CHM 838. Advances in Analytical Chemistry - Luminescence Spectroscopy. (3 h)**

Instrumentation, methods, and applications of molecular luminescence spectroscopy.

**CHM 839. Tutorial in Analytical Chemistry. (2-3 h)****CHM 843. Tutorial in Advanced Kinetics. (3 h)****CHM 844. Tutorial in Thermodynamics/Statistical Mechanics. (3 h)**  
Kondepudi.**CHM 848. Lasers in Physical Chemistry. (3 h)**

Survey of lasers and their use to study physical-chemical processes. Topics include types of lasers, range of spectral and temporal operation, methods of detection, and application to specific chemical problems.

**CHM 849. Tutorial in Chiral Asymmetry in Chemistry and Physics. (3 h)**  
Chiral asymmetry in nuclear, atomic, and molecular interactions. General group theoretic approach to spontaneous chiral symmetry breaking and the study of specific mechanisms.**CHM 861. Applications of Electrochemistry. (3 h)**

Determination of inorganic and organic reaction mechanisms, electrochemical synthesis, applications to materials science. Noftle.

**CHM 862. Special Topics in Coordination Chemistry. (3 h)**

Selected applications of transition metal chemistry such as in paramagnetic resonance (NMR, EPR), bioinorganic chemistry, and industrial process.

**CHM 863. Crystallography. (3 h)**

Crystal structure determination using powder and single crystal X-ray diffraction.

**CHM 864. Modern Chemical Spectroscopy. (3 h)**

Applications of vibrational, rotational, electronic, and nuclear spectroscopy to current problems in chemistry.

**CHM 865. Metallopharmaceuticals. (3 h)**

Design and mechanism of metal-containing pharmaceuticals in cancer therapy and diagnosis.

**CHM 869. Tutorial in Inorganic Chemistry. (3 h)****CHM 871. Advanced Quantum Chemistry. (3 h)**

Advanced quantum mechanical methods for the investigation of electronic structure and radiation-molecule interaction.

**CHM 879. Tutorial in Theoretical Chemistry. (3 h)****CHM 888. Dependent Proposal. (3 h)**

Course requires a written document detailing a proposed project and an oral exam covering the basic chemical principles, foundation of the plan and experimental design. Pass/Fail. Must be taken by the 6th semester of residence.

**CHM 891. Dissertation Research I. (1-9 h)****CHM 892. Dissertation Research II. (1-9 h)**

## Faculty

Program Director Amanda Jones

Thurmond D. Kitchin Professor of Chemistry and Chair S. Bruce King

John B. White Professor of Chemistry Willie L. Hinze

William L. Poteat Professor of Chemistry Mark E. Welker

Professors Rebecca W. Alexander, Ulrich Bierbach, Christa L. Colyer,

Patricia C. Dos Santos, Bradley T. Jones, Abdessadek Lachgar, Akbar Salam

Associate Professors Lindsay R. Comstock, Amanda C. Jones, Paul B.

Jones, John C. Lukesh

Assistant Professors Elham Ghadiri, Troy A. Stich

## Chemistry, MS

### Master of Science Degree Requirements

The degree requires 30 credit hours; 24 hours of coursework with an average grade of B or above plus 6 hours of thesis research. At least 12 of the 24 hours must be in courses numbered 700 or above. The remaining 12 hours may be in either 600 or 700 level courses. All work must be completed within six years of the date of initial enrollment in the graduate program.

For additional degree requirements, see Requirements for Degrees.

## Chemistry, PhD

### Doctor of Philosophy Degree Requirements

Students have no minimum required number of course hours. Courses taken are selected in consultation with the individual student's Advisory Committee. The degree requires an average grade of B or above, plus a minimum of 6 hours of dissertation research.

For additional degree requirements, see Requirements for Degrees.

## Communication (COM)

### Master of Arts

#### Overview

Students who enroll are expected to have a strong undergraduate background and rationale for graduate work in communication. The program is designed primarily as a PhD preparation program. Most students will require two academic years to complete the program. The graduate program is associated with the Bioethics and Documentary Film graduate programs. Students have the opportunity to take classes in those areas as well. The program began in 1969.

### Programs

#### Master of Arts

- Communication, MA

### Courses

**COM 602. Argumentation Theory. (3 h)**

Examination of argumentation theory and criticism; emphasis on both theoretical issues and social practices. Offered in alternate years. Hazen, Zulick.

**COM 603S. Directing the Forensics Program. (1-3 h)**

A pragmatic study of the methods of directing high school and college forensics. Laboratory work in the High School Debate Workshop. Summer only. Staff.

**COM 604. Freedom of Speech. (3 h)**

Examination of the philosophical and historical traditions, significant cases, and contemporary controversies concerning freedom of expression. Offered in alternate years. Llewellyn, Zick.

**COM 605. Communication and Ethics. (3 h)**

A study of the role of communication in ethical controversies. Hyde.



**COM 607. The Prophetic Mode in American Public Discourse. (3 h)**

Investigates prophetism as a rhetorical act by examining Biblical forms of prophetic speech and investigating how these forms influence American public discourse.

**COM 610. Media Production II. (3 h)**

Students produce advanced media projects over which they assume significant creative control.

**COM 612. Film History to 1945. (3 h)**

Survey of the developments of motion pictures to 1945. Includes lectures, readings, reports, and screenings. Dalton.

**COM 613. Film History since 1945. (3 h)**

Survey of the development of motion pictures from 1946 to present day. Includes lectures, readings, reports, and screenings. Dalton.

**COM 614. Media Effects. (3 h)**

Theoretical approaches to the role of communication in reaching mass audiences and its relationship to other levels of communication. Mitra.

**COM 615. Communication and Technology. (3 h)**

Exploration of how communication technologies influence the social, political, and organizational practices of everyday life. Hyde, Mitra.

**COM 616. Screenwriting. (3 h)**

Introduction to narrative theory as well as examination of the role of the screenwriter in the motion picture industry, the influence of genre on screenwriting, and exploration of nontraditional narrative structures. Students complete an original, feature-length screenplay.

**COM 617. Communication and Popular Culture. (3 h)**

Explores the relationship between contemporary media and popular culture from a cultural studies perspective using examples from media texts. Mitra.

**COM 619. Media Ethics. (3 h)**

Examines historical and contemporary ethical issues in the media professions within the context of selected major ethical theories while covering, among other areas, issues relevant to journalism, advertising, public relations, filmmaking, and media management.

**COM 620. Media Theory and Criticism. (3 h)**

Critical Study of media including a survey of major theoretical frameworks.

**COM 629. The Arab-Israeli-Palestinian Conflict as a Communication Phenomenon. (3 h)**

Explores the evolution of the Arab-Israeli-Palestinian conflict from the end of the Nineteenth Century to its contemporary dynamic as a communication phenomenon; focusing on the narratives of the parties to the conflict as viewed through the lens of extant communication-grounded conflict theory.

**COM 630. Communication and Conflict. (3 h)**

Review of the various theoretical perspectives on conflict and negotiation as well as methods for managing relational conflict. Rogan.

**COM 631. Communication and Terror. (3 h)**

Examines domestic and international terrorism as grounded in extant communication theory, with emphasis on explicating the role that communication plays in current conceptualizations and responses to terrorism.

**COM 634. Narrative Approaches to Entrepreneurship. (3 h)**

Embraces narrative theory to examine how myths, stories, and other tropes form the basis on which we understand entrepreneurship. We will consider diverse and alternative stories as well as the construction of the neoliberal individual in a postmodern epoch.

**COM 635. Survey of Organizational Communication. (3 h)**

Overview of the role of communication in constituting and maintaining the pattern of activities that sustain the modern organization. Llewellyn, McMillan.

**COM 636. Organizational Rhetoric. (3 h)**

Explores the persuasive nature of organizational messages - those exchanged between organizational members and those presented on behalf of the organization as a whole. Offered in alternate years. McMillan.

**COM 637. Rhetoric of Institutions. (3 h)**

A study of the communication practices of institutions as they seek to gain and maintain social legitimacy. Offered in alternate years. Llewellyn.

**COM 638. The Art of Twentieth-Century African-American Rhetoric. (3 h)**

Explores how African Americans have invented a public voice in the twentieth century. Focuses on how artistic cultural expression, in particular, has shaped black public speech. Watts.

**COM 639. Practices of Citizenship. (3 h)**

Explores the history and theory of citizenship as a deliberative practice linked to the rhetorical tradition of communication with an emphasis on participatory and deliberative skills as part of the process in which communities are formed and citizens emerge as members.

**COM 640. Democracy, Slavery, and Sex: Emancipation Discourse from the Founding to the Civil War. (3 h)**

Examines the influence of emancipation movements on American public discourse by reading and analyzing original speeches and documents with emphasis on abolition of slavery and woman's rights.

**COM 641. Class, Race, Sex and War: Emancipation Discourse from the Civil War to the Second Wave of Feminism. (3 h)**

Examines the influence of emancipation movements on American public discourse by reading and analyzing original speeches and documents. Among the movements addressed are labor, civil rights, student protest, and women's liberation.

**COM 642. Political Communication. (3 h)**

Study of electoral communication including candidate and media influences on campaign speeches, debates and advertising. Offered in alternate years. Louden.

**COM 643. Presidential Rhetoric. (3 h)**

Examines theory and practice of speechmaking and mediated presidential communication. Louden.

**COM 646. Sport, Media and Communication. (3 h)**

Examines the role of sport in society, cultural, and institutional practice. Surveys the value represented by interpersonal and mediated messages regarding key dimensions of sport including competition, ethics, gender, and race.

**COM 650. Intercultural Communication. (3 h)**

Introduction to the study of communication phenomena between individuals and groups with different cultural backgrounds. Offered in alternate years. Hazen, Mitra, Rogan.

**COM 651A. Comparative Comm Japan. (1.5, 3 h)**

Comparison of communicative and rhetorical processes in the U.S. with one or more other national cultures with an emphasis on both historical and contemporary phenomena. a) Japan; b) Russia; c) Great Britain; d) Multiple countries. Offered in alternate years. Hazen.

**COM 653. Persuasion. (3 h)**

An examination of theories and research concerning the process of social influence in contemporary society.



**COM 654. International Communication. (3 h)**

In-depth look at the role of mass media in shaping communication between and about cultures using examples from traditional and emerging media systems. Hazen, Mitra.

**COM 655. Health Communication. (3 h)**

Examination of theories, research, and processes of health communication in contemporary society. May be repeated for credit.

**COM 656. Health Comm: Patient-Provider. (3 h)**

Explores contemporary issues related to communication in health care contexts, notably theories and research on patient-provider communication.

**COM 657. Health Comm Campaigns. (3 h)**

Examination of the principles behind designing, implementing, and evaluating a health campaign, including message design and application of media theories for behavior change.

**COM 664. Narrative, Communication, and Health. (3 h)**

Combines theory and research in social science with narrative in multiple forms: film, visual art, memoir, short story, and poetry. Explores the power of story to transform human lives with an emphasis on health. Asks: What is narrative? How does narrative shape who we are? How does narrative inform our understanding and experience of wellness and illness? How does narrative influence health communication in our personal relationships? What role can narrative play in medical education, medical practice, and public health campaigns? Through careful study and reflection, students discover how story can create positive change on a personal, professional, and societal level.

**COM 670. Special Topics. (1-4 h)**

Examination of topics not covered in the regular curriculum. Staff.

**COM 680. Great Teachers. (3 h)**

Intensive study of the ideas of three noted scholars and teachers in the field of communication. Students interact with each teacher during a two- or three-day visit to Wake Forest. Staff.

**COM 719. Theory and Research Design in Communication Science. (3 h)**

Examination of communication science theory with a focus on critiquing and utilizing theory in research, accompanied by an overview of quantitative research design and methodology. Giles, Helme, Mitra, Rogan.

**COM 720. Quantitative Analysis in Communication Science. (3 h)**

Overview of statistical data analysis, interpretation, and reporting for communication research. P-COM 719. Giles, Helme, Mitra, Rogan.

**COM 752. Contemporary Rhetorical and Communication Theory. (3 h)**

Introduction to theory building in human communication and rhetoric, with a survey and evaluation of major contemporary groups of theorists. Approaches studied are those which emphasize the symbol (George Herbert Mead and Kenneth Burke), human relations (Martin Buber), the media (Marshall McLuhan), and systems (Norbert Wiener). Hazen, Watts.

**COM 753. Seminar in Persuasion. (3 h)**

Study of contemporary social science approaches to persuasion theory and research. Influence is examined with interpersonal, social, and mass media contexts. Louden.

**COM 758. Rhetorical Theory. (3 h)**

Introduction to primary texts in the theory of rhetoric including classical theories, dramatism, semiotics, and critical/cultural studies. Llewellyn, McMillan, Watts, Zulick.

**COM 759. Rhetorical Criticism. (3 h)**

The critical application of rhetorical theories aligning with the traditions covered in Communications 758. P-Communications 758.

**COM 763. Proseminar in Communication. (1.5 h)**

Introduction to graduate study in communication. Mitra.

**COM 764. Proseminar in Communication. (1.5 h)**

Introduction to graduate study in communication. Mitra.

**COM 773. Seminar in Interpersonal Communication. (3 h)**

Study of recent research and theoretical developments in dyadic communication. Methodology examined includes conversational analysis, field, and experimental approaches. Rogan.

**COM 774. Research and Theory of Organizational Communication. (3 h)**

Advanced study of theoretical approaches to the role of communication in organizations and empirical application of such theories. Llewellyn, McMillan.

**COM 780. Special Seminar. (1-3 h)**

Intensive study of selected topics in communication. Topics may be drawn from any theory or content area of communication and offer a wide variety of special topics across a two year program. May be repeated for credit for a maximum of 12 hours.

**COM 781. Readings and Research in Speech Communication. (1-3 h)**

Students may receive credit for a special reading project in an area not covered by regular courses or for a special research project not related to the master's thesis. May be repeated for credit for a maximum of 16 hours.

**COM 782. Readings and Research in Speech Communication. (1-3 h)**

Students may receive credit for a special reading project in an area not covered by regular courses or for a special research project not related to the master's thesis. May be repeated for credit for a maximum of 16 hours.

**COM 791. Thesis Research I. (1-9 h)**

Staff.

**COM 792. Thesis Research II. (1-9 h)**

Staff.

## Faculty

Program Director Jarrod Atchison

Chair Steven Giles

Associate Chair Marina Krcmar

Professors Jarrod Atchison, Mary Dalton, Sandra Dickson, Michael David Hazen

Woodrow Hood, Marina Krcmar, Ananda Mitra, Randall G. Rogan

Associate Professors Mollie Canzona, Steven Giles, Rebecca Gill, John

Llewellyn, Alessandra Von Burg, Ron Von Burg, Eric Watts, Margaret D. Zulick

Assistant Professor Phillip Cunningham, Rowie Kirby-Straker

Associate Teaching Professors Polly Black, Nathaniel French

Professor of Practice Justin Green

Assistant Professors of Practice Cagney Gentry, Thomas Southerland

Affiliated Teaching Professors Peter Gilbert, Cara Pilson

Manager of Communication/Media Laboratory Ernest S. Jarrett

## Communication, MA

### Degree Requirements

#### Thesis Option

The degree requires 33 credit hours; 27 hours of coursework with an average grade of B or above plus 6 hours of thesis research. At least 18 of the 27 hours must be in courses numbered 700 or above. The remaining 9 hours may be in either 600 or 700 level courses of which 6 hours may be

in electives outside the department. All work must be completed within six years of the date of initial enrollment in the graduate program.

The program requires a core of courses in research methodology and then allows students to take courses in content areas such as health communication, intercultural communication, interpersonal communication, mass communication, organizational communication, public communication, and rhetorical communication. In addition, the department provides work in communication ethics, communication technologies, and argumentation.

All students must demonstrate competence in a research skill relevant to their thesis and/or professional goals. Most students demonstrate their competency in empirical methodology or critical methodology; however, a foreign language also may be elected.

For additional degree requirements, see Requirements for Degrees.

## Comprehensive Examination Option

Students are required to indicate their desire to take a comprehensive examination by the end of the first year. The degree requires 33 credit hours with an average grade of B or above. At least 24 of the 33 hours must be in courses numbered 700 or above. The remaining 9 hours may be in either 600 or 700 level courses of which 6 hours may be in electives outside the department. All work must be completed within six years of the date of initial enrollment in the graduate program. Students will be required to successfully complete a comprehensive examination at the end of completing the 33 hours of coursework.

For additional degree requirements, see Requirements for Degrees.

# Computer Science (CSC)

## Master of Science

### Overview

The program is designed to accommodate students seeking a terminal MS degree or preparation for entering a PhD program.

In addition to the graduate school admission requirements, students entering the graduate program must have completed computer science coursework in the areas of programming in a modern high-level language, basic computer organization and architecture, data structures and algorithms, and principles of operating systems and networks. Students should also have completed mathematics courses equivalent to differential and integral calculus including infinite series, discrete mathematics, linear algebra, and probability and statistics.

Students in the program may apply to participate in the Data Science Certificate Program. On successful completion of this program, a student will earn an MS degree in computer science with a Certificate in Data Science. Current information about this program and an application link can be accessed on the Web at <https://cs.wfu.edu/data-science-certificate/>

Students in the program may apply to participate in the Interdisciplinary Graduate Track in Structural and Computational Biophysics. On successful completion of this track, a student will earn an MS degree in computer science (thesis option) with a Certificate in Structural and Computational Biophysics.

Current information about the program and links to faculty interests can be accessed on the Web at <http://college.wfu.edu/cs/>.

## Programs

- Computer Science, MS
- Computer Science, BS & MS Five Year Program
- Structural and Computational Biophysics (SCB), Certificate

## Courses

### CSC 611. Computer Architecture. (3 h)

An in-depth study of computer systems and architecture design. Topics include processor design, memory hierarchy, external string devices, interface design, and parallel architectures.

### CSC 621. Database Management Systems. (3 h)

Introduction to large-scale database management systems. Topics include data independence, database models, query languages, security, integrity, and transactions.

### CSC 622. Data Management and Analytics. (3 h)

Management, analysis, and visualization of large-scale data sets. Topics include key-value databases, distributed file systems, map reduce techniques, similarity measures, link analysis, and clustering. P - CSC 621.

### CSC 631. Software Engineering. (3 h)

Study of fundamental topics in software engineering including software processes, agile software development and project management, requirements engineering, system modeling, design patterns and implementation, and software testing. Students practice software engineering principles through team projects.

### CSC 632. Mobile and Pervasive Computing. (3 h)

Study of the fundamental design concepts and software principles underlying mobile and pervasive computing, including mobile interface design, data management, mobile networks, location aware computing, and mobile security. Involves significant programming on modern mobile platforms.

### CSC 633. Principles of Translators for Compilers and Interpreters. (3 h)

Study of techniques for translating high-level programming languages to a target language. Typical target languages include Java bytecode and assembly language. Topics include lexical analysis, parsing, intermediate representatives, language semantics, code generation, and optimization.

### CSC 641. Operating Systems. (3 h)

Study of the different modules that compose a modern operating system. In-depth study of concurrency, processor management, memory management, file management, and security.

### CSC 643. Internet Protocols. (3 h)

Study of wide area connectivity through interconnection networks. Emphasis is on Internet architecture and protocols. Topics include addressing, routing, multi-casting, quality of service, and network security.

### CSC 646. Parallel Computation. (3 h)

Study of techniques for parallel and high performance computing. Topics include an overview of modern high-performance computer design, pipelining, concurrency, data dependency, shared memory, message passing, and graphics processors. Select parallel algorithms and methods for asymptotic scalability analysis are also presented. Assignments may include coding with OpenMP, MPI, and CUDA.

**CSC 647. GPU Programming. (3 h)**

An introduction to general purpose parallel program development on Graphics Processing Units (GPUs). Topics covered will include data parallelism, memory and data locality, parallel algorithm patterns and performance metrics, and application test studies.

**CSC 648. Computer Security. (3 h)**

Introduction to computer security concepts and associated theory. Detailed coverage of the core concepts of access control, cryptography, trusted computing bases, digital signatures, authentication, network security, and secure architectures. Legal issues, security policies, risk management, certification and accreditation are covered in their supporting roles. Students will learn to analyze, design, and build secure systems of moderate complexity.

**CSC 652. Numerical Linear Algebra. (3 h)**

Numerical methods for solving matrix and related problems in science and engineering using a high-level matrix-oriented language such as MATLAB. Topics include systems of linear equations, least squares methods, and eigenvalue computations. Special emphasis is given to applications. Credit is not allowed for both CSC 652 and MTH 626.

**CSC 655. Introduction to Numerical Methods. (3 h)**

An introduction to numerical computations on modern computer architectures; floating point arithmetic and round-off error including programming in a scientific/engineering language such as MATLAB, C or Fortran. Topics include algorithms and computer techniques for the solution of problems such as roots of functions, approximations, integration, systems of linear equations and least squares methods. Credit not allowed for both MTH 655 and CSC 655.

**CSC 661. Digital Media. (3 h)**

Study of the mathematics and algorithms underlying digital sound, image, and video manipulation. Topics may include sampling and quantization, resolution, filters, transforms, data encoding and compression, multimedia files types and transmission, 3D printing, and digital media in multimedia and web programming.

**CSC 663. Computer Graphics. (3 h)**

Study of software and hardware techniques in computer graphics. Topics include line and polygon drawing, hidden line and surface techniques, transformations, and ray tracing.

**CSC 665. Image Processing Fundamentals. (3 h)**

Study of the basic theory and algorithms for image enhancement, restoration, segmentation, and analysis.

**CSC 671. Artificial Intelligence. (3 h)**

An overview of areas of study in artificial intelligence. Topics are chosen from among knowledge representation, formal logic, fuzzy logic, intelligent agents, expert systems, machine learning, robotics, and natural language processing.

**CSC 673. Data Mining. (3 h)**

An overview of data mining methods and algorithms for classification, association analysis, clustering, and anomaly detection. A major focus will be on the implementation of algorithms for and design and construction of solutions to data mining problems. Applications and ethical considerations of data mining in humanities, arts, and healthcare are discussed.

**CSC 674. Machine Learning. (3 h)**

An introduction to concepts and application of machine learning algorithms and techniques, focusing on supervised and unsupervised learning. Students learn the theoretical concepts behind several types of machine learning algorithms and gain practical experience applying them. Algorithms covered could include logistic regression, support vector machines, regularization, dimensional reduction, clustering, and neural networks.

**CSC 675. Neural Networks and Deep Learning. (3 h)**

An introduction to concepts and applications of neural networks and deep learning, a branch of machine learning that uses additional layers of high-level representations of data to maximize performance on a given task. The topics covered may include basic neural networks, deep neural networks, and convolutional and recurrent neural networks. Students learn the theoretical concepts behind several of types of neural network algorithms and gain practical experience applying them.

**CSC 685. Bioinformatics. (3 h)**

Introduction to bioinformatics and computing techniques essential to current biomedical research. Primary focus is gene and protein sequence and structure databases and algorithms for sequence and structure analysis. Emphasizes interdisciplinary interactions and communication. Also listed as PHY 685 and BIO 685.

**CSC 687. Computational Systems Biology. (3 h)**

Introduction of concepts and development of skills for the comprehension of modern systems biology research problems, including both biological and computational aspects. Topics may include microarrays, protein interaction networks, large-scale proteomics experiments, and algorithms and computational approaches for modeling, storing, and analyzing the resulting data sets. Emphasizes interdisciplinary interactions and communication.

**CSC 691. Selected Topics. (1-3 h)**

Topics in computer science that are not studied in regular courses or which further examine topics begun in regular courses. P-POI.

**CSC 693. Individual Study. (1, 2 h)**

Independent study directed by a faculty adviser. By prearrangement.

**CSC 702. Theory of Computation. (3 h)**

Basic theoretical principles of computer science. Topics include the relationship between automata and grammars, Church's thesis, unsolvability, and computational complexity.

**CSC 721. Theory of Algorithms. (3 h)**

Design and analysis of algorithms. Topics may include time and space complexity analysis, divide-and-conquer algorithms, the fast Fourier transform, NP-complete problems, and efficient algorithms for operations on lists, trees, graphs, and matrices.

**CSC 726. Parallel Algorithms. (3 h)**

A thorough, current treatment of parallel processing and supercomputing. Modern high-performance commercial architectures, parallel programming, and various supercomputing applications are discussed. Hands-on experience is emphasized. Students are given access to a variety of machines.

**CSC 731. Compiler Optimization. (3 h)**

Design and implementation of optimizing compilers. Optimization techniques, parallelizing transforms, and comparative examples form the literature. P-CSC 633.

**CSC 743. Topics in Operating Systems. (3 h)**

Issues in operating system development; resource management, queuing theory, concurrent processing, and languages for operating system development. P-CSC 641.

**CSC 753. Nonlinear Optimization. (3 h)**

The problem of finding global minimums of functions is addressed in the context of problems in which many local minima exist. Numerical techniques are emphasized, including gradient descent and quasi-Newton methods. Current literature is examined and a comparison made of various techniques for both unconstrained and constrained optimization problems. Credit not allowed for both CSC 753 and MTH 753. P-CSC 655 or MTH 655.

**CSC 754. Numerical Methods for Partial Differential Equations. (3 h)**

Numerical techniques for solving partial differential equations (including elliptic, parabolic, and hyperbolic) are studied along with applications to science and engineering. Theoretical foundations are described, and emphasis is on algorithm design and implementation using either C, FORTRAN or MATLAB. Also listed as MTH 754. P-CSC 655 or MTH 655.

**CSC 765. Image Processing. (3 h)**

Advanced techniques in image processing including image formation and corruption models, digitization, Fourier domain methods, enhancement, restoration, and tomographic reconstruction. P-CSC 721.

**CSC 766. Pattern Recognition. (3 h)**

Study of statistical pattern recognition techniques and computer-based methods for decision-making, including discriminant functions, feature extraction, and classification strategies. Emphasis is on applications to medical image analysis. P-POI.

**CSC 767. Computer Vision. (3 h)**

Techniques for extracting features from images: optimal thresholding, 2D and 3D feature measurement, graph isomorphism and graph matching methods. P-CSC 766.

**CSC 775. Neural Networks. (3 h)**

Design of artificial neural networks. Introduction to the relevant neurophysiology, feedforward networks, recurrent networks, and applications to pattern recognition and optimization.

**CSC 779. Topics in Artificial Intelligence. (3 h)**

Advanced topics in artificial intelligence. Individual projects are assigned. P-CSC 671.

**CSC 781. Computer Science Seminar. (0 h)**

Discussions of contemporary research. No credit.

**CSC 790. Advanced Topics in Computer Science. (3 h)**

Advanced topics of current interest in computer science not covered by existing courses. P-POI.

**CSC 791. Thesis Research I. (1-9 h)**

May be repeated for a maximum of 18 hours each. Satisfactory/Unsatisfactory.

**CSC 792. Thesis Research II. (1-9 h)**

May be repeated for a maximum of 18 hours each. Satisfactory/Unsatisfactory.

**CSC 795. Project. (3 h)**

Satisfactory/Unsatisfactory.

**CSC 796. Internship. (1-6 h)**

Provides students an opportunity to integrate computer science theory and practice by working in a supervised and professional setting. The course is limited to those seeking the fifth-year Master's in computer science and approval must be obtained by the Computer Science Graduate faculty prior to enrollment. Credit hours may be adjusted based on the length of the internship. May be repeated. Satisfactory/Unsatisfactory. P-CSC 631 (admission to the 5th year program).

## Faculty

Program Director Samuel S. Cho

Chair William H. Turkett

Emeritus Reynolds Professor Robert J. Plemmons

Emeritus Professors Jennifer J. Burg, David J. John, Stan J. Thomas

Professors Errin W. Fulp, V. Paúl Pauca, Peter Santago

Associate Professors Grey Ballard, Daniel A. Cañas, Samuel S. Cho, William H. Turkett Jr.

Assistant Professors Sarra Alqahtani, Minghan Chen, Aditya

Devarakonda, Natalia Khuri, Michael Xueyuan Vanbastelaer

Wright Presidential Chair, Roy Doyle

Adjunct Professors Rob Robless, Sami Khuri

## Computer Science, MS

### Degree Requirements

Completion of the degree requirements may be fulfilled in one of three ways: thesis, project, and coursework-only. The degree with a thesis requires thirty semester hours, including six hours of thesis research (CSC 791, CSC 792) and a successfully completed thesis. The degree with a project requires thirty-six semester hours, including three hours of project research (CSC 795) and a successfully completed project. The coursework-only degree requires thirty-six semester hours of coursework.

The following courses are identified as the core courses for the degree and are required of all students:

Code	Title	Hours
CSC 631	Software Engineering	3
CSC 641	Operating Systems	3
CSC 702	Theory of Computation	3
CSC 721	Theory of Algorithms	3

The remaining hours are then selected from graduate computer science courses. For the thesis, project, and coursework-only options, at least nine of the remaining hours must be selected from 700-level courses other than:

Code	Title	Hours
CSC 791	Thesis Research I	1-9
CSC 792	Thesis Research II	1-9
CSC 795	Project	3

Graduate courses may be taken outside of the department to fulfill requirements with prior approval from the graduate program director; however, no more than six such hours may count toward the degree.

For additional degree requirements, see Requirements for Degrees.

## Counseling (CNS)

### Master of Arts in Counseling Master of Arts in Human Services

#### Overview

The Master of Arts in Counseling degree is awarded to candidates who successfully complete a minimum of sixty semester hours in a planned and directed program of study. The program consists of a common core of courses to provide knowledge in eight areas: human growth and



development, social and cultural foundations, helping relationships, group work, career and lifestyle development, appraisal, research and program evaluation, and professional orientation. The program also supplies clinical instruction with practicum and internship experiences. In addition, students must select a program specialty area-school counseling, clinical mental health counseling, or addiction counseling-in which they complete their internships and take courses that assure at least entry-level competence.

Continuance in the program and admission to candidacy are based on success in academic courses and on personal, ethical, and performance considerations.

Graduates are eligible to sit for the National Counselor examination. Those who complete the school counseling program are eligible to apply for licensure with the public schools of North Carolina.

### Admission to the Program

Admissions decisions are based on consideration of a combination of criteria: college grade-point average, recommendations, professional commitment, work or volunteer experience in the human services field, and suitability for the profession. Applicants being considered for admission are required to have a personal interview with a program representative. Candidates for the counseling program are not required to have a specific undergraduate major or minor.

### Criminal Background Check

Acceptance to the program will be contingent on the successful completion of a criminal background check. The background check is standardized and mandatory for all students. Any student who has a criminal offense documented through this procedure will have to address this on a case-by-case basis with the Program Director and Department Chair. Areas of concern may include, but are not limited to, felony convictions, especially those involving harm to others, theft or fraud convictions, and patterns of misdemeanors other than moving traffic violations.

### On Campus and Online Programs

There are three counseling tracks offered through the Department of Counseling: the school counseling track, the clinical mental health counseling track, and the addiction counseling track. Each is offered on campus and via online delivery systems. The campus programs are for full-time students. Applications are accepted for entry into the on-campus programs for the fall semester only. The online programs are for part-time students. Applications are accepted for entry in the online programs for the fall, spring, and summer semesters. Course and admission requirements for on-campus and online students are the same.

### Master of Arts in Counseling - School Counseling

The school counseling track provides prospective school counselors with the knowledge, skills, and competence necessary to establish and conduct effective developmental guidance and counseling programs in schools, kindergarten through the 12th grade. The course of study which leads to a license in school counseling in North Carolina is based on the requirements of the North Carolina Department of Public Instruction and is accredited by the Council on Accreditation of Counseling and Related Educational Programs (CACREP). School counseling students are not required to hold a teacher's license to enter the program.

### Master of Arts in Counseling - Clinical Mental Health

In the clinical mental health track, students are prepared for counseling in a wide variety of community settings and agencies. The course of study

is accredited by the Council on Accreditation of Counseling and Related Educational Programs (CACREP).

### Master of Arts in Counseling - Addiction

In the addiction track, students are prepared for counseling in addiction recovery settings and in a variety of community settings and agencies. The course of study is not yet accredited by the Council on Accreditation of Counseling and Related Educational Programs (CACREP).

### Master of Arts in Human Services (Online Only)

The Master of Arts in Human Services degree is offered by the Department of Counseling via online delivery only. The degree is awarded to candidates who successfully complete a minimum of 39 semester hours in a planned and directed program of study. The program consists of 30 hours of courses in common with the Master's in Counseling program, an additional 6 hours of specialized study in human services administration and programming, and 3 hours of field experience. Applications are not currently being accepted for entry in this program.

### Residency Requirements – Online Only

Two Thursday night through Sunday at noon residency experiences are required for online classroom students. These face-to-face sessions will allow faculty to engage in competency and readiness evaluations as well as to plan and evaluate practicum and internship arrangements. Students will also complete the experiential group requirements at this time. Dates will be announced six months in advance.

## Programs

- Counseling, MA
- Counseling, MDiv/MA

## Courses

*All courses listed are open to counseling students only unless otherwise noted.*

#### CNS 721. Research and Statistical Analysis in Counseling. (3 h)

Qualitative and quantitative research methods. Analysis and evidence-based evaluation of research-based literature in the counseling field. Grant writing. Program evaluation. Descriptive, Inferential, parametric and non parametric statistical procedures involved in research.

#### CNS 723. Statistical Analysis for the Helping Professions. (3 h)

Descriptive and inferential (parametric and nonparametric) statistical procedures involved in research. Computer methods for statistical analysis. Counseling students only.

#### CNS 736. Appraisal Procedures for Counselors. (3 h)

Appraisal, assessment, and diagnosis of personality, emotional, intellectual, and learning characteristics and disorders of clients in schools, colleges, and community human service agencies. Use of tests in counseling as an adjunct to clinical impressions.

#### CNS 737. Basic Counseling Skills and Techniques. (3 h)

Basic communication skills, helping relationships, and strategies for personal change. Issues and ethics in counseling.

#### CNS 738A. Counseling Practicum - School. (3 h)

Supervised experience for the development of individual and group counseling skills under individual and group supervision in a school or clinical mental health agency. Involvement in direct service work and activities similar to those of regularly employed professional staff. P - CNS 737.



**CNS 738B. Counseling Practicum - Clinical Mental Health. (3 h)**

Supervised experience for the development of individual and group counseling skills under individual and group supervision in a school or clinical mental health agency. Involvement in direct service work and activities similar to those of regularly employed professional staff. Henderson, Newsome. P - CNS 737.

**CNS 739. Advanced Counseling Skills and Crisis Management. (3 h)**

Topics covered will be advanced and specialized counseling interventions including crisis intervention, suicide prevention, and emergency management models. Students will be required to demonstrate appropriate skill level. P-CNS 737.

**CNS 740. Professional Orientation to Counseling. (3 h)**

Covers the history, roles, organizational structures, ethics, standards, specializations, and credentialing in the profession of counseling. Public policy processes and contemporary issues are also considered.

**CNS 741. Theories and Models of Counseling. (3 h)**

Study of theories and approaches to professional counseling: psychoanalytic (Freud, Adler, Jung), person-centered (Rogers), existential (May, Frankl), behavioral (Skinner, Glasser), cognitive/rational (Ellis), holistic/systemic, eclectic. Professional orientation, issues, ethics, cultural pluralism, and trends in counseling.

**CNS 742. Group Procedures in Counseling. (3 h)**

An experiential and conceptual exploration of the psychological dynamics and interpersonal communication of small groups, including group structure, leadership models, group process and practice, stages of group development, group techniques, and ethical principles.

**CNS 743. Career Development and Counseling. (3 h)**

Vocational development throughout life; psychological aspects of work; occupational structure and the classifications of occupational literature; theories of vocational choice and their implications for career counseling.

**CNS 744A. Counseling Internship I A. School. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. Case review. P-CNS 738.

**CNS 744B. Counseling Internship I: Clinical Mental Health. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. Case review. P-CNS 738.

**CNS 744C. Counseling Internship I: Addiction. (2, 3 h)**

Internship is a supervised counseling experience in a school, college, addictions recovery setting, community agency, or medical center in which students provide direct counseling services and engage in activities relevant to their counseling specialty area. P-CNS 738.

**CNS 745A. Counseling Internship II A. School. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. P-CNS 744: Internship I.

**CNS 745B. Counseling Internship II: Clinical Mental Health. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. P-CNS 744: Internship I.

**CNS 745C. Counseling Internship II: Addiction. (2, 3 h)**

Internship is a supervised counseling experience in a school, college, addictions recovery setting, community agency, or medical center in which students provide direct counseling services and engage in activities relevant to their counseling specialty area. P-CNS 744.

**CNS 746. Counseling Children. (3 h)**

Theory and practice of counseling with children in schools and community agencies. Elementary school counseling; models, methods, and materials. Counseling children with special emotional, learning, psychological, or behavioral concerns.

**CNS 747. Cultures and Counseling. (3 h)**

The influence of culture in human development and in counseling relationships. A study of personal and ethnic diversity and commonality.

**CNS 748. Life Span Development: Implications for Counseling. (3 h)**

Examination of major theories and principles of human development across the life span, including physical, psychological, intellectual, social, and moral perspectives.

**CNS 749. School Guidance and Counseling. (3 h)**

The organization and management of comprehensive school guidance and counseling programs. Individual and group counseling, consultation, coordination, and collaboration in student services in schools. Program development in elementary, middle, and secondary schools.

**CNS 750. The Vienna Theorists-Freud, Adler, Moreno and Frankl. (3 h)**

Examination of the original writings of four of the leading theorists of modern counseling, which is enhanced by a visit to the city in which they initially formulated their clinical ideas. Students read and discuss several original writings of each practitioner-Freud, Adler, Moreno, and Frankl-prior to and during a two-week stay in the Wake Forest University Flow House in Vienna during which they visit relevant historical sites and institutes.

**CNS 752. Human Services Administration. (3 h)**

This course will focus on the knowledge, theory, and skills used in the administrative aspects of the human services delivery systems including organizational management, supervision, strategic planning, budgeting, grant and contract negotiation, and legal/regulatory issues. The course also covers managing the professional development of staff, recruiting and managing volunteers, and advocacy techniques. P-CNS 737, 741, 742.

**CNS 753. Human Services Program Planning and Evaluation. (3 h)**

This course will focus on the range and characteristics of human services delivery systems and major conceptual models used to integrate prevention, maintenance, intervention, and rehabilitation and healthy functioning. The course includes the history of human services as well as the systematic analysis of service needs. The course also covers the selection of strategies or interventions and the evaluation of outcomes. P-CNS 741, CNS 737 and CNS 742.

**CNS 754. Human Services Field Experience. (1-3 h)**

Field experience is a learning experience in a human services delivery organization in which the student will complete 350 hours of on-site volunteer work with an agency. Students, university supervisors, and on-site partners will determine the student's role, activities, outcomes, and instructional needs based on placement site possibilities. P-CNS 752 and CNS 753.

**CNS 755A. Counseling Internship III A. School. (2 h)****CNS 755B. Counseling Internship III B. Clinical Mental Health. (2 h)****CNS 755C. Counseling Internship III: Addiction. (2 h)**

Internship is a supervised counseling experience in a school, college, addictions recovery setting, community agency, or medical center in which students provide direct counseling services and engage in activities relevant to their counseling specialty area. P-CNS 745C.

**CNS 760. Issues in School Counseling. (3 h)**

This course is designed to allow students to investigate current issues related to the practice of school counseling. The emphasis will be on identifying appropriate prevention responses to these issues. Counseling students only.

**CNS 762. Case Formulation and Treatment Planning in Clinical Mental Health Counseling. (3 h)**

Examines case conceptualization (e.g., assessment, diagnosis) and treatment planning in clinical mental health counseling settings as well as contemporary issues related to clinical mental health counseling. Explores ethical and professional considerations for counselors' interfacing with the legal system and in integrated behavioral health settings.

**CNS 763. Specialized Study in Counseling. (1-3 h)**

"Exploration of special topics or areas of practice in the field of counseling. a. School Guidance and Counseling h. Rehabilitation b. College Student Development Services Counseling i. Adult Development/ Aging c. Mental Health Counseling j. Religious Counseling d. Marriage and Family Counseling k. Health Counseling e. Business/Industry Counseling l. Multicultural Counseling f. Correctional Counseling m. Holistic Counseling g. Career Counseling n. Tests, Measurements and Interpretation .

**CNS 764. Creative Arts in Counseling. (1-3 h)**

Examines history, theories, processes, and techniques of using the creative arts in counseling with clients throughout the life span. Particular attention is given to the visual and verbal arts, such as drawing, imagery, photography, cartooning, cinema, movement, dance, literature, drama, and music.

**CNS 765. Addiction Counseling. (3 h)**

Introduces the concepts of chemical dependency, counseling procedures and techniques, and treatment considerations. The student has opportunities to apply models of chemical dependency counseling to hypothetical situations at various stages of substance use.

**CNS 766. Crisis Prevention and Response. (3 h)**

This course will present counseling approaches which effectively address crises. The course will examine the characteristics and impact of trauma and crisis and potential neurobiological responses. Students will gain knowledge and skills useful in theory-based prevention and response models and community-based strategies for a diverse society. Students will also explore counseling and human service contexts for application of assessment and intervention approaches in addressing specific crisis situations.

**CNS 767. Human Sexuality. (3 h)**

This course is designed for counseling students whose work will bring them into contact with clients experiencing problems and concerns with their sexuality. The course is designed to develop: a) students' knowledge base related to human sexuality, b) an understanding of the varied sexuality issues which may be encountered in professional counseling practice, c) students' skills in assessment and intervention skills with sexuality issues and d) increased awareness of one's personal perceptions, attitudes and affect related to sexuality issues. Course participants will become more effective in identifying, assessing, and intervening with human sexuality related counseling issues.

**CNS 768. PsychoPharmacology for Counselors. (3 h)**

Students will learn the basic principles of psychopharmacology, pharmacokinetics, and neurobiology as they pertain to their role as a professional counselor. They will learn how psychopharmacological drugs are classified, prescribed, and managed. The information presented in this course will prepare student to function as knowledgeable members of multi-disciplinary treatment teams serving clients seeking counseling services. Finally, students will gain knowledge about the important and complex ethical and legal issues that surround the use of psychopharmacological drugs.

**CNS 769. Advanced Counseling in a Diverse Society. (3 h)**

An advanced investigation into the complex elements of racism, social justice, and advocacy in the counseling relationship and beyond. An exploration of systemic disparities (ex. food deserts and health care) as well as anti-racist perspectives and actions in a diverse society, further promoting an in-depth personal and professional examination of implicit and explicit biases.

**CNS 770. Classification of Mental and Emotional Disorders. (3 h)**

Analyzes healthy and unhealthy personality, as well as developmental and situational problems in adjustment. Studies the classification of mental disorders, as defined by the American Psychiatric Association in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders. Examines appropriate ways in which diagnosis can be utilized by counselors to explore personality and systemic interventions for career, educational, and relationship concerns.

**CNS 771. Clinical Mental Health Counseling. (3 h)**

History, philosophy, organization, management, and delivery of counseling services in various clinical mental health settings. Preventative, developmental, and remedial strategies for use with various populations.

**CNS 772. Marriage and Family Systems. (3 h)**

Study of the institutions of marriage and the family from a general systems perspective. Exploration of how changes in developmental and situational aspects of the family life cycle influence individuals within the systems of marriage and the family. Both horizontal and vertical dimensions of change are focused on through the use of genograms. Different forms of family lifestyles, such as dual career, single parent, and blended are covered.

**CNS 773. Family Counseling. (3 h)**

Examination of the philosophy and goals of seven major theories of family counseling (Bowenian, Adlerian, psychodynamic, experiential/ humanistic, behavioral, structural, strategic) as well as the development of the profession of family counseling from a historical and current trends perspective. Differences between family counseling and individual/group counseling are highlighted and ethical/legal considerations for working with family units are stressed. Techniques associated with theories are demonstrated through video and play simulations. Research methods for gathering data on families are highlighted.

**CNS 774. Marriage Counseling. (3 h)**

Study of the philosophy and goals of six main theories of marriage counseling (psychoanalytic, social learning, Bowenian, structural-strategic, experiential/humanistic, and rational-emotive) and the techniques associated with each. Historical and current trends associated with the field of marriage counseling are explored, along with related issues such as premarital counseling, family-of-origin influences within marriage, and widowhood. Appropriate marriage assessment instruments, research methods, and ethical/legal questions involved in marriages counseling are addressed.

**CNS 775. Marital and Family Health and Dysfunctionality. (3 h)**

Examines system and individual dynamics associated with marital and family health and dysfunctionality. Longitudinal research on factors connected with healthy, long-term marriages and functional family life are explored. Interactive patterns that lead to such marital and family dysfunctionality as spouse and child abuse, anorexia nervosa, addictive disorders, and dependency are examined.

**CNS 776. Assessment and Treatment Planning in Addictions. (3 h)**

Examines screening, assessment, and diagnosis of addiction and co-occurring disorders. P-CNS 765, POI or a master's degree in the counseling field.

**CNS 777. Addictions Counseling Skills. (3 h)**

Explores the development of skills for individual and group counseling with persons diagnosed with addictive and co-occurring disorders.

**CNS 778. Addiction and the Family. (3 h)**

Explores the influence of addiction on family systems. Covers knowledge and skills for assisting individuals and families with substance abuse and addiction. P-CNS 765, POI or a master's degree in the counseling field.

**CNS 780. Professional, Ethical and Legal Issues in Counseling. (2 h)**

Provides an overview of the critical professional issues in counseling with emphasis on current ethical, legal, and values-related questions and the relationship of these issues to the counselor's role in training, supervision, consultation, appraisal, and research. P-Advanced graduate standing or permission of instructor.

**CNS 782. Developmental Counseling Psychology. (3 h)**

Theoretical, research, and methodological aspects of a developmental/holistic/systems framework for counseling. Integration and application of major theories and approaches to counseling.

**CNS 786. Consultation and Program Development in Counseling. (2 h)**

Consultation theory and process. Consultation with families, schools, colleges, and community agencies. Models for facilitating change in human systems.

**CNS 790. Professional Identity Capstone Course. (2 h)**

Review and application of counseling skills, settings, practice parameters and other current issues necessary to integrate students into the profession of counseling. P-CNS 744.

## Faculty

Program Director and Professor Mark B. Scholl

Online Program Director J. Robert Nations

Associate Online Program Directors; Allison M. Forti, Seth C. W. Hayden

Professor Emeriti Samuel T. Gladding, Donna A. Henderson, Deborah W.

Newsome

Professor José A. Villalba

Associate Professors Erin E. Binkley, Jamie E. Crockett, Seth C.W. Hayden,

Nathaniel N. Ivers, David A. Johnson, Jennifer, L. Rogers,

Assistant Professors Donald R. Casares, Isabell C. Farrell, Michelle R.

Ghoston, Jasmine Graham, Amy L. Grybush,

Associate Teaching Professors Tammy H. Cashwell, Philip B. Clarke, Allison M. Forti

Assistant Teaching Professors Nikki C. Elston, Sharon B. Jones, Sarah A. Moore, J. Robert Nations, Sandra L. Penn, Kenneth W. Simington, George Stoupas, Brittany E. Wyche

Clinical Program Manager Carla Emerson

## Counseling, MA Degree Requirements

The Master of Arts degree in Counseling is awarded to candidates who successfully complete a minimum of 60 hours in a planned and directed program of study. Courses required by the program cannot be taken as Pass/Fail.

For additional degree requirements, see Requirements for Degrees.

## Documentary Film Program (DOC)

### Master of Fine Arts Master of Arts

#### Overview

The Documentary Film Program offers an MFA degree through a two-year course of study and an MA through a one-year course of study. The program admits students on a full-time basis only.

The comprehensive curriculum is designed not only to equip students with the skill set needed to produce professional quality films, but also to develop a respect for the traditions of the craft, an understanding of the economic aspects of the industry, and the intellectual discipline required to translate a creative vision into film. While this is a skills intensive curriculum, it is also a plan of study that emphasizes the social awareness elements that lie at the heart of the documentary tradition. The faculty believes it is imperative to impart to students the power and responsibility documentary filmmakers have in a world increasingly dependent on the moving image to educate, inform, and affect change.

## Programs

- Documentary Film, MA
- Documentary Film, MFA

## Courses

**DOC 701. Internship I. (1.5 h)**

Internships may be taken for 1.5 credits on a pass/fail basis when approved by faculty members. These internships provide students the opportunity for experiential learning at production houses, television networks, public television stations, and at other facilities deemed useful as well as with independent producers.

**DOC 702. Internship II. (1.5 h)**

Internships may be taken for 1.5 credits on a pass/fail basis when approved by faculty members. These internships provide students the opportunity for experiential learning at production houses, television networks, public television stations and at other facilities deemed useful as well as with independent producers.

**DOC 703. Internship. (3 h)**

Internships provide students the opportunity for experiential learning at production houses, television networks, public television stations, and at other facilities deemed useful as well as with independent producers.

**DOC 713. Documentary Storytelling I. (3 h)**

The course provides an introduction to the fundamental theory and craft of non-fiction visual storytelling and familiarizes students with concepts such as drama, structure, story development and visual style.

**DOC 715. Cinematography and Sound. (3 h)**

Through a combination of lectures, film screening and hands-on demonstrations, this course will familiarize students with the basics of documentary shooting, lighting, and sound gathering.

**DOC 717. Fundamentals of Documentary Editing. (1.5 h)**

Through a combination of lectures, film screenings, hands-on demonstrations, and assignments, this course familiarizes students with the basics of documentary editing.

**DOC 718. Social Media and Marketing in the Creative Arts. (3 h)**

This course examines how social media is changing not just what content creators produce, but also the way creators engage with their audience by using social media and marketing techniques to drive attention to their work and enhance their overall brand. Through guest lectures, case studies and hands-on production - students will study each social media platform, learn how it's being used and see how it can be leveraged to enhance all aspects of the creative arts. Course may be offered on campus or online.

**DOC 722. Documentary Storytelling II. (3 h)**

This course teaches students how to research, conceptualize and develop a non-fiction story idea. Students receive instruction on effective research strategies, idea development, production planning, and proposal writing and pitching. P-DOC 713, 715, 717.

**DOC 724. Advanced Story Editing. (3 h)**

This course builds upon the storytelling skills learned in the Foundations of Story Editing course and complements the production techniques learned in Cinematography and Sound. Special emphasis will be placed on the aesthetics of editing and other post-production techniques. P-DOC 717.

**DOC 726. Advanced Sports Storytelling. (3 h)**

Introduces students to both the theoretical and technical aspects of non-fiction sports storytelling. Students will examine both historical and contemporary examples of sports storytelling, including various styles of documentaries, branded and commercial content, social media and web-based content, and podcasts. P-DOC 717.

**DOC 728. Documentary History. (3 h)**

Acquaints students with the historical development of documentary film from its roots in 19th-century art forms to the present. Examines various styles and techniques of documentary and analyzes the contribution of the documentary as a persuasive means of communication to achieve social and political goals. Open to all Wake Forest University graduate students with POI.

**DOC 730. Sports, Culture and Society. (3 h)**

Through films, case studies and discussions with sports professionals, media industry leaders and scholars we will look at how sports helps frame our common understanding of society's biggest social issues including race, gender, and human rights.

**DOC 733. The Business of Sports Media. (3 h)**

Students will get a high level understanding of the business of sports media and how the digital revolution is changing the game for content creators, leagues and teams. Through lectures, current periodicals, projects and guest speakers, students will learn to look beyond the final score and better understand the entire sports communication ecosystem.

**DOC 734. Adv Cinematography & Sound. (3 h)**

This course provides instruction in advanced cinematography, sound, and lighting techniques.

**DOC 735. Documentary Law and Ethics. (3 h)**

Provides students with the opportunity to explore the ethical issues that can arise in documentary filmmaking. The discussion points will evolve from the in-depth examination of a select group of films and directors.

**DOC 737. Documentary Storytelling III. (3 h)**

The class focuses on advanced principles of writing, producing, directing and editing documentary films. Theoretical, aesthetic, technical and ethical aspects of the creative non-fiction storytelling process will be the focus. The class format will be a combination of theory and practice as it relates to the dramaturgical process of filmmaking. P-DOC 713, 715, 717, 728, 722, 750.

**DOC 746. Documentary Storytelling IV. (3 h)**

The course combines lectures, screenings, and exercises to build a technical and aesthetic foundation in digital post-production. Special emphasis will be placed on advanced visual storytelling techniques—including continuity, pacing, character development and dramatic structure. Students will also explore various distribution strategies and transmedia applications P-DOC 713, 715, 717, 728, 722, 724, 750, 735, 737, 748.

**DOC 748. Creative Thesis Project. (1-9 h)**

Students will work under faculty supervision on their creative thesis projects.

**DOC 750. The Imagination Project. (3 h)**

Students will produce short films, digital study guides or E-books and/or other types of multimedia materials on important social, political, cultural and economic issues. The course, structured around digital media projects, provides opportunities for students to immerse themselves in a single topic and interact with scholars from various disciplines. The topics will vary each year. P-DOC 713, 715, 717.

**DOC 751. Professional Seminar: Teaching in Higher Education. (3 h)**

Provides an understanding of pedagogical practices and major theories of curriculum and a foundation for students interested in pursuing careers in academe.

**DOC 753. Individual Study. (1-3 h)**

For students who wish to perform independent study in a cognate area with a professor from the Documentary Film Program or another program. May be repeated for credit for a maximum of 9 hours.

**DOC 755. Professional Seminar: Entrepreneurial Filmmaking. (3 h)**

This course will provide students with the knowledge and skills to help them create their own creative arts venture and help them design and teach a course in entrepreneurship in the creative arts, particularly digital media and non-fiction filmmaking.

**DOC 764. Individual Study. (1-3 h)**

For students who wish to perform independent study in a cognate area with a professor from the Documentary Film Program or another program. May be repeated for credit for a maximum of 9 hours.

**DOC 766. Teaching Practicum. (3 h)**

Students work closely with Documentary Film program faculty during the teaching of an undergraduate course. Students participate in the design and development of course material and observe classroom and organizational aspects of teaching in an apprenticeship role.



**DOC 780. Special Topics. (3 h)**

Intensive study of selected topics in documentary film. Topics may be drawn from any content area of documentary studies and production. May be repeated for credit for a maximum of 6 hours.

**Faculty**

Program Director Cara Pilson

Professor Sandra Dickson

Professors of Practice Peter Gilbert, Christopher Sheridan

Associate Program Director and Associate Teaching Professor

Christopher Zaluski

**Documentary Film, MA****Degree Requirements**

The MA requires 33 hours. Students take required courses in writing, directing, and producing with an emphasis on sports storytelling. In addition, they explore the social, political, and cultural impacts of sports as well as the business of sports media. All students develop and produce a short thesis film.

For additional degree requirements, see Requirements for Degrees.

**Documentary Film, MFA****Degree Requirements**

The MFA requires 48 hours. The first year of the program is dedicated to documentary core courses such as research, theory, writing, directing, and producing and the development of the thesis film. The second year builds on the foundation of the first year of study with courses in entrepreneurship and academic career preparation. Students may also take elective courses in an area of special interest.

For additional degree requirements, see Requirements for Degrees.

**Education (EDU)****Master of Arts in Education****Overview**

The Department of Education offers professional graduate programs in teacher education. The goals and requirements for these programs are available in the Licensure Office of the department. Candidates for the Master of Arts in Education degree seeking a North Carolina Class M Teacher's License must possess a North Carolina Class A Teacher's License or its equivalent. Master Teacher Fellows are not expected to hold a teacher's license when they enter the program.

**Initial Licensure Program**

Master Teacher Fellows (MTF). This program involves coursework and fieldwork, including one semester of full-time student teaching. It is offered at the Secondary (grades 9-12) and Elementary (grades K-6) levels. For secondary education, students must have a bachelor's degree (or equivalent coursework) in one of our content areas: English, Mathematics, Science (Biology, Chemistry, or Physics), or Social Studies. The secondary program lasts thirteen months, and the elementary program lasts 1.5 years.

**Advanced Licensure Program**

Master Teacher Associates (MTA). This program provides an extension of the candidate's current teaching license. It is also thirteen months and

it includes coursework and other requirements to foster the candidate's further development in content, pedagogy, and leadership. It is offered for either Elementary or Secondary levels.

**Non-Licensure Program**

Master of Educational Studies (MES). This program is for students who are interested in education but choose not to seek a teaching license.

**Certificate Program**

The Curriculum, Instruction, and Assessment Certificate is appropriate for those with elementary, secondary, or higher education interest.

**Programs**

- Education, MAED
- Education, MDiv/MAED
- Curriculum, Instruction, and Assessment, Certificate

**Courses****EDU 601. Microcomputer and Audiovisual Literacy. (3 h)**

Introduction to microcomputers for educators and other users, emphasizing familiarity with computers, use and evaluation of software, and elementary programming skills. Experience with audiovisual materials and techniques is included.

**EDU 602. Production of Instructional Materials. (3 h)**

Methods of producing instructional materials and other technological techniques. P-EDU 601 and senior or graduate standing.

**EDU 603. History of Western Education. (3 h)**

Educational theory and practice from ancient times through the modern period, including American education.

**EDU 604. Social Justice Issues in Educ. (3 h)**

This course facilitates exploration of issues of social justice and schooling from both theoretical and practical perspectives. It includes a focus on multicultural education, global awareness, issues of equity in school funding, urban and rural education, poverty, and marginalized populations.

**EDU 605. The Sociology of Education. (3 h)**

Study of contemporary educational institutions. Examines such issues as school desegregation, schooling and social mobility, gender equity, and multiculturalism.

**EDU 606. Studies in the History and Philosophy of Education. (3 h)**

Study of selected historical eras, influential thinkers, or crucial problems in education. Topics announced annually.

**EDU 609L. Introduction to Secondary Education. (3 h)**

This course includes practical experiences in classrooms with focus on secondary classrooms and students. It involves public school experience and seminar.

**EDU 610. Race, Class, and Gender in a Color-blind Society. (3 h)**

Examines issues surrounding race, class, and gender in the U.S. Topics include income and wealth, theories of discrimination, public education, gender bias, and patterns of occupational and industrial segregation.

**EDU 612. Teaching Exceptional Children. (3 h)**

This course examines the various types of learning differences in K-12 schools. Emphasis is on instructional planning, identification of interventions, and assessment techniques to support diverse learners.



**EDU 613. Human Growth and Development. (3 h)**

Theories of childhood and adolescent development, their relation to empirical research, and their educational implications. Consideration of the relation to learning of physical, intellectual, emotional, social, and moral development in childhood and adolescence.

**EDU 614L. Elementary Teaching Rounds. (2 h)**

Involves practical experiences in elementary classrooms with focus on pedagogy and content. Weekly public school experience and seminar. Pass/Fail.

**EDU 616. Elementary Literacy Interventions. (3 h)**

This course is a field experience for elementary education candidates focused on early literacy, including diagnosis and remediation of reading and writing skills. It includes public school experience and seminar.

**EDU 621. Advanced Issues and Trends in Education. (3 h)**

Special topics course related to advanced educational issues and trends with a focus on K-12 schools and teachers. Focus will vary by instructor. Course can be repeated if topic differs.

**EDU 637. TESOL Linguistics. (3 h)**

An introduction to the theoretical and practical linguistics resources and skills for teaching English to speakers of other languages (TESOL) within the US or abroad.

**EDU 641. Teaching Elementary Literacy. (3 h)**

Methods and materials for implementing research-based strategies for teaching and assessing reading, writing, listening and speaking in grades K-6.

**EDU 642. Teaching Elementary Social Studies. (3 h)**

Methods and materials for teaching K-6 social, studies, including adaptations for diverse and exceptional learners. Also includes experience in diverse elementary classrooms.

**EDU 643. Teaching Elementary STEM (Science, Technology, Engineering, Mathematics). (3 h)**

Methods and materials for teaching STEM subjects in elementary schools, emphasizing inquiry teaching and learning, and including adaptations for diverse and exceptional learners.

**EDU 650L. Student Teaching: Elementary. (9 h)**

Supervised teaching experience in grades K-6. Full-time. Service Learning. Satisfactory/Unsatisfactory.

**EDU 651. Adolescent Psychology. (4 h)**

Introduction to theories of adolescent psychology as related to teaching and counseling in various settings. Readings emphasize researchers' suggestions for parenting, teaching, and counseling adolescents between the ages of 13 and 19.

**EDU 654. Content Pedagogy. (3 h)**

Methods, materials, and techniques used in teaching particular secondary subjects (English, mathematics, science, second languages, social studies).

**EDU 654A. Content Pedagogy: Teaching Secondary English. (3 h)**

Methods and materials used in teaching secondary English.

**EDU 654B. Content Pedagogy: Teaching Secondary Mathematics. (3 h)**

Methods and materials used in teaching secondary mathematics.

**EDU 654C. Content Pedagogy: Teaching Secondary Social Studies. (3 h)**

Methods and materials used in teaching secondary social studies.

**EDU 654D. Content Pedagogy: Teaching Secondary Science. (3 h)**

Methods and materials used in teaching secondary science.

**EDU 654E. Content Pedagogy: Teaching World Languages. (3 h)**

Methods and materials used in teaching world languages.

**EDU 654L. Content Pedagogy Rounds. (2 h)**

Practical experiences in classrooms with focus on pedagogy and content. Weekly public school experience and seminar. Satisfactory/Unsatisfactory.

**EDU 655. Professional Seminar: Elementary. (3 h)**

Reflection on the elementary school curriculum, including the needs of diverse learners, lesson planning, best practices, classroom management, and leadership. Provides additional field experience focused on early literacy, including diagnosis and remediation of reading and writing skills.

**EDU 661. Foundations of Education. (3 h)**

Philosophical, historical, and sociological foundations of education, including analysis of contemporary issues and problems.

**EDU 664L. Student Teaching Internship. (9 h)**

Supervised teaching experience in grades 9-12 (K-12 for foreign language). Full-time, 15-week field experience. Includes a weekly on-campus seminar. Satisfactory/Unsatisfactory.

**EDU 665. Professional Development Seminars. (3 h)**

Analysis and discussion of problems and issues in secondary school teaching. Examination of research and practice-based strategies. Pass/Fail only.

**EDU 668. Professional Experience in Education. (3 h)**

This course offers students a placement in an educational setting under the supervision of a professional mentor. During this internship, students examine a critical topic in a local school, a community agency, a nonprofit organization, or other educational setting.

**EDU 673. Comparative and International Education. (3 h)**

A study of various historical, political, economic, and social issues shaping education in selected countries throughout the world. The course aims to expand student understanding of differing educational and pedagogical structures and comparatively investigate educational issues around the globe.

**EDU 674. Student Teaching Seminar. (1.5 h)**

Analysis and discussion of practical problems and issues in the teaching of particular secondary subjects (English, mathematics, science, second languages, social studies). Emphasis is on the application of contemporary instructional methods and materials. Includes prior (intercession) 20 hours field experience requirement.

**EDU 677. Literacy in the 21st Century. (3 h)**

This course examines the impact of emerging literacy trends on the 21st Century students in a digital global world. There is specific focus on engaging reluctant and struggling readers.

**EDU 681. Special Needs Seminar. (1 h)**

Analysis and discussion of practical problems and issues in the teaching of special needs students in the secondary classroom. Topics include classroom management, reading and writing in the content area, inclusion, and evaluation. Satisfactory/Unsatisfactory.

**EDU 682. Reading and Writing in the Content Areas. (2 h)**

Survey of methods for teaching reading and writing to help students learn in the various content areas, and of techniques for adapting instruction to the literacy levels of students.

**EDU 683. Classroom Management Seminar. (1 h)**

Examination of research and practice-based strategies for secondary school classroom management and discipline. Satisfactory/Unsatisfactory.

**EDU 684. Creative Research Methodologies. (2 h)**

Investigation of source materials, printed and manuscript, and research methods which are applied to creative classroom experiences and the preparation of research papers in literature and social studies.

**EDU 685. Diversity Seminar. (1 h)**

Exploration of multi-cultural issues and relevant Spanish language and cultural teaching practices essential for classroom communication.

Satisfactory/Unsatisfactory.

**EDU 687. Tutoring Basic Writing. (2 h)**

Review of recent writing theory applicable to teaching basic writers (including the learning disabled and non-native speakers). Special attention to invention strategies and heuristic techniques. Includes experience with tutoring in the Writing Center. (Credit not allowed for both EDU 387 and ENG 387.)

**EDU 688. Writing Pedagogy. (3 h)**

This course blends theory and practice, providing students from all content areas with a foundational understanding of writing pedagogy methods and approaches. Topics of study will include writing across the curriculum, writing research and writing assessment.

**EDU 690. Methods and Materials for Teaching Foreign Language. (3 h)**

Survey of the basic materials, methods, and techniques of teaching foreign languages in the elementary and middle grades. Emphasis is on issues and problems involved in planning and implementing effective second language programs in grades K-6. Spring only.

**EDU 693. Individual Study. (1-3 h)**

A project in an area of study not otherwise available in the department; permitted upon departmental approval of petition presented by a qualified student. May be repeated for credit.

**EDU 695. Teaching Diverse Learners. (3 h)**

This course addresses diversity in the classroom, particularly the needs of English Language Learners (ELL) and Exceptional Children (EC). It examines differentiated instruction with appropriate instructional and behavioral strategies to meet the needs of all students.

**EDU 698. Seminar in Secondary Education. (1 h)**

Investigation of the issues that form the context for teaching in secondary schools.

**EDU 705. Sociology of Education. (3 h)**

Study of contemporary society and education, including goals and values, institutional culture, and the teaching/learning process.

**EDU 707. Educational Policy & Practice. (3 h)**

Examination of the impact of race, ethnicity, and social class on educational achievement and attainment, including consideration of philosophical, historical, and sociological issues.

**EDU 708. School and Society. (3 h)**

Study of continuity and change in educational institutions, including analysis of teachers, students, curriculum, assessment and evaluation, and contemporary problems and reform movements.

**EDU 711. Reading Theory and Practice. (3 h)**

Study of current reading theory and considerations of its application in the teaching of reading, grades K-12.

**EDU 712. Learning & Cognitive Science. (3 h)**

Examination of patterns of human development, and theories and principles of cognition applied to teaching and learning.

**EDU 713. Classroom Climate: Classroom Management and Conflict Resolution. (3 h)**

This course focuses on the development and maintenance of a safe, orderly, and respectful classroom environment in conjunction with advanced pedagogical strategies. Students learn classroom management and conflict resolution techniques while considering their own teaching practices.

**EDU 714. Advanced Content Pedagogy. (3 h)**

This course assists students in developing skills for content-specific teaching of critical thinking and problem solving while building upon existing pedagogical content knowledge through collaboration that is rooted in current practice, and addressing state and national standards.

**EDU 715. Action Research. (3 h)**

Individual planning for action research study on a specific pedagogical topic in a school setting. Includes definition of research problem, literature review, and proposal for collection of field data, and reporting of results.

**EDU 716. Professional Growth Seminar. (3 h)**

Students will provide reflections on their teaching experiences, report the results of their action research, and define their professional goals.

**EDU 717. Instructional Design, Assessment and Technology. (3 h)**

Introduction to contemporary technologies and their applications for supporting instruction, assessment, professional practice, and school leadership.

**EDU 718. Adv Multimedia Tech in Educ. (3 h)**

This course develops advanced technology skills and knowledge of how to incorporate technology tools into pedagogical practice through a variety of assignments including an implementation project.

**EDU 721. Educational Research. (3 h)**

Theory, construction, and procedures of empirical research on teaching and learning. Analysis and evaluation of research studies.

**EDU 723. Educational Statistics. (3 h)**

Descriptive, inferential, and nonparametric statistical procedures involved in educational research. Computer methods for statistical analysis.

**EDU 725. Action Research II. (1 h)**

Reporting of results of action research study on pedagogical topic. Includes oral and written presentations.

**EDU 730L. Service Learning: Tutoring. (1 h)**

Practical experiences in classrooms with focus on tutoring and assisting with preparation for standardized testing. Includes field work and reflection. Pass/Fail only.

**EDU 731. Foundations of Curriculum Development. (3 h)**

Philosophical, psychological, and social influences on the school curriculum. Examination of both theoretical and practical curriculum patterns for the modern school. Processes of curriculum development, including the leadership function of administration and research.

**EDU 733. Supervision of Instruction. (3 h)**

Analysis of various techniques of supervision: orientation of teachers, in-service education, classroom observation, individual follow-up conferences, ways to evaluate instruction, and methods for initiating changes.

**EDU 735. Assessment of Teaching and Learning. (3 h)**

This course focuses on the assessment of learning from a theoretical and practical perspective. It includes an understanding of formative and summative assessments, traditional and non-traditional assessments, standardized testing, and the interpretation and application of test data.

**EDU 745. Advanced Diverse Learners. (3 h)**

This course addresses advanced issues related to diversity in the classroom.

**EDU 747. Research and Trends in the Teaching of Foreign Languages. (3 h)**

Study of current trends and issues in foreign language education. Research topics include language and linguistics, culture, and technology.

**EDU 751. Adolescent Psychology. (3 h)**

Introduction to theories of adolescent psychology as related to teaching and counseling in various settings. Readings emphasize researchers' suggestions for parenting, teaching, and counseling adolescents between the ages of 13 and 19.

**EDU 758. Studies in Educational Leadership. (3 h)**

Examination of contemporary leadership theory and its various applications in education.

**EDU 764. Seminar in Curriculum and Instruction. (3 h)**

Exploration of special topics in the field of curriculum and instruction.

**EDU 781. Methodology and Research. (3 h)**

Advanced study of the methods and materials of a specific discipline (English, French, Spanish, social studies, mathematics, science) in the curriculum with special attention directed to the basic research in the discipline. Includes 20 hours field experience/project.

**EDU 783. Readings and Research in Education. (1-3 h)**

Independent study and research on topics relevant to the student's field of concentration which may include a special reading program in an area not covered by other courses or a special research project. Supervision by faculty members. Hours of credit to be determined prior to registration.

**EDU 784. Research in Writing. (3 h)**

Investigation of selected topics related to the writing process.

**EDU 785. The Teaching of Writing. (3 h)**

Examination of the theories and methods of instruction of writing.

**EDU 787. Teaching Advanced Placement. (2, 3 h)**

An investigation of the content of and the pedagogy appropriate to advanced placement courses in the various disciplines. Summer only.

**EDU 788. Teaching Foreign Languages in the Elementary Grades. (2 h)**

Intensive period of observation and instruction in an elementary school setting with a foreign language specialist. Methods for development of listening, speaking, reading, writing, and cultural awareness using content-based instruction and thematic units.

**Faculty**

Program Director Leah McCoy  
Chair Alan Brown  
Professors Adam Friedman, Leah P. McCoy, Linda N. Nielsen  
Associate Professors Alan Brown, Donal Mulcahy  
Assistant Professors Debbie French, Danielle Parker-Moore

**Education, MAED**

**Degree Requirements**

**Course Requirements**

The Master Teacher Fellows program requires 42-48 semester hours. The Master Teacher Associates and Master of Educational Studies programs each require 36 semester hours. The Curriculum, Instruction,

and Assessment Certificate requires 15 credit hours. Field-based courses, including the following are offered only as pass/fail:

Code	Title	Hours
EDU 614L	Elementary Teaching Rounds	2
EDU 650L	Student Teaching: Elementary	9
EDU 664L	Student Teaching Internship	9
EDU 665	Professional Development Seminars	3

All remaining coursework must be taken for a grade. All courses must be approved, and an overall grade-point-average of B must be maintained. The course requirements must be completed in courses numbered 600 or above, with at least half of the total number of required hours in courses numbered 700 or above.

**Research Competence in Teacher Education**

Research competence in Teacher Education includes a set of three courses that include both research studies and personal reflection.

**Licensure Only Coursework**

Students who wish to enroll in graduate courses to obtain or renew a license may seek admission through the Licensure Officer of the Department of Education. The GRE is not required.

A copy of the Title II Federal Report Card may be obtained in the Licensure Office of the department.

For additional degree requirements, see Requirements for Degrees.

**English (ENG)**

**Master of Arts**

**Overview**

This degree offers opportunities for study and research in most of the major areas of both British and American literature, as well as in creative writing, writing-rhetorical studies, and in the English language.

The courses for graduates only (numbered 700 or above) stress independent study and research out of which theses may develop. With approval of the graduate committee, students may take one or two related courses in other departments. Students may also take 600-level courses in English (ENG), Creative Writing (CRW), and Writing (WRI).

Applicants are expected to hold an undergraduate degree in English from an accredited institution. This major should consist of a well-rounded selection of courses demonstrating significant exposure to the range of literatures written in English and to ideas of literary history and interpretation.

**Programs**

- English, MA
- Medieval and Early Modern Studies, Certificate

**Courses**

**ENG 601. Individual Authors. (3 h)**

Study of selected work from an important American or British author. May be repeated once for credit.

**ENG 602. Ideas in Literature. (3 h)**

Study of a significant literary theme in selected works. May be repeated when the course is taught by a different professor on a different topic.

**ENG 604. History of the English Language. (3 h)**

Survey of the development of English syntax, morphology, and phonology from Old English to the present, with attention to vocabulary growth.

**ENG 605. Old English Language and Literature. (3 h)**

Introduction to the Old English language and a study of the historical and cultural background of Old English literature, including Anglo-Saxon and Viking art, runes, and Scandinavian mythology. Readings from Beowulf and selected poems and prose.

**ENG 608. Beowulf. (3 h)**

This course offers an intensive study of the poem, with emphasis on language, translation skills and critical contexts.

**ENG 609. Modern English Grammar. (3 h)**

A linguistics approach to grammar study. Includes a critical exploration of issues such as grammatical change and variation, the origins and effects of grammar prescriptions/proscriptions, the place of grammar instruction in education, and the politics of language authority.

**ENG 610. The Medieval World. (3 h)**

Examines theological, philosophical and cultural assumptions of the Middle Ages through the reading of primary texts. Topics include Christian providential history, drama, devotional literature, the Franciscan controversy, domestic life and Arthurian romance.

**ENG 611. The Legend of Arthur. (3 h)**

The origin and development of the Arthurian legend in France and England with emphasis on the works of Chretien de Troyes and Sir Thomas Malory.

**ENG 612. Medieval Poetry. (3 h)**

The origin and development of poetic genres and lyric forms of medieval vernacular poetry.

**ENG 613. The Roots of Song. (3 h)**

Interdisciplinary investigation of poetry and song in the Middle Ages and early Renaissance. Study of the evolution of poetic and musical genres and styles, both sacred and secular. Students must complete a project or projects on the technical or theoretical aspects of early song.

**ENG 615. Chaucer. (3 h)**

Emphasis on The Canterbury Tales and Troilus and Criseyde, with some attention to minor poems. Consideration of literary, social, religious, and philosophical background.

**ENG 620. British Drama to 1642. (3 h)**

British drama from its beginnings to 1642, exclusive of Shakespeare. Representative cycle plays, moralities, Elizabethan and Jacobean tragedies, comedies, and tragicomedies.

**ENG 623. Shakespeare. (3 h)**

Thirteen representative plays illustrating Shakespeare's development as a poet and dramatist.

**ENG 625. 16th-Century British Literature. (3 h)**

Concentration on the poetry of Spenser, Sidney, Shakespeare, Wyatt, and Drayton, with particular attention to sonnets and The Faerie Queene.

**ENG 626. Studies in English Renaissance Literature. (3 h)**

Selected topics in Renaissance literature. Consideration of texts and their cultural background. May be repeated once for credit pending approval of instructor.

**ENG 627. Milton. (3 h)**

The poetry and selected prose of John Milton with emphasis on Paradise Lost.

**ENG 628. 17th-Century British Literature. (3 h)**

Poetry of Donne, Herbert, Vaughan, Marvel, Crashaw, prose of Bacon, Burton, Browne, Walton. Consideration of religious, political, and scientific backgrounds.

**ENG 630. Restoration and 18th-Century British Literature. (3 h)**

Representative poetry and prose, exclusive of the novel, drawn from Addison, Steele, Defoe, Swift, Pope, Johnson, and Boswell. Consideration of cultural backgrounds and significant literary trends.

**ENG 633. Jane Austen. (3 h)**

An intensive study of the works of the British novelist Jane Austen and her cultural contexts.

**ENG 635. Eighteenth-Century British Fiction. (3 h)**

Primarily the fiction of Defoe, Richardson, Fielding, Smollett, Sterne, and Austen.

**ENG 636. Restoration and Eighteenth-Century British Drama. (3 h)**

British drama from 1660 to 1780, including representative plays by Dryden, Etherege, Wycherley, Congreve, Goldsmith, and Sheridan. Kairoff.

**ENG 637. Studies in 18th-Century British Literature. (3 h)**

Selected topics in 18th-century literature. Consideration of texts and their cultural background.

**ENG 638. Studies in Gender and Literature. (3 h)**

Thematic and/or theoretical approaches to the study of gender in literature.

**ENG 639. Studies in Sexuality and Literature. (3 h)**

Thematic and/or theoretical approaches to sexuality within literary studies.

**ENG 640. Studies in Women and Literature. (3 h)**

Women writers in society. May be repeated when the course is taught by a different professor on a different topic.

**ENG 641. Literature and the Environment. (3 h)**

This course studies the relationship between environmental experience and literary representation.

**ENG 644. Studies in Poetry. (3 h)**

Selected topics in poetry. May be repeated when the course is taught by a different professor on a different topic.

**ENG 645. Studies in Fiction. (3 h)**

Selected topics in fiction. May be repeated when the course is taught by a different professor on a different topic.

**ENG 646. Studies in Theatre. (3 h)**

Selected topics in drama. May be repeated when the course is taught by a different professor on a different topic.

**ENG 647. Internship in the Major. (1.5 h)**

Internship that involves both hands-on experience and academic study. Students will partner with a literature faculty member to integrate work in the community and engagement with his or her academic plan of study.

**ENG 648. English Studies and the Professions. (1.5 h)**

A practicum course focused on career design and career planning, specific to career options in humanities fields. The course will broaden awareness of career opportunities available to English graduate students. Pass-fail only. Cannot be repeated.



**ENG 650. British Romantic Poets. (3 h)**

A review of the beginnings of Romanticism in British literature, followed by a study of Wordsworth, Coleridge, Byron, Keats, and Shelley; collateral reading in the prose of the period.

**ENG 651. Studies in Romanticism. (3 h)**

Selected topics in European and/or American Romanticism with a focus on comparative, interdisciplinary, and theoretical approaches to literature.

**ENG 653. Nineteenth-Century British Fiction. (3 h)**

Representative major works by Dickens, Eliot, Thackeray, Hardy, the Brontës, and others.

**ENG 654. Victorian Poetry. (3 h)**

A study of the Brownings, Tennyson, Hopkins, and Arnold or another Victorian poet.

**ENG 656. Literature of the Caribbean. (3 h)**

Readings include significant works by authors from the Caribbean and authors writing about the Caribbean. Critical, historical, and cultural approaches are emphasized. All texts are in English.

**ENG 657. Studies in Chicano/a Literature. (3 h)**

Writings by Americans of Mexican descent in relation to politics and history. Readings in literature, literary criticism, and sociocultural analysis.

**ENG 658. Postcolonial Literature. (3 h)**

Survey of representative examples of postcolonial literature from geographically diverse writers, emphasizing issues of politics, nationalism, gender, and class.

**ENG 659. Studies in Postcolonial Literature. (3 h)**

Examination of themes and issues in postcolonial literature, such as: globalization, postcolonialism and hybridity, feminism, nationalism, ethnic and religious conflict, the impact of the Cold War, and race and class.

**ENG 660. Studies in Victorian Literature. (3 h)**

Selected topics such as development of genres, major authors and texts, cultural influences. Reading in poetry, fiction, autobiography, and other prose.

**ENG 661. Literature and Science. (3 h)**

Literature of and about science. Topics vary and may include literature and medicine, the two-culture debate, poetry and science, nature in literature, and the body in literature.

**ENG 662. Irish Literature in the 20th-Century. (3 h)**

Study of modern Irish literature from the writers of the Irish Literary Renaissance to contemporary writers. Course consists of overviews of the period as well as specific considerations of genre and of individual writers.

**ENG 663. Studies in Modernism. (3 h)**

Selected issues in Modernism. Interdisciplinary, comparative, and theoretical approaches to works and authors.

**ENG 664. Studies in Literary Criticism. (3 h)**

Consideration of certain figures and schools of thought significant in the history of literary criticism.

**ENG 665. Twentieth-Century British Fiction. (3 h)**

A study of Conrad, Ford, Forster, Joyce, Lawrence, Woolf and later British writers, with attention to their social and intellectual backgrounds.

**ENG 666. James Joyce. (3 h)**

The major works by Joyce, with an emphasis on *Ulysses*.

**ENG 667. Twentieth-Century English Poetry. (3 h)**

A study of 20th-century poets of the English language, exclusive of the U.S. Poets will be read in relation to the literary and social history of the period.

**ENG 668. Studies in Irish Literature. (3 h)**

The development of Irish literature from the 18th-century through the early 20th-century in historical perspective, with attention to issues of linguistic and national identity.

**ENG 669. Modern Drama. (3 h)**

Main currents in modern drama from 19th-century realism and naturalism through symbolism and expressionism. After an introduction to European precursors, the course focuses on representative plays by Wilde, Shaw, Synge, Yeats, O'Neill, Eliot, Hellman, Wilder, Williams, Hansberry, and Miller.

**ENG 670. American Literature to 1820. (3 h)**

Origins and development of American literature and thought in representative writing of the Colonial, Revolutionary, and Federal periods.

**ENG 671. American Ethnic Literature. (3 h)**

Introduction to the field of American Ethnic literature, with special emphasis on post World War II formations of ethnic culture: Asian American, Native American, African American, Latino, and Jewish American. The course highlights issues, themes, and stylistic innovations particular to each ethnic group and examines currents in the still developing American culture.

**ENG 672. American Romanticism. (3 h)**

Studies of Romanticism in American literature. Focus varies by topic and genre, to include such writers as Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson.

**ENG 673. Literature and Film. (3 h)**

Selected topics in the relationship between literature and film, such as adaptations of literary works, the study of narrative, and the development of literary and cinematic genres.

**ENG 674. American Fiction before 1865. (3 h)**

Novels and short fiction by such writers as Brockden Brown, Cooper, Irving, Poe, Hawthorne, Melville, Stowe, and Davis.

**ENG 675. American Drama. (3 h)**

An historical overview of drama in America, covering such playwrights as Boucicault, O'Neill, Hellman, Wilder, Williams, Inge, Miller, Hansberry, Albee, Shepard, Norman, Mamet, and Wilson.

**ENG 676. American Poetry before 1900. (3 h)**

Readings and critical analysis of American poetry from its beginnings, including Bradstreet, Emerson, Longfellow, Melville, and Poe, with particular emphasis on Whitman and Dickinson.

**ENG 677. American Jewish Literature. (3 h)**

Survey of writings on Jewish topics or experiences by American Jewish writers. Explores cultural and generational conflicts, responses to social change, the impact of the Shoah (Holocaust) on American Jews, and the challenges of language and form posed by Jewish and non-Jewish artistic traditions.

**ENG 678. Literature of the American South. (3 h)**

Study of Southern literature from its beginnings to the present, with emphasis upon such major writers as Tate, Warren, Faulkner, O'Connor, Welty, and Styron.



**ENG 679. Literary Forms of the American Personal Narrative. (3 h)**

Reading and critical analysis of autobiographical texts in which the ideas, style, and point of view of the writer are examined to demonstrate how these works contribute to an understanding of pluralism in American culture. Representative authors include Douglass, Brent, Hurston, Wright, Kingston, Angelou, Wideman, Sarton, Hellman, and Dillard.

**ENG 680. American Fiction from 1865 to 1915. (3 h)**

Study of such writers as Twain, James, Howells, Crane, Dreiser, Wharton, and Cather.

**ENG 681. Studies in African American Literature. (3 h)**

Reading and critical analysis of selected fiction, poetry, drama, and other writings by American authors of African descent. May be repeated once for credit if topic varies.

**ENG 682. Modern American Fiction, 1915 to 1965. (3 h)**

Includes such writers as Cather, Lewis, Hemingway, Fitzgerald, Faulkner, Dos Passos, Wolfe, Baldwin, Ellison, Agee, O'Connor, Styron, Percy, and Pynchon.

**ENG 685. Twentieth-Century American Poetry. (3 h)**

Readings of modern American poetry in relation to the literary and social history of the period.

**ENG 686. Directed Reading. (1-3 h)**

A tutorial in an area of study not otherwise provided by the department; granted upon departmental approval of petition presented by a qualified student.

**ENG 687. African-American Fiction. (3 h)**

Selected topics in the development of fiction by American writers of African descent. May be repeated once for credit if topic varies.

**ENG 689. African-American Poetry. (3 h)**

Readings of works by American poets of African descent in theoretical, critical, and historical contexts.

**ENG 690. The Structure of English. (3 h)**

Introduction to the principles and techniques of modern linguistics applied to contemporary American English.

**ENG 691. Studies in Postmodernism. (3 h)**

Interdisciplinary, comparative, and theoretical approaches to works and authors.

**ENG 693. Multicultural American Drama. (3 h)**

Examines the dramatic works of playwrights from various racial and ethnic communities such as Asian American, Native American, and Latino. Includes consideration of issues, themes, style, and form.

**ENG 694. Contemporary Drama. (3 h)**

Considers experiments in form and substance in plays from *Godot* to the present. Readings cover such playwrights as Beckett, Osborne, Pinter, Stoppard, Churchill, Wertebaker, Albee, Shepard, Mamet, Wilson, Soyinka, and Fugard.

**ENG 695. Contemporary American Literature. (3 h)**

Study of post-World War II American poetry and fiction by such writers as Bellow, Gass, Barth, Pynchon, Morrison, Ashbery, Ammons, Bishop, and Rich.

**ENG 696. Contemporary British Fiction. (3 h)**

Study of the British novel and short story, with particular focus on the multicultural aspects of British life, including works by Rushdie, Amis, Winterson, and Ishiguro.

**ENG 700. Teaching Internship. (1.5 h)**

An internship for the observation and practice of undergraduate pedagogy, placing an MA student into a core literature, writing, or creative writing course taught by a permanent faculty member, typically in the first semester of the student's second year. Arranged by permission or invitation of the supervising faculty member. Must be taken as an overload in addition to the coursework for the degree. May be repeated for credit for a maximum of 3 hours.

**ENG 701. Individual Authors. (3 h)**

Study of selected works from an important American, English, or Global Anglophone author.

**ENG 702. Ideas in Literature. (3 h)**

Study of a significant literary theme in selected works. May be repeated for credit if topic varies.

**ENG 703. Introduction to Composition Studies. (3 h)**

This graduate seminar offers an introduction to the field of Composition Studies (also known as Composition-Rhetoric). Students examine the field's historical perspectives, research traditions, guiding theories and constructs, classroom practices, and approaches to writing assessment.

**ENG 704. Studies in Rhetorical Theory and Criticism. (3 h)**

In this graduate seminar, students explore major issues and perspectives in rhetorical theory, including histories of rhetoric, elements of rhetorical criticism, and methods of rhetorical analysis. May be repeated once.

**ENG 705. Special Topics in Writing Studies. (3 h)**

In this graduate seminar, students examine significant writing theories and practices focused on one area of study within the international field of Writing Studies. May be repeated once.

**ENG 707. Workshop in Prose. (3 h)**

This graduate workshop is meant to improve and consolidate prose-writing skills and expand artistic ambitions, preparing students for further study (an MFA or PhD program) or a career in writing, editing, or teaching. May be repeated once.

**ENG 708. Workshop in Poetry. (3 h)**

This graduate workshop is meant to improve and consolidate poetry-writing skills and expand artistic ambitions, preparing students for further study (an MFA or PhD program) or a career in writing, editing, or teaching. May be repeated once.

**ENG 709. Special Topics in Creative Writing. (3 h)**

This graduate workshop is meant to develop students' creative writing skills in one or more genres in the context of a particular topic, as well as to expand artistic ambitions and prepare students for further study (an MFA or PhD program) or a career in writing, editing, or teaching. May be repeated once.

**ENG 710. Early Medieval Narrative. (3 h)**

A variety of forms of early medieval narrative (history, saga, chronicle, poetry, hagiography), with a focus on issues of genre and narrative form, connections between story and history, and the text's relation to the culture that produced it. Emphasis is on interdisciplinary viewpoints (artistic, archaeological, geographic), and on contemporary narrative theory.

**ENG 711. Arthurian Legend. (3 h)**

Emphasis is on the origin and developments of the Arthurian legend in England and France, with primary focus on Malory's *Le Morte d'Arthur*. Attention to social and intellectual backgrounds.

**ENG 712. Studies in Medieval Literature: Romance and Identity. (3 h)**

A diverse corpus of medieval poetry, both lyric and narrative, is explored in an effort to trace the origin and evolution of the idea and meaning of “romance,” a term signifying, for the medieval audience, narrative poetry in the vernacular, and, for our purposes, that uniquely new concept of ennobling love that emerged in the 12th century.

**ENG 715. Studies in Chaucer. (3 h)**

Emphasis on selected Canterbury Tales, Troilus and Criseyde, and the longer minor works, with attention to social, critical, and intellectual background. Lectures, reports, discussions, and a critical paper.

**ENG 720. Renaissance Drama. (3 h)**

Using an historical approach, this seminar examines the relationship between the theater as an institution and centers of authority during the Tudor and Stuart periods. The plays—tragedies, comedies, tragicomedies—are approached as the products of a dynamic exchange between individual authors and the larger political and social concerns of the period.

**ENG 721. Studies in Spenser. (3 h)**

Emphasis on *The Faerie Queene*; attention to the minor works; intellectual and critical background. Lectures, discussions, and class papers. Ettin.

**ENG 722. Studies in 16th-Century British Literature. (3 h)**

Introduction to critical and scholarly methodology for the study of the literature; particular emphasis on Spenser's *Faerie Queene* and Sidney's *Arcadia*.

**ENG 723. Studies in Shakespeare. (3 h)**

Representative text from all genres, examined in light of critical methodologies in the field of Shakespeare studies. Emphasis is on reading primary sources as well as on discussion of the impact that historical, cultural, and religious developments had on Shakespeare, the theater, and the thematics of his plays.

**ENG 725. Studies in 17th-Century British Literature. (3 h)**

Non-dramatic literature of the 17th century, exclusive of Milton. Emphasis on selected major writers. Lectures, discussions, and presentation of studies by members of the class.

**ENG 727. Studies in 17th-Century British Literature: Primarily Milton. (3 h)**

The work of John Milton, primarily *Paradise Lost*, within its cultural environment. Some attention to connections between Milton's writings and that of his contemporaries.

**ENG 729. Early Modern Literature. (3 h)**

Introduction to Early Modern literature, spanning a variety of genres, periods, and regions and including historical contexts, critical methodologies, and secondary criticism in Early Modern studies.

**ENG 733. 18th-Century British Fiction. (3 h)**

A study of two major British novelists of the 18th century. Lectures, reports, critical papers. Authors for study chosen from the following: Defoe, Richardson, Fielding, Smollet, and Austen.

**ENG 737. Studies in Restoration and 18th-Century British Literature. (3 h)**

Selected topics in Restoration and 18th-century literature. Consideration of texts and their cultural background.

**ENG 740. Studies in Gender and Literature. (3 h)**

An examination of selected writers and/or theoretical questions focusing on issues of gender.

**ENG 741. Studies in Sexuality and Literature. (3 h)**

Thematic and/or theoretical approaches to sexuality within literary studies.

**ENG 743. Nineteenth-Century British Fiction. (3 h)**

Study of one or more major British novelists of the 19th century. Lectures, reports, discussions, and a critical paper. Authors for study chosen from the following: Austen, Dickens, Thackeray, Eliot, and Hardy.

**ENG 745. British Poetry of the 19th and 20th Centuries. (3 h)**

Study of several British poets chosen from the major Romantics, Tennyson, Browning, Hardy, and Yeats.

**ENG 746. Studies in British Romanticism. (3 h)**

Examination of major writers, topics, and/or theoretical issues from the late 18th and early 19th centuries.

**ENG 757. American Poetry. (3 h)**

Studies of the poetry and poetic theory of three major American writers in the 19th and 20th centuries. Writers chosen from the following: Whitman, Dickinson, Frost, Eliot, Stevens, or Williams. Discussions, reports, and a critical paper.

**ENG 758. Studies in Modern Poetry. (3 h)**

Theoretical issues and themes in 20th-century poetry.

**ENG 759. Studies in Postcolonial Literature. (3 h)**

Examination of themes and issues in postcolonial literature and/or theory such as globalization, identity and hybridity, feminism, nationalism, ethnic and religious conflict, the impact of neo-imperialism and economic policy, and race and class.

**ENG 760. Studies in Victorian Literature. (3 h)**

Selected topics such as development of genres, major authors and texts, and cultural influences of Victorian Literature. Readings in poetry, fiction and autobiography, and other prose.

**ENG 763. Studies in Modernism. (3 h)**

This course will examine selected issues in Modernism, from interdisciplinary, comparative, and theoretical approaches.

**ENG 765. Literary Criticism. (3 h)**

Review of historically significant problems in literary criticism, followed by study of the principal schools of 20th-century critical thought. Lectures, reports, discussions, and a paper of criticism.

**ENG 766. Studies in 20th-Century British Literature. (3 h)**

Examination of major writers, topics, and/or theoretical issues in 20th-century British literature. In addition to fiction, the course focuses on drama, theory, prose readings, and poetry.

**ENG 767. Twentieth Century British Fiction. (3 h)**

Study of one or more of the major British novelists of the 20th century. Authors chosen from among the following: Conrad, Ford, Forster, Joyce, Lawrence, or Woolf.

**ENG 768. Irish Literature. (3 h)**

Study of major themes, theories, individual authors, or periods, which might include discussions of mythology, folklore, landscape, poetics, narrative strategies, gender, and politics.

**ENG 770. Studies in American Literature. (3 h)**

Introduction to studies in American literatures, spanning a variety of genres, periods, and regions (U.S., Black Atlantic, Caribbean, Central American, South American, and hemispheric literatures), including historical contexts, critical methodologies, and secondary criticism in the field.

**ENG 771. American Ethnic Literature. (3 h)**

Examination of how ethnic writers narrate cultural histories and respond to and represent the ambiguity of cultural location. Literary topics include slavery, exile, the Holocaust, immigration, assimilation, and versions of the American Dream.

**ENG 772. Studies in American Romanticism. (3 h)**

Writers of the mid-19th century, including Emerson, Thoreau, Hawthorne, and Melville.

**ENG 774. American Fiction Before 1865. (3 h)**

Study of novels and short fiction by such writers as Brockden Brown, Cooper, Irving, Poe, Hawthorne, Melville, Stowe, and Davis.

**ENG 776. American Poetry Before 1900. (3 h)**

Close reading and critical analysis of selected American poets, such as Bryant, Longfellow, Poe, Emerson, Whitman, and Dickinson.

**ENG 779. Autobiographical Voices: Race, Gender, Self-Portraiture. (3 h)**

Using an historical and critical approach, this seminar examines autobiography as an activity which combines history, literary art, and self-revelation. Lectures, reports, discussions, a critical journal, a personal narrative, and a critical paper. Authors for study chosen from the following: Douglass, Brent, Hurston, Wright, Angelou, Crews, Dillard, Moody, Malcolm X, Kingston, Wideman, or Sarton.

**ENG 780. Studies in American Fiction from 1865 to 1915. (3 h)**

Study of the principal fiction of one or more major American writers of the late 19th and early 20th centuries. Lectures, seminar reports, and a research paper. Authors for study chosen from the following: Twain, James, Howells, Adams, Crane, Dreiser, Wharton, or Cather.

**ENG 781. African-American Literature and the American Tradition. (3 h)**

Critical readings of selected works of major American writers of African descent within the contexts of the African-American and American literary and social traditions. Covers such genres as autobiography, fiction, drama, and poetry. Lectures, reports, discussions, and a critical paper.

**ENG 782. Studies in American Fiction from 1915 to 1965. (3 h)**

Study of the principal fiction of one or more major American writers of the 20th century. Writers are chosen from the following: Cather, Lewis, Hemingway, Fitzgerald, Faulkner, Dos Passos, Wolfe, Baldwin, Ellison, Agee, O'Connor, Percy, or Pynchon.

**ENG 783. Contemporary American Fiction. (3 h)**

Seminar devoted to the close study of some of the most important novels produced in the United States since World War II.

**ENG 784. Contemporary American Poetry. (3 h)**

Seminar devoted to the close study of some of the most important poems written in America since World War II.

**ENG 786. Directed Reading. (1-3 h)**

A tutorial in an area of study not otherwise provided by the department; granted upon departmental approval of petition presented by a qualified student. May be repeated for credit if topic varies.

**ENG 789. Linguistics in Literature. (3 h)**

Examination of theories of grammar and attitudes toward the English language reflected in the literature of selected periods.

**ENG 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**ENG 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Faculty

Program Co-Directors Jennifer Greiman and Zak Lancaster  
Chair Jefferson M. Holdridge  
Associate Chair Judith Madera  
Reynolds Professor of English Herman Rapaport  
Thomas H. Pritchard Professor of English Eric G. Wilson  
William R. Kenan Professor of the Humanities Laura Mullen

Winifred W. Palmer Professor of English Dean Franco

Professors Jennifer Greiman, Susan Harlan, Jefferson M. Holdridge, Scott W. Klein, Barry G. Maine, Gale Sigal

Associate Professors Chris Brown, Amy Catanzano, Omaar Hena, Sarah Hogan, Melissa S. Jenkins, Zak Lancaster, Judith Madera, Jessica A. Richard, Joanna Ruocco, Jeffrey Solomon, Erica Still, Olga Valbuena-Hanson

Assistant Professors Lucy Alford, Derek Lee, Alisa Russell

Teaching Professors Erin Branch, Ryan Shirey

Associate Teaching Professors Meredith Farmer, Jennifer Pyke, Randi Saloman

## English, MA

### Degree Requirements

Students are required to have a reading knowledge of a modern foreign or classical language. This requirement can be met by earning a satisfactory grade in an advanced reading course in a foreign language taken in residence at the University or by satisfactorily passing a translation examination administered by the English department.

The degree requires 30 credit hours; 24 hours of coursework with an average grade of B or above plus 6 hours of thesis research. At least 15 of the 24 hours must be in courses numbered 700 or above. The remaining 9 hours may be in either 600 or 700 level courses. The thesis must be original and not revised material from coursework. All work must be completed within six years of the date of initial enrollment in the graduate program.

For additional degree requirements, see Requirements for Degrees.

## Health and Exercise Science (HES)

### Master of Science

#### Overview

This program offers specialization in the area of health and exercise science and is designed for those who are interested in careers in research, preventive, and rehabilitative programs, and/or further graduate study.

Candidates for the health and exercise science program are not required to have a specific undergraduate major or minor. However, an undergraduate concentration in the sciences is preferred. Candidates for the program generally pursue research careers in exercise science (e.g. exercise physiology, biomechanics, behavioral medicine, or rehabilitation), and/or careers in clinical exercise physiology, rehabilitation, or health behavior promotion (e.g., cardiac rehabilitation, YMCAs, and corporate fitness programs). The prerequisites for this program include course work in human anatomy, human physiology, physiology of exercise, and biomechanics. These courses should be completed before admission to the program. None of the prerequisites may apply toward the graduate degree.

The Department of Health and Exercise Science supports the Healthy Exercise and Lifestyle Programs (HELPS), a chronic disease prevention and management program for the local community. As part of the coursework in HES 761 and HES 765, graduate students serve an internship in HELPS to gain practical experience as clinical exercise specialists. After serving an internship with HELPS during the first academic year, each student will have the opportunity to be certified

as an American College of Sports Medicine (ACSM) Clinical Exercise Physiologist.

The Department of Health and Exercise Science began offering graduate study in 1967. Departmental graduate committee: Katula (chair), Beavers, Berry, Brubaker, Fanning Marsh, Messier, Mihalko, Miller.

## Programs

### Master of Science

- Health and Exercise Science, MS

## Courses

### HES 650. Human Physiology. (3 h)

A lecture course that presents the basic principles and concepts of the function of selected systems of the human body, with emphasis on the muscular, cardiovascular, pulmonary, and nervous systems. Berry, Brubaker.

### HES 651. Nutrition in Health & Disease. (3 h)

A lecture/lab course that presents the principles of proper nutrition including an understanding of the basic foodstuffs and nutrients as well as the influence of genetics, eating behavior, and activity patterns on performance, energy balance, and weight control. Labs focus on intervention in obesity and coronary heart disease through diet analysis, methods of diet prescription, and behavior modification. Miller.

### HES 652. Human Gross Anatomy. (4 h)

A lecture/lab course on the structure and function of the human body. Labs are devoted to the dissection and study of the human musculoskeletal, neuromuscular, and vascular systems. Marsh, Messier.

### HES 653. Physiology of Exercise. (3 h)

Lecture course that presents the concepts and applications of the physiological response of the human body to physical activity. The acute and chronic responses of the muscular and cardiorespiratory systems to exercise are examined. Other topics include exercise and coronary disease, strength and endurance training, somatotype and body composition, gender-related differences, and environmental influences. P-HES 650 or POI. Miller, Berry.

### HES 660. Epidemiology. (3 h)

Introduction to basic determinants of the incidence of chronic disease in the population, and development of an understanding of individual, community, and environmental approaches to promoting healthful lifestyles in youth, adults, and elderly populations. Issues are analyzed by formal statistical modeling. Mihalko.

### HES 670. Biomechanics of Human Movement. (3 h)

Study of the mechanical principles which influence human movement, sport technique, and equipment design. Messier.

### HES 675. Advanced Exercise Physiology. (3 h)

Lecture course on the study of physiological and biochemical adaptations of the human body to exercise, with special emphasis on substrate metabolism, ventilation and respiration, oxygen transport, and muscle physiology. Berry.

### HES 682. Independent Study. (1-3 h)

Literature reviews and/or laboratory research performed on an individual basis under the supervision of a faculty member. Staff.

### HES 715. Experimental Design. (3 h)

Study of the various types of research relevant to health and exercise science. While attention is given to topics such as statistical treatment of data, the primary emphasis involves discussion concerning threats to internal and external validity for experimental and quasi-experimental designs. In conjunction with a sound methodological approach, practical experiences are provided in the preparation and presentation of thesis proposals. Katula.

### HES 721. Data Analysis and Interpretation. (3 h)

The application of basic statistical techniques in the analysis and interpretation of data in scientific research. Topics include descriptive statistics, simple linear and multiple correlation/regression analysis, t-tests, analysis of variance and covariance, and non-parametric statistics. Berry.

### HES 733. Health Psychology. (3 h)

Seminar on current topics in health psychology with a focus on wellness programs and rehabilitative medicine. Katula.

### HES 761. Cardiopulmonary Disease Management. (3 h)

A lecture/lab class that examines the physiological, pathologic, and pharmacologic considerations of managing patients with cardiovascular and pulmonary disease. Special emphasis on learning diagnostic procedures, interventions, and therapies, particularly models for cardiac and pulmonary rehabilitation. Brubaker.

### HES 763. Advanced Biomechanics. (3 h)

An in-depth study of the mechanical principles that influence human movement. Topics include the study of kinetics, kinematics, cinematography, sport shoe design, and skeletal biomechanics. P-POI. Messier.

### HES 765. Graded Exercise Testing and Exercise Prescription. (3 h)

The study of the rationale for the use of graded exercise testing in the evaluation of functional work capacity and prescription of exercise. Lectures include the analysis of different modes of evaluation: treadmill, bicycle ergometer, arm ergometer, and field testing, with the application of the results in the evaluation of normal and cardiac patients and prescription of exercise for special populations. Lab experiences include the use of electrocardiographs, ergometers, and metabolic analyzers in the assessment of functional capacity. Brubaker.

### HES 780. Advanced Topics in Exercise and Sport Science. (3 h)

This course is divided into two or more content areas to allow an in-depth treatment of selected topics that are not a regular part of required coursework. Topics are chosen from the following areas: anatomy, biomechanics, computer analysis, multivariate statistics, and physiology of exercise. Seminar and/or lab approach. Staff.

### HES 782. Independent Study in Health and Exercise Science. (1-3 h)

Literature and/or laboratory research performed on an individual basis under the supervision of a faculty member. May be repeated for credit. Staff.

### HES 783. Seminar in Health and Exercise Science. (1 h)

Seminar class designed to bring graduate students and faculty together on a regular basis to discuss research proposals, research design and studies, results of research, and current topics in health and exercise science. Talks by invited or visiting speakers are included as seminar sessions. Graduate students receive reading and work assignments related to the material presented in the seminar. May be repeated for credit. Katula.



**HES 784. Seminar in Health and Exercise Science. (1 h)**

Seminar class designed to bring graduate students and faculty together on a regular basis to discuss research proposals, research design and studies, results of research, and current topics in health and exercise science. Talks by invited or visiting speakers are included as seminar sessions. Graduate students receive reading and work assignments related to the material presented in the seminar. May be repeated for credit. Katula.

**HES 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**HES 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Faculty

Program Director Jeffrey A. Katula

Chair Peter H. Brubaker

Research Professor W. Jack Rejeski

Professors Peter H. Brubaker, Jeffrey A. Katula,

Anthony P. Marsh, Stephen P. Messier, Shannon L. Mihalko, Gary D. Miller

Associate Professor Kristen M. Beavers

Assistant Professors Elliot Arroyo, Jason Fanning, Megan Bennett Irby

## Health and Exercise Science, MS

### Degree Requirements

All students in the program are required to take the following courses:

Code	Title	Hours
HES 660	Epidemiology	3
HES 675	Advanced Exercise Physiology	3
HES 715	Experimental Design	3
HES 721	Data Analysis and Interpretation	3
HES 733	Health Psychology	3
HES 761	Cardiopulmonary Disease Management	3
HES 763	Advanced Biomechanics	3
HES 765	Graded Exercise Testing and Exercise Prescription	3
HES 783	Seminar in Health and Exercise Science	1
HES 784	Seminar in Health and Exercise Science	1
HES 791	Thesis Research I	1-9
HES 792	Thesis Research II	1-9
<b>Total Hours</b>		<b>28-44</b>

Students can typically expect to spend two years in this program. The first year is devoted to required coursework and the identification of a thesis topic. The research and data collection for the thesis are usually completed in the second year. The second year also allows an opportunity for elective coursework outside the department.

For additional degree requirements, see Requirements for Degrees.

## Interpreting and Translation Studies (ITS)

### Master of Arts

#### Overview

This program prepares professionals for working in the growing language industry as it relates to a variety of fields—foreign affairs, media, business, law, and especially healthcare delivery. The current lack of interpreters and translators has led the U.S. Department of Labor to project an 18 percent increase in employment over the next decade. The program in interpreting and translation studies will not only help meet this demand, but also responds to Wake Forest's "Pro Humanitate" motto, as its graduates will serve underprivileged communities while at the same time contributing to the quality of mainstream healthcare delivery and demonstrating the strong connections between liberal arts education and public service. The program offers four Master of Arts tracks: Intercultural Services in Healthcare; Teaching of Interpreting; Interpreting and Translation Studies, Spanish-English and Chinese-English. The degree can be earned through an intense two-semester course of study or an extended two-year program for the Chinese-English Track. The program admits students on a full-time basis only.

For students who are not able or ready to commit to earning a Master of Arts degree, but who would like to focus on an area of interest, the program also offers three Graduate Certificates and one postgraduate Certificate in specialized areas. Pairing various certificates provides a comprehensive package for students to reach their career goals in a more flexible, customized manner.

#### Master of Arts Tracks

The **Interpreting and Translation Track** is a language-specific, professionally oriented and research-based program that prepares interpreters and language specialists for working in the language industry. Graduates of this program will have a solid foundation in applied interpreting and translation studies, analysis of contextual meaning and extra-linguistic aspects of communication, cross-cultural awareness, sociolinguistics and dialectology, localization and terminology management, and advanced technologies for linguistic services. This program is especially appropriate for those who intend to pursue a doctorate in this field.

The **Teaching of Interpreting Studies Track** is a non-language-specific program that prepares graduates to be instructors in community or college-level interpreter training programs. It is the only program in the Northern hemisphere to focus on methodology of teaching interpreting in the medical context. Graduates of the program will not only provide their students with a set of techniques on how to interpret, but they will also teach, mentor, and raise awareness about the interpreting practice. The curriculum lays the foundation for understanding the interpreting encounter, the co-conversational process and sociocultural determinations. It also includes a broad interdisciplinary research component, which is absent from the training seminars/workshops of other, non-academic programs.

The **Intercultural Services in Healthcare Track** is a non-language-specific program and is the first such specialization in the U.S. It prepares graduates to enter managerial positions in culturally sensitive healthcare delivery areas such as bilingual employment, patient relations, translation and interpreting services, health discourse and health messages. The curriculum provides a solid foundation in cross-cultural health communication, sociolinguistics, applied interpreting



and translation studies, written and oral discourse analysis, medical translation, advanced technologies for linguistic services, localization and terminology management, organizational behavior, and health promotion as related to ethnicity.

## Foreign Language or Special Skills Requirements

The Interpreting and Translation Track: Spanish-English. Applicants who do not have a college or high school degree from a Spanish speaking country are required to take an online Spanish proficiency exam.

The Interpreting and Translation Track: Chinese-English. Applicants who do not have a college or high school degree in Chinese (Mandarin) may be subject to a written exam and/or oral interview.

The Teaching of Interpreting Studies Track. Proven interpreting experience is required for this program.

The Intercultural Services in Healthcare Track. Foreign language competency is desirable, but not required for this program

## Programs

- Interpreting and Translation Studies, MA
- Interpreting and Translation Studies, Certificates

## Courses

In addition to the courses listed under Interpreting and Translation Studies (TIS), the following list of courses in Linguistics and Spanish also count towards the completion of the required hours for the Masters or the Certificate programs:

Code	Title	Hours
Communication		
COM 655	Health Communication	3
COM 656	Health Comm: Patient-Provider	3
Linguistics		
LIN 610	Sociolinguistics& Dialectology	3
LIN 680	Language Use & Technology	3
LIN 683	Language Engineering Localization and Terminology	3
Spanish		
SPA 671	Contrastive Spanish/English Grammar and Stylistics	3
SPA 681	Spanish Translation	3
SPA 682	Spanish/English Interpreting	3
SPA 683	Medical and Scientific Translation	3

## Interpreting and Translation Studies

### TIS 684. Internship. (1-3 h)

The internship requires 60 hours of shadowing, observing, gathering data and interpreting/translation work in a professional interpreting, translation, educational or healthcare setting, depending on the student's chosen track.

### TIS 731. Applied Interpreting Studies. (3 h)

This course explores connections between research and practical issues in studies of interpreting (simultaneous, consecutive, bilateral and other modalities). It focuses on the interdisciplinary of the interpreting field and, based on case studies, examines the interface between interpreting as a profession, research in interpreting studies and the teaching of interpreting. It includes a research project.

### TIS 732. Methodology of Teaching Interpreting. (3 h)

This course discusses syllabus design and lesson planning for teachers of interpreting in a field-specific context. It focuses on the development of interpreting skills, including use of recent technological advancements. It explores classroom management options and strategies for providing feedback to students. It also covers internship design methods, including an on-site observation of various interpreting settings.

### TIS 733. Applied Translation Studies. (3 h)

This course examines the theory and practice of translation from a variety of linguistic and cultural angles. It introduces key concepts such as relevance, equivalence, skopos, back-translation, and explores critical approaches, depending on the translated text types.

### TIS 734. U.S. Heritage Speakers. (3 h)

This course provides a comprehensive introduction to the fields of heritage languages, bilingualism, and bilingual education from a cross-disciplinary perspective. It covers a wide variety of topics, including individual and societal conceptions of heritage and dominant languages, general bilingual educational issues, bilingualism and multilingualism as they relate to identity, political and ideological issues, Spanish in the U.S. among many others.

### TIS 735. Discourse Organization and Interpreting. (3 h)

This course will explore the links between social situations, interlocutors, and the functional aspects of communicative events. The course will focus on several important methodological approaches that have been developed to do discourse analysis in as much as they highlight important features of translation and interpreting. We will review the varied traditions around meaning-making, including sociolinguistics, conversation analysis, critical discourse analysis, and discursive psychology. Readings will tie in traditional topics in discourse analysis with specific issues in translation and interpreting. This course will link theory to practice. One session per week will be devoted to practical, hands-on activities using real world data in various formats: written transcripts, aural speeches, or videos.

### TIS 736. Organizational Behavior and Interpreting. (3 h)

This course is designed to apply organizational behavior theories into the interpreting field in order to bring about a better understanding of how individual interpreters or interpreter teams actually behave in large-scale project/organizational setting. Particular emphases are placed on interpreter's roles and on how to evaluate interpreter's performance, motivate interpreters, and maintain a high level of interpreting services. This course prepares students to enter managerial positions in translation/interpreting companies or organizations.

### TIS 737. Remote Interpreting. (3 h)

Through discussion-oriented sessions, simulations and testing, and talks given by guest speakers, this language-neutral course examines the origins and evolution of remote interpreting, including over-the-phone interpreting, video-mediated interpreting and remote simultaneous interpreting in community and conference settings. Students will explore issues in professionalism and ethics as well as future trends in remote interpreting.

**TIS 738. Editing and Revising for Translators. (3 h)**

This course covers various aspects of the editing of translated English text, from copy editing to more substantive forms. Rules of grammar, orthography and principles of composition are reviewed in the context of specialized discourses. Focus is placed on practical issues and editing tasks commonly faced by translators.

**TIS 742. Spanish Specialized Translation. (3 h)**

Develops and refines a practical translation skill set within specialized domains, for example, technology, law, international relations, media. Students gain familiarity with textual conventions that govern source and target texts in specialized contexts and deepen their understanding of both Spanish and English as language for specific purposes.

**TIS 743. Spanish-English Dialogue Interpreting. (3 h)**

In this course students will develop advanced interpreting skills through bidirectional short consecutive translations in some major domains, including business, education, social care, and law. The course focuses on practicing active listening, delivery techniques, glossary preparation, public speaking skills, interpreter's professionalism and ethics in dialogue interpreting.

**TIS 750. Contrastive Chinese-Eng Gramm. (3 h)**

Advanced study of structures and vocabulary. Exploration of general principles behind 'atom-like' rules and the main lexical dichotomies, and how implications for meaning help in choosing the best option. Discussion of structures that are usually taught as idiomatic but are more compositional than previously thought: subject-predicate vs. topic-comment, verb-particle, verb-complement, serial verb construction, relative clause construction, reduplication, imperative, negation, adposition, etc.

**TIS 751. Chinese-English Translation. (3 h)**

Development of advanced translating skills through the practice of bidirectional translation with a strong emphasis on Chinese into English translating. Some back translation exercises will be offered as part of this course.

**TIS 752. Chinese-English Specialized Translation. (3 h)**

Develops and refines a practical translation skill set within the specialized domains such as medicine, science, business, etc. In addition, students will gain familiarity with textual conventions that govern source and target texts within these domains and deepen their understanding of both Chinese and English as language for special purposes. Apart from translation proper, students will also be able to analyze texts for register, style, tone and content to determine the most appropriate process to achieve the highest quality translation. Finally, students' research skills will improve through the examination of available resources and the creation of domain-specific resources.

**TIS 753. Chinese-English Dialogue Interpreting. (3 h)**

In this course students will develop advanced interpreting skills through bidirectional consecutive translations in some major domains, including business, education, social care, healthcare and law. The course focuses on practicing active listening, delivery techniques, glossary preparation, public speaking skills, interpreter's professionalism and ethics in dialogue interpreting.

**TIS 755. Chinese-English Interpreting. (3 h)**

Chinese-English Interpreting develops strategies for community, conference, escort and other types of interpreting. Current employment opportunities in the field of interpreting will be also briefly presented. In class work will focus on learning and practicing interpreting techniques. Individual, at home, preparation - besides the assigned readings and interpreting exercises - will also include a strong terminology enhancement.

**TIS 760. U.S. Landscapes: Systems, Culture and Norms. (3 h)**

This course is designed for international students to increase their knowledge of US socio-political structures and Anglo-American cultural identity through the study of U.S. history, politics and popular traditions.

**TIS 770. Multimedia Translation. (3 h)**

This language-neutral course examines concepts, characteristics, tools and software of multimedia translation, a distinctive and booming sector in the arena of translation and localization. Students will explore translation challenges encountered and creative techniques adopted in translating films, TV shows, documentaries, anime, etc.

**TIS 785. Applied Research Project. (3 h)**

The applied research project will establish a rigorous connection between the practical experience in the workplace and the more theoretical experience in research and in the classroom. The applied research project will be divided in two components: during the fall semester (3 credit hours) students will learn about general research methodology and receive individual guidance to choose between the research project options. During the spring semester (3 credit hours) students will complete the research project under supervision of a project director.

**TIS 786. Special Topics. (1-3 h)**

Examination of topics not covered in the regular curriculum. May be repeated for credit.

**TIS 789. Independent Study. (1-3 h)**

Examination of topics not covered in the regular curriculum. May be repeated for credit.

## Faculty

Program Director Olgierda Furmanek

Associate Director Diego Burgos

Professors Olgierda Furmanek, Luis Gonzalez

Associate Professors Diego Burgos, Cesar Gutierrez, Jerid Francom,

Tiffany Judy, Zak Lancaster, Stephanie Pellet

Teaching Assistant Professors Xijinyan Chen, Carlos A. Fasola, Brett

Rosenberg, Chaowei Zhu

## Interpreting and Translation Studies, MA

### Degree Requirements

Interpreting and Translation Studies: Spanish-English, Intercultural Services in Healthcare and Teaching of Interpreting are intense two-semester programs, where students in each track are required to complete a minimum of 27 credit hours of course instruction, 3 credit hours of internship, and a 6 credit hour applied research project. None of the 27 credit hours of course instruction may be taken Pass/Fail.

The Interpreting and Translation Studies: Chinese-English track is a two year program of study where students are required to complete a minimum of 30 credit hours of course instruction, 3 credit hours of internship and a 6 credit hour applied research project during the last 2 semesters of the program.

At the end of each student's program of study, the applied research project will be presented to the graduate committee. The primary members of the applied research project committee are the program faculty, but a student may include an approved committee member from outside of the program.

For additional degree requirements, see Requirements for Degrees.

# Liberal Arts Studies (LBS)

## Master of Arts

Program Director: Ron Von Burg

Program Assistants: April Strader Bullin. Mimi Komos

### Overview

The program offers a master's degree in interdisciplinary exploration of human questions, experiences, and challenges, drawing on diverse fields across the humanities, social sciences, and natural sciences, as well as law, medicine, business, and divinity. Faculty from varied academic disciplines offer interdisciplinary seminars with a focus on integrating knowledge, thinking critically, and strengthening practices of analysis and communication. Students are encouraged to shape their studies around their particular interests and may enroll in directed studies as well as any master's level course in the university with permission of the instructor.

Adult learners in any stage of life, from recent college graduation to preparation for post-career activities, are welcome to apply. No specific type of undergraduate degree or major is required. All applicants must show the ability to study in a graduate-level program, as indicated by a minimum of a B average in undergraduate studies. Further, the applicant's writing sample included with the application should demonstrate capacities for reading comprehension, analysis of a topic, and clear writing.

## Programs

### Master of Arts

- Liberal Arts Studies, MA

## Courses

LBS 720-LBS 729 are topics courses that vary by semester. Topic categories are listed below. Please see this website (<https://continuingstudies.wfu.edu/liberal-arts-studies/courses/>) for specific course descriptions.

#### **LBS 720. Special Topics: Language and Literature. (3 h)**

Special Topics in Liberal Studies related to Language and Literature. Course emphasis will vary with instructor. May be repeated for credit if topic differs.

#### **LBS 721. Special Topics: Media, Arts, and Rhetoric. (3 h)**

Special Topics in Liberal Studies related to studies in media, art, and rhetoric. Course emphasis will vary with instructor. May be repeated for credit if topic differs.

#### **LBS 722. Special Topics: Politics and International Relations. (3 h)**

Special topics in Liberal Studies related to politics and international relations. Course emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

#### **LBS 723. Special Topics: History, Societies, and Culture. (3 h)**

Special topics in Liberal Studies related to studies in history, societies, and various cultures. Emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

#### **LBS 724. Special Topics: Philosophy and Religion. (3 h)**

Special Topics in Liberal Studies related to studies in philosophy and religion. Emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

#### **LBS 725. Special Topics: Popular Culture. (3 h)**

Special Topics in Liberal Studies related to studies in popular culture. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

#### **LBS 726. Special Topics: Urban Arts and Architectural Design. (3 h)**

Special Topics in Liberal Studies related to urban arts and architectural design studies. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

#### **LBS 727. Special Topics: Science, Health, and Culture. (3 h)**

Special Topics in Liberal Studies related to the sciences, health and culture. Course emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

#### **LBS 728. Special Topics: Fine Arts, Aesthetics, and Creativity. (3 h)**

Special Topics in Liberal Studies related to the study of Fine Art and the areas of aesthetics and creativity. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

#### **LBS 729. Special Topics: Psychology, Humanism, and Business. (3 h)**

Special Topics in Liberal Studies related to the areas of psychology, humanism, and business. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

#### **LBS 786. Directed Study. (1-3 h)**

Working with a faculty advisor, the student completes a special reading project in area not covered in regular courses or a special research project not related to the master's thesis. A student who wishes to enroll must submit the Directed Study Form, signed by the advisor, to the program director. May be repeated once for credit with the permission of the program director.

#### **LBS 790. Capstone Project. (3 h)**

Capstone project options include: 1) research paper describing and explaining tentative hypotheses based on quantitative and/or qualitative research; 2) creative work with accompanying interpretive text; 3) internship with non-profit or for-profit organization with on site supervision; 4) portfolio of M.A. work, including a retrospective paper on major learnings from student's course of study as well as two academic papers from M.A. courses taken.

#### **LBS 791. Thesis Research. (3 h)**

LBS 791 Thesis Research II (3h) Liberal Studies thesis research now spans two terms and is awarded a total of 6 credit hours (LBS 791 & LBS 792)

#### **LBS 792. Thesis Research II. (3 h)**

LBS 792 (3h) Thesis Research II Liberal Studies thesis research now spans two terms and is awarded a total of 6 credit hours (LBS 791 & LBS 792)

## Liberal Arts Studies, MA

### Degree Requirements

The degree requires a minimum of 30 credit hours. At least 15 hours must be taken in LBS courses designed for this program. Up to 6 hours may be taken in Directed Study courses, which do not count toward the 15-hour LBS minimum. A maximum of 12 hours may be taken in 600 and 700 level departmental courses for graduate credit. A student may transfer a maximum of 6 semester hours from another liberal arts studies program or other appropriate graduate program at the discretion of the director.

Students complete the program by choosing from the following:

## Capstone Project

Students may choose one of four types of capstone projects, for which 3 credit hours are required: a research project, a creative work, an internship, or a coursework portfolio. A capstone project form must be signed by the faculty member advising the project and submitted to the program director for approval.

## Thesis

A thesis is written under the supervision of the student's advisory committee (an advisor, and two other readers). The degree with a thesis requires thirty semester hours, including six hours of thesis research and a successfully completed thesis.

For additional degree requirements, see Requirements for Degrees.

# Mathematics (MTH)

## Mathematics (MTH) Master of Science

### Overview

The program is designed to accommodate students seeking either a terminal master's degree or preparation for PhD work.

To obtain the Master of Science degree in one year, a graduate student must present evidence of having completed the work required of an undergraduate who majors in mathematics in a fully accredited college or university. Such a major is understood to include at least 33 semester hours of mathematics, of which at least 18 require as prerequisite one year of calculus. Students who are admitted with less than the level of preparation specified should expect to take additional courses at the 600-level and remain in residence for more than one year.

Students desiring to use work taken in the department for graduate teacher certification should consult the Department of Education before applying for candidacy.

Students in the program have access to state-of-the-art equipment and facilities, including the DEAC Linux cluster ([is.wfu.edu/services/high-performance-computing](https://is.wfu.edu/services/high-performance-computing) (<https://is.wfu.edu/services/high-performance-computing/>)).

## Programs

- Mathematics, MS
- Data Science, Certificate
- Structural and Computational Biophysics (SCB), Certificate

## Courses

### MTH 605. Introduction to Linear Algebra and Differential Equations. (3 h)

Specific topics covered include: vector algebra, solving linear systems of equations, rank, vector spaces, determinants, eigenvalues, linear transformations, first order differential equations, second order linear ordinary differential equations, and power series solutions to differential equations. May not be used toward any graduate degree offered by the department.

### MTH 606. Advanced Mathematics for the Physical Sciences. (3 h)

Advanced topics in linear algebra, special functions, integral transforms, and partial differential equations. May not be used toward any graduate degree offered by the department. P-MTH 605.

### MTH 611. Introductory Real Analysis I. (3 h)

Limits and continuity in metric spaces, sequences and series, differentiation and Riemann-Stieltjes integration, uniform convergence, power series and Fourier series, differentiation of vector functions, implicit and inverse function theorems.

### MTH 617. Complex Analysis I. (3 h)

Analytic functions, Cauchy's theorem and its consequences, power series, and residue calculus.

### MTH 624. Linear Algebra II. (3 h)

A thorough treatment of vector spaces and linear transformations over an arbitrary field, canonical forms. inner product spaces, and linear groups.

### MTH 626. Numerical Linear Algebra. (3 h)

An introduction to numerical methods for solving matrix and related problems in science and engineering using a high-level matrix-oriented language such as MATLAB. Topics include systems of linear equations, least squares methods, and eigenvalue computations. Special emphasis is given to applications.

### MTH 631. Geometry. (3 h)

An introduction to axiomatic geometry including a comparison of Euclidean and non-Euclidean geometries.

### MTH 634. Differential Geometry. (3 h)

Introduction to the theory of curves and surfaces in two and three dimensional space including such topics as curvature, geodesics, and minimal surfaces.

### MTH 645. Elementary Number Theory. (3 h)

Course topics include properties of integers, congruences, and prime numbers, with additional topics chosen from arithmetic functions, primitive roots, quadratic residues, Pythagorean triples, and sums of squares.

### MTH 646. Modern Number Theory. (3 h)

Course topics include a selection of number-theory topics of recent interest. Some examples include elliptic curves, partitions, modular forms, the Riemann zeta function, and algebraic number theory.

### MTH 647. Graph Theory. (3 h)

Paths, circuits, trees, planar graphs, spanning trees, graph coloring, perfect graphs, Ramsey theory, directed graphs, enumeration of graphs and graph theoretic algorithms.

### MTH 648. Combinatorial Analysis I. (3 h)

Enumeration techniques, generating functions, recurrence formulas, the principle of inclusion and exclusion, Polya theory, graph theory, combinatorial algorithms, partially ordered sets, designs, Ramsey theory, symmetric functions, and Schur functions.

### MTH 651. Introduction to Mathematical Modeling. (3 h)

Introduction to the mathematical modeling, analysis and simulation of continuous processes using MATLAB, Mathematica or Maple. Topics include dimensional analysis, stability analysis, bifurcation theory, one-dimensional flows, phase plane analysis, index theory, limit cycles, chaotic dynamics, hyperbolic conservation laws and traveling waves.

### MTH 652. Partial Differential Equations. (3 h)

A detailed study of partial differential equations, including the heat, wave, and Laplace equations, using methods such as separation of variables, characteristics, Green's functions, and the maximum principle.

### MTH 654. Discrete Dynamical Systems. (3 h)

Introduction to the theory of discrete dynamical systems as applied to disciplines such as biology and economics. Includes methods for finding explicit solutions, equilibrium and stability analysis, phase plane analysis, analysis of Markov chains and bifurcation theory.



**MTH 655. Introduction to Numerical Methods. (3 h)**

An introduction to numerical computations on modern computer architectures; floating point arithmetic and round-off error including programming in a scientific/engineering language such as MATLAB, C, or Fortran. Topics include algorithms and computer techniques for the solution of problems such as roots of functions, approximations, integration, systems of linear equations and least squares methods. Also listed as CSC 655.

**MTH 657. Probability. (3 h)**

Distributions of discrete and continuous random variables, sampling distributions. Covers much of the material on the syllabus for the first actuarial exam. This course is cross-listed as STA 610.

**MTH 658. Mathematical Statistics. (3 h)**

This course will cover derivation of point estimators, hypothesis testing, and confidence intervals using both maximum likelihood and Bayesian approaches. P - MTH 657 or POI.

**MTH 681. Individual Study. (1, 2 h)**

A course of independent study directed by a faculty adviser. By prearrangement. May be repeated for credit.

**MTH 682. Reading in Mathematics. (1-3 h)**

Reading in mathematical topics to provide a foundational basis for more advanced study in a particular area. May not be used to satisfy any requirement in the MS degree with thesis. No more than three hours may be applied to the requirements for the MS degree without thesis. May be repeated for credit for a total of 3 hours.

**MTH 683. Advanced Topics in Mathematics. (1-3 h)**

Topics in mathematics that are not considered in regular courses. Content varies.

**MTH 691. Research Exploration in Mathematics. (1-3 h)**

Students will participate in introductory research projects while developing skills for success. May not be used towards any degree offered by the department. Pass/Fail only. POI only.

**MTH 711. Real Analysis. (3 h)**

An introduction to analysis on metric spaces and to calculus on Banach spaces with applications.

**MTH 712. Real Analysis. (3 h)**

Measure and integration theory, elementary functional analysis, selected advanced topics in analysis.

**MTH 715. Seminar in Analysis. (1 h)****MTH 716. Seminar in Analysis. (1 h)****MTH 717. Optimization in Banach Spaces. (3 h)**

Banach and Hilbert spaces, best approximations, linear operators and adjoints, Frechet derivatives and nonlinear optimization, fixed points and iterative methods. Applications to control theory, mathematical programming, and numerical analysis.

**MTH 718. Topics in Analysis. (3 h)**

Selected topics from functional analysis or analytic function theory.

**MTH 721. Abstract Algebra. (3 h)**

Groups, rings, fields, extensions, Euclidean domains, polynomials, vector spaces, Galois theory.

**MTH 722. Abstract Algebra. (3 h)**

Groups, rings, fields, extensions, Euclidean domains, polynomials, vector spaces, Galois theory.

**MTH 724. Seminar on Theory of Matrices. (1 h)****MTH 725. Seminar in Algebra. (1 h)****MTH 726. Seminar in Algebra. (1 h)****MTH 728. Topics in Algebra. (3 h)**

Topics vary and may include algebraic coding theory, algebraic number theory, matrix theory, representation theory, non-commutative ring theory.

**MTH 731. Topology. (3 h)**

Point-set topology including topological spaces, continuity, connectedness, compactness, and metric spaces. Additional topics in topology may include classification of surface, algebraic topology, and knot theory.

**MTH 732. Topics in Topology and Geometry. (3 h)**

Topics vary and may include knot theory, algebraic topology, differential topology, manifolds, and Riemannian geometry. May be repeated for credit. P - 731 or POI.

**MTH 733. Topics in Topology and Geometry. (3 h)**

Topics vary and may include knot theory, non-Euclidean geometry, combinatorial topology, differential topology, minimal surfaces and algebraic topology. Howard.

**MTH 735. Seminar on Topology. (1 h)****MTH 736. Seminar on Topology. (1 h)****MTH 737. Seminar on Geometry. (1 h)****MTH 738. Seminar on Geometry. (1 h)****MTH 744. Topics in Number Theory. (3 h)**

Topics vary and are chosen from the areas of analytic, algebraic, and elementary number theory. Topics may include Farey fractions, the theory of partitions, Waring's problem, prime number theorem, and Dirichlet's problem.

**MTH 745. Seminar on Number Theory. (1 h)****MTH 746. Seminar on Number Theory. (1 h)****MTH 747. Topics in Discrete Mathematics. (3 h)**

Topics vary and may include enumerative combinatorics, graph theory, algebraic combinatorics, combinatorial optimization, coding theory, experimental designs, Ramsey theory, Polya theory, representational theory, set theory and mathematical logic.

**MTH 748. Seminar on Combinatorial Analysis. (1 h)****MTH 749. Seminar on Combinatorial Analysis. (1 h)****MTH 750. Dynamical Systems. (3 h)**

Introduction to modern theory of dynamical systems. Linear and nonlinear autonomous differential equations, invariant sets, closed orbits, Poincare maps, structural stability, center manifolds, normal forms, local bifurcations of equilibria, linear and non-linear maps, hyperbolic sets, attractors, symbolic representation, fractal dimensions. P - MTH 611.

**MTH 752. Topics in Applied Mathematics. (3 h)**

Topics vary and may include computational methods in differential equations, optimization methods, approximation techniques, eigenvalue problems. May be repeated for credit.



**MTH 753. Nonlinear Optimization. (3 h)**

The problem of finding global minimums of functions is addressed in the context of problems in which many local minima exist. Numerical techniques are emphasized, including gradient descent and quasi-Newton methods. Current literature is examined and a comparison made of various techniques for both unconstrained and constrained optimization problems. Credit not allowed for both MTH 753 and CSC 753. P - MTH 655 or CSC 655.

**MTH 754. Numerical Methods for Partial Differential Equations. (3 h)**

Numerical techniques for solving partial differential equations (including elliptic, parabolic, and hyperbolic) are studied along with applications to science and engineering. Theoretical foundations are described and emphasis is placed on algorithm design and implementation using either C, FORTRAN, or MATLAB. Credit not allowed for both MTH 754 and CSC 754. P-MTH 655 or CSC 655.

**MTH 757. Stochastic Processes and Applications. (3 h)**

This course includes the axiomatic foundations of probability theory and an introduction to stochastic processes. Applications may include Markov chains, Markov Chain Monte Carlo with Metropolis-Hastings, Gibb sampling, Brownian motion, and related topics, with an emphasis on modern developments. This course is cross-listed as STA 710. P-MTH 657 or STA 610 and MTH 611 or POL.

**MTH 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**MTH 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Faculty

Program Director Jeremy Rouse

Chair Sarah Raynor

Wake Forest Taylor Professor Stephen Robinson

Clark Family Fellow and Professor Jennifer Erway Fey

Sterge Faculty Fellow and Professor Ellen Kirkman

Professors Edward Allen, Hugh Howards, Miaohua Jiang, Sarah Mason, Sarah Raynor, Jeremy Rouse

Associate Professors Abbey Bourdon, John Gemmer, W. Frank Moore, R. Jason Parsley

Associate Teaching Professor and Director of the Math and Stats Center Lynne Yengulalp

Associate Teaching Professor Justin Allman

Sterge Faculty Fellows and Assistant Professors Claudia Falcon, Leandro Lichtenfelz

Assistant Professor Fan Yang

Teacher-Scholar Postdoctoral Fellows J. Dylan Bryney, Kyle Celano,

Thomas Kindred, Jacob Mayle, Tolulope Oke

Visiting Assistant Professors Katie Betancourt, C. Williams Chukwu, Peter Merkx, Chee Han Tan

## Mathematics, MS

### Degree Requirements

The requirements for the MS degree are met by selecting either the thesis option or the non-thesis option. Both options require an advanced course in each of analysis, algebra and topology; normally this requirement is met with the courses MTH 711, MTH 721, and MTH 731.

### Thesis Option

If a thesis is written, 30 semester hours of coursework, including MTH 791 and MTH 792 and at least four additional 3-hour courses numbered above 700 are required for the MS degree.

MTH 711 or other	Advanced course in analysis	3
MTH 721 or other	Advanced course in algebra	3
MTH 731 or other	Advanced course in topology	3
Other 700-level	One course	3
600 or 700-level	Four electives	12
MTH 791	Thesis research I	3
MTH 792	Thesis Research II	3
Total Hours		30

### Non-Thesis Option

If a thesis is not written, 36 semester hours of coursework, including at least five 3-hour courses numbered above 700, are required for the MS degree. MTH 791 and MTH 792 cannot be counted as part of this coursework.

MTH 711 or other	Advanced course in analysis	3
MTH 721 or other	Advanced course in algebra	3
MTH 731 or other	Advanced course in topology	3
Other 700-level	Two courses	6
600 or 700-level	Six electives	18
Total Hours		30

With the approval of the graduate committee, graduate courses may be taken in related areas to fulfill requirements; however no more than 9 such hours may count toward the requirements for either the thesis or non-thesis option.

For additional degree requirements, see Requirements for Degrees.

## Physics (PHY)

### Master of Science, Doctor of Philosophy Overview

Opportunities for study are those usually associated with large research universities, while the atmosphere of a small liberal arts university with an ideal faculty/student ratio is maintained.

For admission to the program, students should have knowledge of senior level undergraduate mechanics, electricity and magnetism, thermodynamics, and quantum physics. The course of study for each student is planned in conference with the graduate advisor after an evaluation of academic background and experience. Deficiencies may be removed during the first year of study by taking remedial courses.

The research interests of the graduate faculty are in experimental and computational biophysics, nanotechnology, optics, experimental and theoretical condensed matter physics, particle physics, and gravitation. All research laboratories are well-equipped with state-of-the-

art instrumentation, such as subpicosecond pulsed lasers; EPR; time-resolved, UV-vis spectrophotometers; optical tweezers; atomic force microscopes; single molecule manipulators; high-sensitivity optical and confocal microscopes; numerous, standard biochemical research apparatuses; and others. The Center of Nanotechnology and Molecular Materials ([www.wfu.edu/nanotech](http://www.wfu.edu/nanotech)), which houses state-of-the-art electron microscopes, sample analysis and preparation instruments and a clean room, is part of the physics department. Computational and theoretical research is supported by the DEAC Linux Cluster ([deac.wfu.edu](http://deac.wfu.edu) (<https://is.wfu.edu/services/high-performance-computing/>)) with several thousand computational processing cores.

For more details on the PhD program, visit [www.wfu.edu/physics](http://www.wfu.edu/physics) or write to the program director.

## Programs

- Physics, MS
- Physics, PhD
- MD/PhD
- PhD/MBA
- Structural and Computational Biophysics (SCB), Certificate

## Courses

### PHY 601. Physics Seminar. (0.5 h)

Discussion of contemporary research, usually with visiting scientists. S/U only.

### PHY 607. Biophysics. (3 h)

Introduction to the structure, dynamic behavior, and function of DNA and proteins, and a survey of membrane biophysics. The physical principles of structure determination by X-ray, NMR, and optical methods are emphasized.

### PHY 610. Extragalactic Astronomy and Cosmology. (3 h)

Topics covered include galactic structure, models for galaxies and galaxy formation, the large-scale structure of the universe, the Big Bang model of the universe, physical processes such as nucleosynthesis in the early universe, and observational cosmology.

### PHY 620. Physics of Macromolecules. (3 h)

The physics of large biologically important molecules, especially proteins and nucleic acids. Topics covered include the physical basis of biomolecular structure, the energetics and statistical mechanics of biomolecular dynamics, and the electrostatics and solvation of biomolecules. Designed for students with biochemistry, chemistry, or physics backgrounds.

### PHY 623. Computational Biophysics Laboratory. (1 h)

Application of techniques in molecular modeling, including energy minimization, molecular dynamics simulation, and conformational analysis. C-PHY 620 or POI.

### PHY 625. Biophysical Methods Lab. (1 h)

Experiments using various biophysical techniques such as electron paramagnetic resonance, atomic force microscopy, stopped-flow absorption spectroscopy, X-ray diffraction, and gel electrophoresis. C-PHY 607.

### PHY 635. Computational Physics. (3 h)

An introduction to finding numerical solutions to scientific problems. Topics include understanding computational errors, differentiation, integration interpolation, root finding, random numbers, linear systems, Fourier methods, and the solution of ODEs and PDEs. There is no computer programming prerequisite. Credit will not be given for both PHY 635 and CSC/MST 655.

### PHY 637. Analytical Mechanics. (1.5 h)

The Lagrangian and Hamiltonian formulations of mechanics with applications. Taught in the first half of the fall semester.

### PHY 639. Electricity and Magnetism. (1.5 h)

Electrostatics, magnetostatics, dielectric and magnetic materials, Maxwell's equations and applications to radiation, relativistic formulation. The first half course is taught in the second half of the fall semester, following PHY 637. The other course is taught in the spring semester. These should be taken in sequence.

### PHY 640. Electricity and Magnetism. (3 h)

Electrostatics, magnetostatics, dielectric and magnetic materials, Maxwell's equations and applications to radiation, relativistic formulation. PHY 640 is taught in the spring semester after PHY 639. These should be taken in sequence. P-PHY 639.

### PHY 641. Thermodynamics and Statistical Mechanics. (3 h)

Introduction to classical and statistical thermodynamics and distribution functions.

### PHY 643. Quantum Physics. (3 h)

Basic quantum theory and applications including the time-independent Schrodinger equation, formalism and Dirac notation, the hydrogen atom, spin, identical particles, and approximation models.

### PHY 644. Quantum Physics. (3 h)

Basic quantum theory and applications including the time-independent Schrodinger equation, formalism and Dirac notation, the hydrogen atom, spin, identical particles, and approximation methods.

### PHY 645. Introduction to Quantum Computing. (3 h)

Introduction to the physics of quantum information sciences and quantum computing.

### PHY 652. Physical Optics and Optical Design. (4 h)

Interaction of light with materials; diffraction and coherent optics; ray trace methods of optical design. C- PHY 652L.

### PHY 652L. Physical Optics Lab. (0 h)

### PHY 654. Introduction to Solid State Physics. (3 h)

Survey of the structure, composition, physical properties, and technological applications of condensed matter. P-PHY 643.

### PHY 655. Exotic Materials. (1.5 h)

This course explores materials systems that express exotic properties derived from some aspect of dimensionality or topology. Thermal, electrical, optical and magnetic properties of these quantum materials will be addressed with emphasis on applications in quantum information sciences. From superconducting SSH polymers, to topological insulators, simple models are used throughout the course to develop insight into the physics of low-dimensional structures.

### PHY 656. Electronic Imaging Sciences. (1.5 h)

This course introduces the theory and application of the electron imaging systems: transmission electron microscopy (TEM) and scanning electron microscopy (SEM). It focuses on basic materials science though some biological materials will be covered. It is taught as a series of lectures followed by laboratories.

**PHY 657. Scanning Probes. (1.5 h)**

This course examines the theory and application of scanning tunneling microscopy and atomic force microscopy (STM/AFM). It introduces how each type of imaging works, how to model spectroscopic data, and how to use each microscope. Students will image using the STM and AFM as well as take and reduce spectroscopy data using models built in Maple or Mathematica.

**PHY 658. Kinetics of Materials. (1.5 h)**

This course offers a study of driving forces for atomic and ionic motion within solids leading to a range of materials properties from work hardening to phase transformations and formation. Atomic-level models for diffusion will be introduced as well as techniques and examples of the solution to the diffusion equation. It complements the traditional thermodynamics course.

**PHY 661. Biophysics Seminar. (1 h)**

Seminal and current publications in biophysics are studied. Each week a member of the class makes an oral presentation on a chosen publication and leads the ensuing discussion. Students may also be required to make a second oral presentation relevant to their own research. Does not fulfill course requirements for Master's or PhD degrees. May be repeated for credit. S/U only.

**PHY 663. Condensed Matter Seminar. (1 h)**

Seminal and current publications in condensed matter physics are studied. Each week a member of the class makes an oral presentation on a chosen publication and leads the ensuing discussion. Does not fulfill course requirements for Master's or PhD degrees. May be repeated for credit. S/U only.

**PHY 685. Bioinformatics. (3 h)**

Introduction to computational approaches essential to modern biological inquiry. Approaches may include large biological dataset analyses, sequence similarity and motif searches, and analysis of high-throughput genomic technologies. Emphasizes interdisciplinary interaction and communication. Also listed as CSC 685 and BIO 685.

**PHY 691. Special Topics in Physics. (1-4 h)**

Courses in selected topics in physics. May be repeated if course content differs.

**PHY 692. Special Topics in Physics. (1-4 h)**

Courses in selected topics in physics. May be repeated if course content differs.

**PHY 711. Classical Mechanics and Mathematical Methods. (3 h)**

A study of variational principles and Lagrange's equations, the rigid body equations of motion, the Hamilton equations of motion and canonical transformations, Hamilton-Jacobi theory, and applications to continuous systems and fields.

**PHY 712. Electromagnetism. (3 h)**

A study of electric and magnetic fields in vacuum and within media and their sources. Analytical and numerical methods for solving Maxwell's equations are also an important part of the course.

**PHY 715. Nonlinear Optics and Quantum Electronics. (1-4 h)**

Nonlinear phenomena in laser spectroscopy, the quantum nature of optical processes in matter, and topics in laser physics. Lab—three hours.

**PHY 731. Elementary Particle Physics. (3 h)**

Fundamentals of contemporary elementary particle physics.

**PHY 741. Quantum Mechanics. (3 h)**

Study of the foundations of quantum theory, Hilbert space, operators, Schrodinger's equation and its solutions, symmetries, spin, multiple particles, approximation methods, scattering, the Dirac equation, and quantization of the electromagnetic field and its interaction with atoms.

**PHY 742. Quantum Mechanics. (3 h)**

Study of the foundations of quantum theory, Hilbert space, operators, Schrodinger's equation and its solutions, symmetries, spin, multiple particles, approximation methods, scattering, the Dirac equation, and quantization of the electromagnetic field and its interaction with atoms.

**PHY 744. Introduction to Quantum Field Theory. (3 h)**

Introduction to relativistic quantum field theory, including canonical quantization, path integral techniques, perturbation theory, and renormalization.

**PHY 745. Group Theory. (3 h)**

Group theory and its applications to the quantum mechanics of atoms, molecules, and solids.

**PHY 752. Solid State Physics. (3 h)**

Introductory course including the structure of perfect crystalline solids, their thermal, electronic, and magnetic properties. Crystal symmetries, the free electron and band theory of metals, optical and transport properties, and semiconductors. Consequences of electronic interactions.

**PHY 754. Surface Science. (3 h)**

Experimental and theoretical methods for the study of surfaces and interfaces. Lab-1.5 hours.

**PHY 765. Gravitational and Particle Theory Seminar. (1 h)**

Topics in general relativity, particle physics, and astrophysics are studied. Each week a faculty member or member of the class makes an oral presentation on a chosen topic and leads the ensuing discussion. Does not fulfill minimum course requirements for Master's and PhD degrees. May be repeated for credit. S/U only.

**PHY 770. Statistical Mechanics. (3 h)**

Introduction to probability theory and to the physics of systems containing large numbers of particles from the classical as well as the quantum point of view.

**PHY 771. Radiological Physics. (3 h)**

The nature and fundamental concepts of ionizing radiation including: ionizing radiation, radiation quantities, attenuation and stopping power, charged particle and radiation equilibria radioactive decay, photon interactions, charged and uncharged particle interactions, x-ray production and quality, dosimetry concepts, ionization cavity theory, and calibration of ionizing radiation beams. Also listed as BMES 771 and MPHY 771.

**PHY 773. Radiation Therapy Physics. (3 h)**

The physics of radiation treatment including: radiation producing equipment, character of photon and electron radiation beams, radiation dose functions, computerized radiation treatment planning, brachytherapy, special radiation treatment procedures, quality assurance, and radiation shielding for high energy facilities. Also listed as BMES 773 and MPHY 773.

**PHY 774. Physics of Medical Imaging. (3 h)**

The physical principles, mathematical algorithms and devices used in diagnostic medical imaging, covering the following imaging modalities: x-ray digital imaging, digital image receptors, computerized tomography and reconstruction algorithms, ultrasound imaging, magnetic resonance imaging and nuclear medicine imaging. Also listed as BMES 774 and MPHY 774.

**PHY 776. Medical Health Physics. (3 h)**

Physical and biological aspects for the use of ionizing radiation in medical environments, biological consequences of human radiation exposure, principles of ionizing radiation protection, operational dosimetry, radiation exposure recommendations and regulations, physical principles of radiation shielding design, personnel monitoring, medical health physics instrumentation, and waste disposal. Also listed as BMES 776 and MPHY 776.

**PHY 780. Theory of General Relativity. (3 h)**

Study of the covariant formulation of physical laws in mechanics and electromagnetism.

**PHY 785. Topics in Theoretical Physics. (1-3 h)**

Selected topics of current interest in theoretical physics not included in other courses. May be repeated for credit.

**PHY 787. Advanced Topics in Physics. (1-3 h)**

Lectures on advanced topics in physics that depend on the subspecialty of the instructor. Topics range from medical physics to special topics in biophysics, condensed matter physics, or quantum optics. May be repeated for credit.

**PHY 789. Survival Skills for Scientists. (1 h)**

Students will learn skills that are essential to a successful career in the sciences. The following topics will be covered: Mentoring; How to Read, Write, and Review a Research Paper; Grant & Fellowship Basics; Choosing a Career Path & Creating a Winning Job Application; and Networking & Giving Effective Talks.

**PHY 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**PHY 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**PHY 795. Physics for Education Research. (3 h)**

Fulfills the requirement for a graduate course in physics for students in the Masters in Education program seeking certification to teach physics.

**PHY 891. Dissertation Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**PHY 892. Dissertation Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**Faculty**

Program Director and Professor Freddie Salsbury  
Department Chair/Professor/Harbert Family Distinguished Chair Daniel B. Kim-Shapiro  
Professor and Wright Family Endowed Chair in Physics Timo Thonhauser  
Baker Family Professor of Physics Oana Jurchescu  
Professor/Associate Chair/Kykynych Family Fellow Martin Guthold  
Professor and Associate Provost for Research and Scholarly Activities Keith Bonin  
Professor and MacDonough Family Fellow Paul R. Anderson  
Professors David L. Carroll, Natalie A. W. Holzwarth, Jed Macosko  
Associate Professors Eric D. Carlson, Samuel S. Cho, Gregory B. Cook  
Teaching Professor Jack A. Dostal  
Assistant Professors Ajay Ram Srimath Kandada, Stephen M. Winter  
Adjunct Professors J. Daniel Bourland, Michael Munley, Peter Santago  
Adjunct Associate Professor Adam R. Hall  
Affiliate Assistant Professors Erin Henslee, Lauren Lowman

**Physics, MS**  
**Degree Requirements**

Course work must include:

Code	Title	Hours
PHY 711	Classical Mechanics and Mathematical Methods	3
PHY 712	Electromagnetism	3
PHY 741	Quantum Mechanics	3
PHY 601	Physics Seminar (each semester)	3
Thesis Research		6
PHY 600 or 700 level courses		12
Total Hours		30

If serious conflicts arise (e.g. time conflict with other classes or teaching duties, exceeding allowed credit hours for part-time students), departmental seminar series requirement may be waived for some semesters, at the discretion of the program director. These weekly seminars, in fields of special interest, usually feature outside speakers. The degree requires 30 credit hours; 24 hours of coursework with an average grade of B or above plus 6 hours of thesis research. At least 12 of the 24 hours must be in courses numbered 700 or above. The remaining 12 hours may be in either 600 or 700 level courses. All work must be completed within six years of the date of initial enrollment in the graduate program.

For additional degree requirements, see Requirements for Degrees.

**Physics, PhD**  
**Degree Requirements**

Course work must include the following:

Code	Title	Hours
PHY 711	Classical Mechanics and Mathematical Methods *	3
PHY 712	Electromagnetism *	3
PHY 741	Quantum Mechanics *	3
PHY 742	Quantum Mechanics *	3
PHY 770	Statistical Mechanics *	3
PHY 601	Physics Seminar (seven semesters)	3.5

\*  
Unless satisfactorily completed elsewhere.

Students must also take three elective courses at the graduate level (600 or 700 level), at least one of which must be in physics. A research advisory committee, appointed after completion of the written preliminary examination, determines the additional courses needed for the degree, such as Advanced Quantum Mechanics, Biophysics, Solid State Physics, General Relativity, Nonlinear Optics, or courses from Math, Computer Science, Medical Physics, Biomedical Engineering, etc. Within eighteen months of completing the preliminary written examination, the student submits to his or her individual advisory committee and defends orally a dissertation research plan. This constitutes the oral part of the preliminary exam and upon passing it, the student can be advanced to candidacy. All PhD students admitted in Fall 2023 or later must fulfill the



Physics graduate program scientific ethics requirement in the Fall of their second year through one of two options:

Option A: Take the CITI online RCR modules (biomedical or physical sciences as appropriate) and take a 2-hr online workshop through ORSP. This option is required for students funded via an NSF-funded RA or fellowship; those students may need to complete this earlier under some circumstances

Option B: Take CITI online RCR modules in biomedical sciences and GRD 713 through the biomedical graduate program on the medical school campus. This option is required for students on NIH training grants or fellowships."

The research advisory committee meets annually with the student to ensure timely progress toward the degree. Upon completion of the research in the approved plan, the student writes his or her dissertation, presents it to the department, and defends it orally.

For additional degree requirements, see Requirements for Degrees.

## Psychology (PSY)

### Master of Arts

#### Overview

This research-oriented program emphasizes the scientific, theoretical, and research bases common to all areas of psychology (e.g., social, cognition, personality, developmental, statistics).

The program is designed for capable students who expect to continue to the PhD degree but wish to begin graduate work in a department where they receive a high degree of individual attention from the faculty.

The applicant is expected to have an undergraduate major in psychology at an accredited institution, including a subset of basic foundational courses such as developmental, social, biopsychology, personality, cognition, learning, perception, etc., as well as statistics and/or research methods. Applications are also accepted from students who were not psychology majors as undergraduates, but these applicants should have a background in coursework that prepares the student for graduate level work in psychology.

The areas in which research is currently being conducted include aging, cognitive processes, judgment and decision making, adolescent development, cultural identity, neuropsychology, perception, personality, physiology, and social psychology.

Most students take two academic years to complete the program. Students who hold assistantships are required to spend two years in residence.

The Master of Arts degree has been offered since 1964.

## Programs

### Master of Arts

- Psychology, MA

## Courses

### PSY 620. Physiological Psychology. (3 h)

Neurophysiological and neuroanatomical explanations of behavior.

### PSY 622. Psychopharmacology. (3 h)

Survey of the influences of a wide range of psychoactive drugs, both legal and illegal, on human physiology, cognition, and behavior.

### PSY 623. Animal Behavior. (3 h)

Survey of lab and field research on animal behavior.

### PSY 626. Learning Theory and Research. (3 h)

Theory and current research in learning, with emphasis on applications of learning principles for behavior modification and comparisons across species.

### PSY 629. Perception. (3 h)

Survey of theory and research findings on various sensory systems (vision, hearing, touch, taste).

### PSY 631. Research in Cognitive Psychology. (3 h)

In-depth examination of research in a selected area of cognitive psychology such as memory, attention, or executive function. Research projects required.

### PSY 633. Motivation of Behavior. (3 h)

Survey of basic motivational concepts and related evidence.

### PSY 638. Emotion. (3 h)

Survey of theory, methods, and research in the area of emotion. Developmental, cultural, social-psychological, physiological, personality, and clinical perspectives on emotions are given.

### PSY 641. Research in Developmental Psychology. (3 h)

Methodological issues and selected research in child development. Research projects required.

### PSY 646. Stereotyping and Prejudice. (3 h)

Research and theory on social and cognitive processes that underlie prejudice and discrimination.

### PSY 648. Clinical Neuropsychology. (3 h)

Surveys connections between abnormal neurological processes and clinical abnormalities. This implies already having an understanding of normal brain function and anatomy.

### PSY 651. Personality Research. (3 h)

The application of a variety of research procedures to the study of human personality. Research projects required.

### PSY 655. Research in Social Psychology. (3 h)

Methodological issues and selected research in the study of the human as a social animal. Field research projects required.

### PSY 657. Cross-Cultural Psychology. (3 h)

Examination of differences in psychological processes (e.g., attitudes, perception, mental health, organizational behavior) associated with cultural variation.

### PSY 659. Psychology of Gender. (3 h)

Exploration of the psychological similarities and differences between human males and females, including consideration of social, cognitive, motivational, biological, and developmental determinants of behavior.

### PSY 662. Psychological Testing. (3 h)

Theory and application of psychological assessment procedures in the areas of intelligence, aptitude, vocational interest, and personality.

### PSY 663. Survey of Clinical Psychology. (3 h)

Overview in the field of clinical and other selected areas of applied psychology.

### PSY 664. Prejudice, Discrimination, Racism, and Heterosexism. (3 h)

Comparison of cross-cultural similarities and differences in the initiation, maintenance, and treatment of prejudice, discrimination, and racism, with an emphasis on past and current trends in the U.S.



**PSY 667. Parent-Child Relationships. (3 h)**

Surveys characteristics of parent-child relationships and issues of parenting as related to a variety of factors, including developmental changes of parent and child, family structure, and sociocultural context.

**PSY 674. Judgment and Decision Making. (3 h)**

Theoretical and empirical examination of how people make decisions and judgments about their lives and the world, and how these processes can be improved.

**PSY 692. Contemporary Problems in Psychology. (1.5 h)**

Seminar treatment of current theory and research in specific areas within psychology. The course is one-half semester.

**PSY 701. Current Topics in Psychology. (1.5 h)**

Seminar courses in selected topics in psychology.

**PSY 702. Current Topics in Psychology. (1.5 h)**

Seminar courses in selected topics in psychology.

**PSY 703. Current Topics in Psychology. (3 h)**

Seminar course in selected topics in psychology.

**PSY 715. Research Design and Analysis in Psychology. (3 h)**

Intensive study of the design of experiments and the analysis of research data in psychology. Covers conventional methods, including univariate and multivariate analysis of variance, multiple regression, and factor analysis. Requires previous or concurrent coursework in basic statistics. Written permission of instructor required. Furr, Stone.

**PSY 716. Research Design and Analysis in Psychology. (3 h)**

Intensive study of the design of experiments and the analysis of research data in psychology. Covers conventional methods, including univariate and multivariate analysis of variance, multiple regression, and factor analysis. Requires previous or concurrent coursework in basic statistics. Written permission of instructor required. Furr, Stone.

**PSY 720. Biological Psychology. (3 h)**

Study of the biological basis of behavior and mental processes, with emphasis on current developments in neuroscience, and human applications of this information. Laboratory work in neuroanatomy and psychophysiology. Blumenthal.

**PSY 728. Human Cognition. (3 h)**

Current theory and research on functional characteristics and neural correlates of cognitive processes in such areas as memory, attention, and language. Dagenbach.

**PSY 738. Learning and Motivation. (3 h)**

Basic learning principles and concepts and related motivational concepts.

**PSY 742. Seminar in Developmental Psychology. (3 h)**

Critical examination of the major findings, principles, and theories of development, with attention to both human and lower-animal research. Best, Buchanan.

**PSY 752. Seminar in Social Psychology. (3 h)**

Content and methodology of social psychology examined through a critical and comparative analysis of contemporary theory and literature. Petrocelli.

**PSY 757. Seminar in Personality Psychology. (3 h)**

Evaluation of contemporary solutions to important problems in personality psychology, with special attention to historical context and anticipated future directions. Fleeson, Furr, Jayawickreme.

**PSY 770. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 771. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 772. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 773. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 782. Readings and Research in Psychology. (1-3 h)**

This listing allows the graduate student, working under the supervision of a faculty member, to pursue and receive credit for 1) a special reading project in an area not covered by regular courses or 2) a special research project not related to the master's thesis. Supervising faculty member and hours credit for which enrolled determined by graduate committee prior to registration.

**PSY 785. Directed Thesis Research I. (3 h)**

First-year students undertake a substantial research project under the direction of their adviser. Staff.

**PSY 786. Directed Thesis Research. (3 h)****PSY 791. Thesis Research I. (1-9 h)**

Staff.

**PSY 792. Thesis Research II. (1-9 h)**

Staff.

## Faculty

Program Director R. Michael Furr

Chair Christy M. Buchanan

Harold W. Tribble Professor of Psychology Eranda Jayawickreme

Professors Terry D. Blumenthal, Christy M. Buchanan, Dale Dagenbach,

William W. Fleeson, R. Michael Furr, Lisa Kiang, John V. Petrocelli, Wayne

E. Pratt, Eric R. Stone, Christian E. Waugh

Associate Professors Janine M. Jennings, Lara Kammrath, E.J.

Masicampo

Assistant Professors Shannon T. Brady, Veronica Cole, Mason Garrison,

Anthony W. Sali, Katharine Scott

## Psychology, MA

### Degree Requirements

The degree requires 42 credit hours; 24 hours of coursework with an average grade of B or above plus 18 hours of thesis research. All hours must be in courses numbered 700 or above. All graduate students must write a major research paper and conduct and defend a thesis. All work must be completed within six years of the date of initial enrollment in the graduate program.

For additional degree requirements, see Requirements for Degrees.

## Religious Studies (REL)

### Master of Arts

#### Overview

The program provides students an opportunity to forge a unique, creative, and rigorous program of study. The degree can serve either as a terminal degree or as preparation for a doctoral program. It emphasizes the comparative and theoretical study of religion in its various traditions

and forms. Reflecting the teaching and research interests of the current graduate faculty in the department, the program fosters interdisciplinary approaches, offering training in traditional and contemporary theories and methods in conjunction with substantive investigations of diverse religious traditions and topics. Students are encouraged to make imaginative use of all available resources in the creation of their own distinctive programs of study. Typically, this would involve:

1. a focus on a particular religious culture/region or historical period, and
2. an approach or approaches to the study of the subject area.

For students interested in the Religion and Public Engagement Concentration, please see page 123.

The Master of Arts in Religion program began in 1967.

## Programs

- Religious Studies, MA
- Religious Studies, JD/MA

## Courses

In the list of courses offered with graduate credit, not every course is scheduled every year, but usually 1-2 courses at the 700-level are offered each year, including REL 700. In addition, we encourage students to approach individual professors to teach 700-level directed reading courses on specific topics. Substantive efforts are made to offer courses that are needed by students in either graduate course of study, and student input is welcome in determining the course schedule from semester to semester.

### REL 600. Approaches to the Study of Religion. (3 h)

A phenomenological study of different ways of defining religion, including views of representative philosophers, psychologists, sociologists, anthropologists, theologians, and historians of religion.

### REL 604. Myth, Ritual, and Symbolism. (3 h)

Explores how people envision and manipulate the supernatural in cross-cultural perspective. Emphasizes functional aspects of religious beliefs and practices.

### REL 605. Ethnography of Religion. (3 h)

Study of theory and method in ethnography of religion where students closely read ethnographies from a variety of cultures and discuss the practical, methodological, and ethical issues related to ethnography. Course culminates with students researching and writing their own ethnographies.

### REL 606. Ritual Studies. (3 h)

An introduction to the various methods and theories employed in the field of ritual studies, while examining comparative rituals and ritualized practices from around the world.

### REL 607. Magic, Science, and Religion. (3 h)

Explores concepts of magic, science, and religion that emerged in Western thought and culture from late antiquity through the European Enlightenment and analyzes connections between religious traditions and Western, Modern Science.

### REL 608. Sacred Scripture in the Tradition of Abraham. (3 h)

Comparative study of sacred texts in Judaism, Christianity, and Islam with particular attention to the issues of authority, function, and interpretations.

### REL 610. The Prophetic Literature. (3 h)

Examination of the development and theological contents of the literary products of Israel's prophetic movement.

### REL 612. The Critical Study of the Pentateuch. (3 h)

Study of the five traditional books of Moses (the Torah) and various lines of analysis that modern Biblical critics have used to interpret their composition and role in the development of Israelite theological thought.

### REL 613. Near Eastern Archeology. (3 h)

Survey of archaeological work in the Near East with attention to the ways in which interest in the Bible has shaped research questions, interpretation of materials, and museum exhibits.

### REL 615. Field Research in Biblical Archeology. (3 h)

Study of the religion and culture of the ancient Near East through the excavation and interpretation of ancient sites.

### REL 616. Field Research in Biblical Archeology. (3 h)

Study of the religion and culture of the ancient Near East through the excavation and interpretation of ancient sites.

### REL 617. The Wisdom Literature. (3 h)

Examination of the development, literary characteristics, and theological contents of the works of ancient Israel's sages.

### REL 618. Feminist and Contemporary Interpretations of the Bible. (3 h)

Study of feminist and contemporary approaches to the Bible in light of the history of interpretation and a range of contemporary concerns and interpretive contexts.

### REL 620. The Search for Jesus. (3 h)

Introduction to the issues, assumptions, evidence, and debate that shapes the continuing quest for the historical Jesus.

### REL 623. Jesus Traditions. (3 h)

Examines ancient Christian and other religious representations of Jesus in historical, social, cultural and theological context.

### REL 624. Early Christian Literature. (3 h)

Examination of various literature and perspectives of the first three centuries of the Christian movement.

### REL 628. Jewish-Christian Relations and the New Testament. (3 h)

Study of Jewish-Christian relations and selected writings of the New Testament in the historical, social, religious and political contexts of ancient Judaism and emerging Christianity. Focus varies with instructor.

### REL 629. Chinese Medicine. (3 h)

An interdisciplinary exploration and analysis of Chinese medicine, its fundamental theories, and its range of health-oriented and religious applications.

### REL 630. Pope, Jefferson & Imam: A Study In Comparative Ethics. (3 h)

Comparative study of the moral values and socio-ethical positions in the major religious traditions of the world, with focus on their various methods of reasoning and sources of authority.

### REL 631. Religion and Law. (3 h)

A study of religion and law as distinct yet interdependent spheres that influence cultural negotiations about authority, power, identity, and the regulation of society. Geographic and tradition-specific focus may vary with instructor.

### REL 632. Religion and Public Engagement. (3 h)

This seminar introduces students to dynamics at work at the interface between religious communities and the public sphere. It will explore, through a wide range of readings, guest lectures, and films, the potential for social change—constructive and destructive—within and between communities in locally, regionally, nationally and globally.

**REL 635. Christian Ethics and the Problem of War. (3 h)**

Examination of the causes and characteristics of war, various Christian responses to it, and approaches to peacemaking, with attention to selected contemporary issues.

**REL 636. Religious Traditions and Human Rights. (3 h)**

Study of the relationships and tensions between religious traditions and human rights, with illustrations from historical and contemporary issues and movements.

**REL 638. Religion Ethics and Politics. (3 h)**

Examination of ethical issues in religion and politics using materials from a variety of sources and historical periods.

**REL 639. Religion, Power and Society in Modern Africa. (3 h)**

Interdisciplinary study of the growth transformations of Africa's major religious traditions (Christianity, Islam, and the indigenous religions) and of their relations with secular social changes.

**REL 640. Holy Chow: Food and Religion. (3 h)**

Explores the roles food and eating play in religious behavior and the ways in which religious practices and experiences impact our eating habits and food choices.

**REL 641. Religion and Ecology. (3 h)**

Cross-cultural examination of the relationships among human beings, their diverse cultures, habitats, and religions, including social and political understandings of the environment.

**REL 642. Religious Intolerance in U.S.. (3 h)**

Study of the various manifestations of religious intolerance in the U.S. from the colonial period until the present.

**REL 643. Religion, Culture, and the Body. (3 h)**

A cross-cultural, multi-disciplinary exploration of the body as a malleable locus of contested ideals that informs personal, social, and religious identity formation.

**REL 644. Religion, Poverty, and Social Entrepreneurship. (3 h)**

Interdisciplinary study of major themes in religion, poverty, reduction, and social entrepreneurship. Focus and community emphasis may vary with instructor.

**REL 645. The African American Religious Experience. (3 h)**

Exploration of the religious dimensions of African-American life from its African antecedents to contemporary figures and movements.

**REL 647. Religion, Gender, & Sexuality. (3 h)**

This course explores how "religion" regulates gender and sexuality by examining religious texts, media, and political rhetoric through feminist, queer, and postcolonial theory. Through an analysis of historical and contemporary debates and issues concerning gender and sexuality, this course considers how political, social, and religious institutions understand and deploy religious belief and discourse to legislate, repress, and pathologize certain criminal, deviant, immoral, or sinful.

**REL 648. Race, Memory, and Identity. (3 h)**

Explores the collective memory and identity of American-Indian and African-American communities and their response to historical trauma in their cultural imagination, spirituality, and political and social activism.

**REL 649. Asian Meditation Practices. (3 h)**

Introduces and examines theoretical and practical aspects of various forms of Eastern meditation (concentration, mindfulness, Zen, visualization, and moving energy work) from both practitioner and modern scientific perspectives.

**REL 651. Sociology of Religion. (3 h)**

Introduces the sociological analysis of religion, including religious beliefs and experiences, the cultural context of religion, varieties of religious organization, religious change and social change.

**REL 655. Jewish Identities: Religion, Race, and Rights. (3 h)**

Examines how evolving definitions of race, religion, and Jewishness have correlated and conflicted in varied and sometimes surprising ways and how these shifts have been tied to legal rights and social privileges.

**REL 656. Faces of Modern Judaism. (3 h)**

Examines contemporary expressions of Judaism and its historical roots.

**REL 657. Jews in the United States. (3 h)**

Focusing on the 19th-21st centuries, this course examines Jewish American histories, experiences, and identities, as well as their impact on American society as a whole.

**REL 659. Hinduism in America. (3 h)**

Study of the meanings, values, and practices associated with the religions of Hinduism in dialogue with the dominant culture of America.

**REL 660. Hindus, Muslims, and Sikhs in North America. (3 h)**

This course examines the racialization of Hinduism, Islam, Sikhism in North America. Through an analysis of historical documents, immigration laws, mainstream and social media, popular culture, and academic texts, this class explores how these religions are racialized in Canada and the US. Using a postcolonial and intersectional approach, we will examine how race, religion, gender, sexuality, and class interact to stigmatize or empower certain individuals and/or groups.

**REL 661. Topics in Buddhism. (3 h)**

Variable topics in buddhist history, thought, and/or practice. May be repeated for credit if topic varies.

**REL 662. Topics in Islam. (3 h)**

Examination of the origins and development of Islam, the world's second largest religious tradition. Attention is given to the formation of Islamic faith and practice as well as contemporary manifestations of Islam in Asia, Africa, and North America. May be repeated for credit if topic varies.

**REL 663. Religions of Japan. (3 h)**

Study of the central religious traditions of Japan from pre-history to the present, including Shinto, Buddhism, Zen Buddhism, Christianity, and Confucianism.

**REL 665. History of Religion in America. (3 h)**

Study of American religions from colonial times until the present.

**REL 667. Contemplative Traditions In Christianity. (3 h)**

Study of Christian mysticism and contemplation (spirit possession, visions, dreams, and meditation) and their relation to contemporary issues.

**REL 668. The Protestant and Catholic Reformations. (3 h)**

Study of the origin and development of Reformation theology and ecclesiology.

**REL 669. Radical Christian Movements. (3 h)**

Study of selected radical movements in the Christian tradition and their relation to contemporary issues.

**REL 672. History of Christian Thought. (1.5, 3 h)**

Study of recurring patterns in Christian thought across time and cultures and some of the implications of those patterns in representative ancient and modern figures.

**REL 672B. History of Christian Thought Medieval and Reformation Thought. (1.5 h)**

Study of the history of Christian thought, beginning with its Hebraic and Greek backgrounds and tracing its rise and development to modern times. The course may be divided into halves for 1.5 credits each: a) Patristic Thought and b) Medieval and Reformation Thought.

**REL 673. Special Topics in African-American Religious Traditions. (3 h)**

Variable topics in African-American religious traditions. May be repeated for credit if topic varies.

**REL 674. Black Messiahs and Uncle Toms. (3 h)**

Examines the cultural and religious history of black leadership in the United States.

**REL 675. Race, Myth, and the American Imagination. (3 h)**

A study of myth and mythology in relation to the racial imaginary in America.

**REL 676. Race, Religion, and Film. (3 h)**

Examines past and contemporary filmmakers who couple religious themes with racial concerns.

**REL 678. Latin American Liberation Theology. (3 h)**

Historical, contextual, and theoretical survey of diverse forms of Latin American theologies of liberation.

**REL 679. Muslim Youth. (3 h)**

Explores the lived experiences of young Muslims around the world through the intersecting lenses of religion, power and protest.

**REL 681. Zen Buddhism. (3 h)**

An examination of the origins and development of Zen Buddhism from China (Ch'an) to Japan and contemporary America. Particular attention is given to Zen doctrine and practice in the context of the broader Buddhist tradition.

**REL 682. Religion and Culture in China. (3 h)**

A thematic study of Chinese religious traditions and culture focusing on history, ritual, scripture, and popular practice. Topics include cosmology, ancestor veneration, shamanism, divination, and the role of women. Ford.

**REL 683. The Qur'an & the Prophet. (3 h)**

Examines the history, content, and main approaches to the sacred book of Islam. Explores the influence and interaction between the holy word and its transmitter the Prophet Muhammad.

**REL 684. Islam and Law: Varieties in Interpretation and Expression. (3 h)**

Explores main tenets of the Islamic law (Shari'ah) and how this law has been applied in past and present Islamic societies. Looks at legal issues through the lens of gender, ethics, non-muslim minorities, rights, and duties.

**REL 685. Topics in South Asian Religions. (3 h)**

Variable topics in the religions of South Asia. May be repeated for credit if topic varies.

**REL 686. Indian Epics. (3 h)**

Examines one or both Indian epics, the Mahabharata and Ramayana, while paying attention to either epic's religious, social, and political contexts, performance, and development in Indian history.

**REL 687. Priests, Warriors and Ascetics in Ancient India. (3 h)**

Introduces students to the history, culture and religious traditions of ancient India by examining the overlapping practices, beliefs, ideologies, and gender representations of priests, warriors, kings, and ascetics.

**REL 688. South Asian Women: Religion, Culture and Politics. (3 h)**

This course examines the intersection of religion, race, and gender of South Asian women from a feminist and postcolonial perspective. This course is cross-listed as WGS 688.

**REL 689. Islam in the West: Changes and Challenges. (3 h)**

Explores issues of identity, ethnicity and religion within various Muslim communities living in western countries. A central goal is to understand how these communities negotiate the new environment and the challenges they face.

**REL 690. Spec Topics in Religion. (1.5-3 h)**

Religion topics of special interest. May be repeated for credit.

**REL 691. Topics in East Asian Religions. (3 h)**

Variable topics in the religions of China, Korea, and Japan. May be repeated if topic varies.

**REL 692. Topics in First Peoples' Traditions. (3 h)**

Variable topics in the religions of American Indian and Canadian First Nations. May be repeated for credit if topic varies.

**REL 693. Topics in Religions of Africa. (3 h)**

Variable topics in the religions of Africa or African diaspora. May be repeated for credit if topic varies.

**REL 695. Exploring Interfaith Practice and Leadership. (3 h)**

This online course on interfaith leadership invites students to consider how they might engage most effectively with people from a variety of religious backgrounds.

**REL 696. Interreligious Encounters and Engagements. (3 h)**

Surveys the history of dialogue activities among various religious communities and introduces the methods and theories of interreligious dialogues. Part of this class is interaction with local interfaith projects.

**REL 700. Theory and Method in the Study of Religion. (3 h)**

Explores the history of and methodological resources for the study of religion. Focus may vary according to the instructor, but the emphasis is on the ways religion has been defined, studied and interpreted over the last several centuries.

**REL 701. Directed Reading. (1-3 h)**

May be repeated for credit if topic varies.

**REL 702. Directed Reading. (1-3 h)**

May be repeated for credit if topic varies.

**REL 703. Postmodern Perspective on Power, Symbolism and Performance. (3 h)**

A critical examination of postmodern theories on the relationship between religion and culture.

**REL 704. Conceptions of the Ultimate. (3 h)**

A comparative study of religious conceptions of the ultimate (divine, sacred) within Eastern and Western traditions through a range of methodological lenses including phenomenological, philosophical, theological, and sociological.

**REL 705. Research in Religion. (3 h)**

Tools and methodologies applicable to research in religion. Fulfills the three hours in research methods that the religion department requires of first-year MA students.

**REL 708. Religion Language & Symbol. (3 h)**

An examination of the distinct use of language in religious discourse, with attention to theoretical understandings of human language, the variety of philosophical efforts to define the validity of religious language, and the role of metaphor and analogy in religious communication.



**REL 709. Field Program in Religion and Public Engagement. (1-3 h)**

Integrated study of major themes in religion and public engagement carried out in partnership with one or more communities off campus. Focus varies with instructor. On request.

**REL 716. Old Testament Theology. (3 h)**

Major motifs of revelation in the Old Testament; analysis of recent attempts to write Old Testament theology.

**REL 718. Old Testament Exegesis. (3 h)**

Detailed analysis and exegesis of selected portions of the Hebrew Bible. P-POI.

**REL 719. Old Testament Exegesis. (3 h)**

Detailed analysis and exegesis of selected portions of the Hebrew Bible. P-POI.

**REL 720. The History of Biblical Interpretation. (3 h)**

A detailed study of the history of biblical interpretation and hermeneutics.

**REL 721. New Testament Theology. (3 h)**

Delineation of an approach to New Testament theology as a whole, a consideration of the hermeneutical problem, and an examination of two or three themes in New Testament theology.

**REL 723. New Testament Exegesis. (3 h)**

Examination of selected portions of the Greek New Testament, with attention to the tools necessary for exegesis. P-POI.

**REL 724. New Testament Exegesis. (3 h)**

Examination of selected portions of the Greek New Testament, with attention to the tools necessary for exegesis. P-POI.

**REL 726. Seminar in Early Christianity Studies. (3 h)**

Intensive study of selected topics and texts in early Christianity studies.

**REL 737. Figures and Traditions in Religious Ethics. (3 h)**

Seminar course that examines the basic ethical works and theories of central figures in Western and non-Western traditions. Students engage in close readings of important texts in religious thought and morality and produce essays reflecting on the themes addressed by the authors.

**REL 738. Seminar in Christian Social Ethics. (3 h)**

Critical study of classic texts and figures in the history of Christian ethics and social thought.

**REL 740. Seminar in the Sociology of Religion. (3 h)**

Examination of selected classical and contemporary texts illustrative of the theories, methods, and purposes of the sociological study of religion.

**REL 751. Theory and Practice of Pastoral Counseling. (3 h)**

Study of counseling methodologies, psychotherapeutic techniques, personal development, and human behavior in terms of the implications for pastoral counseling.

**REL 755. Clinical Pastoral Education. (3 h)**

Clinical experience in pastoral care, including work in crisis situations, seminars, interdisciplinary clinical group sessions, formal pastoral counseling, urban ministry assignments, and participation in group therapy. (Both semesters must be completed.)

**REL 756. Clinical Pastoral Education. (3 h)**

Clinical experience in pastoral care, including work in crisis situations, seminars, interdisciplinary clinical group sessions, formal pastoral counseling, urban ministry assignments, and participation in group therapy. (Both semesters must be completed.)

**REL 761. Seminar in Eastern Religion. (3 h)**

Directed study in the selected areas of the religious traditions of the East.

**REL 762. Literature of Ancient Judaism. (3 h)**

Examination of the rabbinic writings (Mishnah, Tosefta, Talmud, Midrashim, Targumim, and the Liturgy), the Dead Sea Scrolls, The Old Testament Apocrypha and Pseudepigrapha, and the literature of Hellenistic Judaism (e.g., Philo and Josephus).

**REL 763. Hellenistic Religions. (3 h)**

Considerations of available source materials, questions of method, and bibliography related to such Hellenistic religions as the Mysteria, Hellenistic Judaism, and Gnosticism.

**REL 766. Seminar in Christian History. (3 h)**

Directed study of selected areas in the history of Christianity, including Baptist history.

**REL 768. The Protestant and Catholic Reformations. (3 h)**

Study of the origin and development of Reformation theology and ecclesiology.

**REL 771. Religions in America. (3 h)**

A study of religious traditions, events, and individuals shaping religious life in America. Attention is given to native religious, colonization, denominations, awakenings, religious liberty, the western movement, and the rise of the "American Self." The development of pluralism and the impact of immigration, civil rights, and "new religions" are also studied.

**REL 775. Seminar in the History of Christian Thought. (3 h)**

Intensive study of a selected period or movement in Christian theological history, with special reference to seminal persons and writings.

**REL 780. Seminar in Theology & Lit. (3 h)**

Intensive study of a single theologian in relation to a literary figure with a similar religious outlook, the aim being to investigate how literature and theology mutually invigorate and call each other into question. Representative pairings: Niebuhr/Auden, Barth/O'Connor, Tillich/Updike, Newman/Eliot, Kierkegaard/Percy. May be repeated for credit if the writers studied are different.

**REL 781. Special Topics in Religion. (3 h)**

An intensive, in-depth study of a selected issue in the study of religion. Focus varies with instructor. May be repeated if topic varies.

**REL 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**REL 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Faculty

Program Director Simeon Ilesanmi

Chair Lynn Neal

Associate Chair Mary Foskett

Professors Stephen Boyd, Jay Ford, Mary Foskett, Kenneth Hoglund,

Simeon Ilesanmi, Lynn Neal, Nelly van Doorn-Harder, Jarrod Whitaker

Associate Professors Lucas Johnston, Ron Neal

Associate Teaching Professor Tanisha Ramachandran

Assistant Professor Annalise Glauz-Todrank

Emeritus Professor Fred Horton

## Religious Studies, MA

### Degree Requirements

The M.A. in Religious Studies is a course intensive program that requires a total of 36 hours of coursework and the submission of a portfolio in the final semester of the program. At least 12 of the 36 hours in coursework must be in courses numbered 700 or above, and one of these courses



must be “REL 700: Theory and Method in the Study of Religion.” The remaining 24 hours may be in courses at either the 600-level or 700-level.

No less than one month before the end of their final semester, students must submit a final portfolio to a committee consisting of one professor of their choice and the graduate director. The final portfolio includes the student’s resume, personal statement, a selection of 3 papers (at least 1 theoretical) from any graduate-level courses they have taken during their M.A. coursework, and a 12-15 page reflection paper that discusses their intellectual trajectory, engagement with theory and method, and personal growth across the 3 papers and the way in which the student’s views of “religion,” broadly defined, have developed. In addition, students will present and discuss their portfolio with their committee in a meeting lasting no longer than one hour. The portfolio will be graded pass/fail (with an option to resubmit) and the committee will consider its overall presentation, clarity of expression and purpose, depth of reflection, and the student’s articulation of what they have learned through their course of study.

## Thesis Option

A thesis option may be pursued by students who wish to undertake substantial independent research and who are already thinking and writing in a succinct, analytical, and sophisticated manner. Permission to write a thesis to complete the M.A. in Religious Studies is dependent on submitting a thesis proposal that earns the approval of the graduate director and proposed primary thesis adviser. If no faculty member in the Department for the Study of Religions agrees to serve as Primary Adviser, then the student cannot write a thesis. Students writing a thesis must also form a thesis committee of 3 faculty (2 must come from the Department for the Study of Religions) and pass an oral defense of the thesis before the committee.

The M.A. in Religious Studies Thesis Option requires a total of 36 hours course work. At least 12 hours of coursework (not counting thesis research hours) must be in courses numbered 700 or above, and one of these courses must be “REL 700: Theory and Method in the Study of Religion.” A further 18 hours may be in courses at either the 600-level or 700-level (not counting thesis research hours). The final 6 hours are to be taken as thesis research (REL 791 and REL 792), typically in the final semester of study. Students who write an M.A. thesis do not submit a portfolio for graduation.

## Thesis Proposal

In order to write a thesis, the student must have a primary thesis adviser from the Department for the Study of Religions faculty, and a committee comprising two additional faculty in relevant areas of research (one of whom must also be a member of the Department for the Study of Religions). Students interested in writing a thesis to complete the M.A., are encouraged to seek out a primary thesis adviser before the end of their second semester in the M.A. program. To receive permission to write an M.A. thesis, the student must submit a well-researched thesis proposal in her or his third semester of study (by or before October 15th) that earns the approval of the graduate program director and the primary thesis adviser. The proposal must be 6-10 pages in length, with a clear synopsis of the thesis argument, proposed chapters, a timeline for chapter submission, and an annotated bibliography. If the student cannot demonstrate both their ability to pursue the thesis independently and that enough preparation has been done to lead to the successful completion of the thesis in the fourth semester, the advisory committee will withhold approval of the thesis option and the student will continue in the course intensive program that is the norm for the M.A. program. The decision

to approve or not approve the thesis proposal will be made jointly by the Graduate Program Director and the primary thesis adviser by or before October 31st.

## Thesis Length and Quality

The length of the thesis is to be decided between the student and the primary faculty adviser, but the department recommends no more than 100 pages. At minimum, the department expects that the thesis should be a publishable, article-length paper (35-50 pages) accompanied by substantial sources. It should be original work and can be a heavy reworking of a previous term paper or other research efforts. The thesis process culminates in an oral examination by a committee of at least three faculty members who must assess the thesis according to the normal guidelines (see Graduate Handbook).

## Language Requirements

In addition to the University’s requirements for the M.A., the Department for the Study of Religions strongly recommends and encourages proficiency in a foreign research language relating to the student’s area of study, whether ancient or modern. Proficiency is normally a minimum of two years of work in a specific language at the university level or equivalent and may include, but not limited to, the following:

- Hebrew
- Greek
- Sanskrit
- Arabic
- Spanish
- French
- German
- Chinese
- Japanese

A second research language is not required, but may be advised depending on the student’s area of study and their plans after graduation (i.e., whether or not they plan on pursuing a Ph.D.). For example, students working on the Hebrew Bible, New Testament, or Sanskrit literature may be advised to learn German (the German Department offers a reading course for graduate students most summers: GER 001: German for Science and Humanities).

For additional degree requirements, see Requirements for Degrees.

## Statistics (STA)

### Statistics (STA)

### Master of Science

#### Overview

The Department of Statistical Sciences offers the degree of M.S. in Statistics. The program is designed to accommodate both students seeking a terminal degree for work in industry as well as those seeking preparation for Ph.D. in Statistics or Biostatistics at another institution. The degree requirements are flexible and permit both thesis and coursework programs of study, with opportunities to engage in research as well as data analysis competitions.

## Programs

- Statistics, MS
- Data Science, Certificate

## Courses

### STA 610. Probability. (3 h)

Distributions of discrete and continuous random variables, sampling distributions. Covers much of the material on the syllabus for the first actuarial exam. This course is cross-listed as MTH 657.

### STA 611. Statistical Inference. (3 h)

Derivation of point estimators, hypothesis testing, and confidence intervals, using both frequentist and Bayesian approaches. P-STA 610 or MTH 657 or POI.

### STA 612. Linear Models. (3 h)

Theory of estimation and testing in linear models. Topics include least squares and the normal equations, the Gauss-Markov Theorem, testing general linear hypothesis, model selection, and applications. P-STA 610 or MTH 657, or POI.

### STA 652. Networks: Models and Analysis. (3 h)

A course in fundamental network theory concepts, including measures of network structure, community detection, clustering, and network modelling and inference. Topics also draw from recent advances in the analysis of networks and network data, as well as applications in economics, sociology, biology, computer science, and other areas.

### STA 662. Multivariate Statistics. (3 h)

Multivariate and generalized linear methods for classification, visualization, discrimination, and analysis.

### STA 663. Introduction to Statistical Learning. (3 h)

An introduction to supervised learning. Topics may include lasso and ridge regression, splines, generalized additive models, random forests, and support vector machines. Requires prior experience with R programming.

### STA 664. Computational and Nonparametric Statistics. (3 h)

Computationally intensive methods to fit statistical models to data. Topics include simulation, Monte Carlo integration and Markov Chain Monte Carlo, sub-sampling, and nonparametric estimation and regression. P-MTH 657 or POI.

### STA 665. Applied Bayesian Statistics. (3 h)

An introduction to Bayesian statistics and computational methods for performing Bayesian data analysis. Topics may include conjugate distributions, objective prior distributions, Bayesian inference, hierarchical models, and Markov chain Monte Carlo methods. P - STA 610 and a previous course in regression.

### STA 668. Time Series and Forecasting. (3 h)

Methods and models for time series processes and autocorrelated data. Topics include model diagnostics, ARMA models, spectral methods, computational considerations, and forecasting error. P-STA 610 or MTH 657, or POI.

### STA 679. Advanced Topics in Statistics. (1-3 h)

Topics in statistics not considered in regular courses or which continue study begun in regular courses. Content varies.

### STA 682. Readings in Statistics. (1-3 h)

Reading in statistical topics to provide a foundational basis for more advanced study in a particular area. May not be used to satisfy any requirement in the MA degree with thesis. No more than three hours may be applied to the requirements for the MA degree without thesis. May be repeated for credit for a total of 3 hours.

### STA 683. Individual Study. (1-3 h)

A course of independent study directed by a faculty adviser. By prearrangement.

### STA 710. Stochastic Processes and Applications. (3 h)

This course includes the axiomatic foundations of probability theory and an introduction to stochastic processes. Applications may include Markov chains, Markov Chain Monte Carlo with Metropolis-Hastings, Gibbs sampling, Brownian motion, and related topics, with an emphasis on modern developments. This course is cross-listed as MTH 757. P-STA 610 or MTH 657 and MTH 611 or POI.

### STA 711. Advanced Statistical Inference. (3 h)

Advanced mathematical treatment of point estimators, hypothesis testings, and confidence intervals, using both frequentist and Bayesian approaches. P-STA 610 or MTH 657, or POI.

### STA 712. Generalized Linear Models. (3 h)

Extensions of the classical linear model to cover models for binary and count data, ordinal and nominal categorical data, and time-to-event data, along with numerical maximization techniques needed to fit such models. Additional topics may include longitudinal data, the Expectation-Maximization algorithm, non-linear models, or related topics. P-STA 612 or POI.

### STA 720. Bayesian Analysis. (3 h)

Fundamental concepts, theory, and computational methods for Bayesian inference. Topics may include decision theory, evaluating Bayesian estimators, Bayesian testing and credible intervals, Markov chain Monte Carlo methods, and hierarchical models. P-STA 610 or MTH 657, or POI.

### STA 779. Topics in Statistics. (3 h)

Topics vary by instructor. May be repeated for credit.

### STA 791. Thesis Research. (1-9 h)

May be repeated for credit. Satisfactory/Unsatisfactory. P-POI.

### STA 792. Thesis Research. (1-9 h)

May be repeated for credit. Satisfactory/Unsatisfactory. P-POI.

## Faculty

Program Director Daniel Beavers

Chair Robert Erhardt

Professors Kenneth Berenhaut, Robert Erhardt

Associate Professors Dan Beavers, Staci Hepler

Assistant Professors Leonardo Cella, Ciaran Evans, Emily Huang, Sneha Jadhay, Sarah Lotspeich, Lucy D'Agostino McGowan

## Statistics, MS

### Degree Requirements

The requirements for the MS degree are met by completing four required courses, and by selecting either the thesis option or the coursework option and completing those specific requirements. The four required courses of all students are:

Code	Title	Hours
STA 612	Linear Models	3
STA 710	Stochastic Processes and Applications	3
STA 711	Advanced Statistical Inference	3
STA 712	Generalized Linear Models	3

## Thesis Option

If a thesis is written, 30 semester hours of coursework, including STA 791, STA 792 and at least four additional 3-hour courses numbered above 700 (which includes STA 710, STA 711, and STA 712) are required for the MS degree.

## Coursework Option

If a thesis is not written, 36 semester hours of coursework, including at least four 3-hour courses numbered above 700 (which includes STA 710, STA 711, and STA 712), are required for the MS degree. STA 791 and STA 792 cannot be counted as part of this coursework.

With the approval of the Graduate Committee, graduate courses outside of STA may be taken in related areas to fulfill requirements; however, no more than 9 such hours may count towards the MS degree.

For additional degree requirements, see Requirements for Degrees.

# Sustainability (SUS)

## Master of Arts

### Overview

This innovative and distinctive one-year program combines social sciences, humanities, natural sciences, management and law. Courses taught will include guest lecturers and off-site facility visits. As a result, students will have unparalleled opportunities to engage with professionals beyond the Wake Forest campus. In addition to completing the four core courses, students will engage with organizations outside of the classroom through the completion of a two-credit practicum in Applied Sustainability as well as through course electives. In the summer following the second semester, students will complete a research thesis or internship.

The program's mission is to educate the next generation of leaders in sustainability and place them where they can be most effective. We provide students with a high caliber education and prepare them to enter the workforce or create new ventures to address the social, economic and environmental demands in their respective fields. We educate students to be change agents and develop a vision for ways to invest in and contribute to creating a sustainable future. The program expands Wake Forest's commitment to sustainability and creates opportunities for faculty members to direct their teaching and scholarship toward sustainability-related topics. The multidisciplinary program strengthens collaboration among the different schools at Wake Forest University and the greater communities of business, government agencies, and non-government organizations.

Candidates do not share a typical background nor are they required to have completed specific prerequisites prior to matriculation. The profile of a candidate will typically take the form of an accomplished mid-career professional seeking to re-orient or supplement their career with deep expertise in the field of sustainability, or a recent undergraduate from an accredited institution of higher education. The integrated curriculum of our programs prepares students to join the vanguard of the sustainability movement, which is generating extensive and diverse opportunities for

graduates in both large and small private business, as well as in NGOs, and government bodies. Candidates for the degree will explore and inform their calling in sustainability and add value to their professional endeavors while simultaneously satisfying the urgent societal need for highly knowledgeable leaders in the field of sustainability.

## Programs

- Sustainability, MA
- Sustainability, JD/MA
- Sustainability, MDiv/MA
- Sustainability, Certificate

## Courses

### SUS 600. Communications Workshop. (1 h)

Effective, persuasive communication requires clarity, engaging language, sound reasoning, and an informed appreciation of audience. To that end, this workshop seeks to equip students as change agents that can effectively articulate a vision for ways to invest in and contribute to creating a sustainable future. Specifically, the Communication Skills Workshop teaches you how to apply such concepts to forms of written (e.g., memos) and oral (e.g., PowerPoint presentations) communication typically found in business and non-profit organizational settings. The workshop includes numerous interactive lessons that focus on the essentials of dynamic and economical writing, argument and evidentiary analysis, engaging and well-researched oral presentations, and audience adaptation.

### SUS 601. Professional & Leadership Skills. (1 h)

This workshop will support students in understanding and developing the skills required to be thought leaders in the sustainability field. Learning will focus on leadership skills required to create meaningful change in various organizational settings. Topics include influencing others, collaborating in teams, managing conflict and working across cultures. To enhance self-awareness we will employ self-assessments and the creation of a program-long development plan.

### SUS 602. Scientific Literacy. (1 h)

In this course we will focus on the nature of scientific inquiry, and explore how it is pursued, reported, and applied. In particular, we will focus on the intersection of climate science and the scientific study of attitudes/beliefs about climate science. We will also explore the projected impacts on and policy responses from the state of North Carolina.

### SUS 603. Natural Capital Valuation and Ecosystem Services. (1 h)

This workshop introduces the concept of Ecosystem Services and Natural Capital Valuation in theory and practice. It focuses broadly on the concept of natural capital and the process of valuing ecosystem services, and more closely on how the process is working at multiple scales in policy, markets and projects. Ecosystem services is a new and rapidly growing field that crosses science, policy and management. Practitioners have varied expertise; from spatial modelers, research scientist, and economists, to policy makers and social scientists. We will cover some of the historical development and current state of the ecosystem services markets specifically for carbon and water. Critical spatial tools of GIS and spatial modeling of ecosystem services are also introduced.

**SUS 625. Environmental Decision-Making. (3 h)**

The complex nature of the environment makes the choices made about environmental issues difficult and incomplete. The course offers a simple but comprehensive understanding of the important interplay between science, economics, and values that must be considered, when making informed environmental decisions. A selection of case studies from around the world are highlighted but emphasis will be given to case studies from the United States.

**SUS 630. Global Coastal Management. (3 h)**

Major issues impacting coastal zones of the world are explored. Management and governance themes used in shaping coastal behavior are emphasized from both an integrative and multi-disciplinary perspective. In particular, the following three issues are examined: the threat to coastal environments from a rapidly growing human population and pollution; the destruction of critical resources and vital ecosystems through unsustainable economic activities; and the difficult challenges governments face in crafting effective coastal management initiatives. The course takes a global perspective, but some emphasis will be given to coastal zones of the United States.

**SUS 691. Special Topics. (1-3 h)**

Examination of topics not covered in the regular curriculum.

**SUS 694. Internship. (1-4 h)**

Internships are available for a student who has completed one year of graduate study and desires experience working in the private sector or a nonprofit or government agency. Internships typically take place during the summer months and last for three months, although the timing and duration may be adjusted to satisfy each student's needs and the type of internship available. Credit hours are adjusted based on the length of the internship. The student receives a written evaluation from the host organization mentor and is required to submit a written report of his/her work. May be repeated for up to 4 credits.

**SUS 695. Individual Study. (1-3 h)**

Opportunity to pursue a topic covered in a regular course in greater depth or topics relevant to the student's field of concentration. Usually involves extensive reading and tutorial sessions with a faculty supervisor. Written papers may be required. May be repeated for up to 6 credits.

**SUS 701. Global Human Systems. (3 h)**

Sustainability is a human term with context specific connotations—in other words deployments of the term in the public sphere often tell us more about the perceptions and values of those utilizing the term than they do about what is central to achieving sustainability. In this course we will interrogate the ways in which uses of this human term intersect with earth systems and politics. Students will gain a basic understanding of earth systems science, gather historical data related to human impacts on earth systems, and study human values as they relate to the other-than-human entities with which they share their habitats. Fundamentally, the goal of this course is to go beyond the traditional disciplinary divides (natural science, social sciences, and humanities), to begin to sketch the outlines of each of these areas while highlighting important convergences and differences.

**SUS 702. Sustainable Organizational Mgt. (3 h)**

Are organizations part of the problem or part of the solution – or both? What practices will produce desirable organizational outcomes and improve the environment? This course will provide information to address these questions. It will include an overview of the presence and impact of sustainable practices in private and public sector organizations. The course information and experiences will equip participants with the ability to think critically about the trade-offs inherent in the relationship between certain organizational decisions and sustainability best practices.

**SUS 703. Natural Science for Sustainability. (3 h)**

Students will explore qualitative and quantitative chemical and physical aspects of sustainability for waste, water, air, and energy. The course provides an in-depth scientific understanding of the most important nonrenewable and renewable energy sources. Students will study the world's present and future energy needs, focus on energy production, consumption, and environmental impact, and explore ways in which these principles relate to sustainability. The sustainability and environmental trade off of different energy systems will be studied.

**SUS 704. Environmental Law & Policy. (3 h)**

To understand how we can move toward sustainability domestically and abroad, we must understand how and why law and policy are developed, challenged, and changed. This course will look at the historical development of environmentalism and the movements that provided the impetus for modern environmental legal regimes, as well as case studies illustrating contemporary environmental issues. We will cover common law and statutory remedies for private citizens, principles of federalism and separation of powers, agency rulemaking, the role of the judiciary in environmental law and policy, and international environmental law. Each case study in this course will emphasize one of the major U.S. environmental statutes, so that upon completion of the course you will not only have a foundation in law and policy processes but also a familiarity with the most significant U.S. statutory schemes.

**SUS 705. Applied Sustainability 1. (2 h)**

This course will introduce you to the practice of building sustainable systems in today's world. In it you should improve your ability to understand design principles for sustainability, assess sustainability actions of organizations at all levels, use different frameworks to track and assess sustainability, and apply your skill in effectively managing change. The objective of this course is for us to learn how to advance sustainability today, see what might be done in the future, and identify opportunities that exist for each of us. We will use a variety of learning experiences, including site visits, group presentations and in class presentations by outside leaders.

**SUS 706. Applied Sustainability: Creativity and Impact. (2 h)**

Applied Sustainability is crafted to experience sustainability in action through Human Centered Design. Human Centered Design is a philosophy, a set of abilities, a set of mindsets, and a set of practices that proves invaluable in addressing the sustainability issues of our time. This way of working is a making based approach to problem solving and solution development. You will apply and practice the mindsets and abilities of design in different scenarios and different scales to address sustainability problems, and develop and build on new to the world ideas. This class is project oriented and team based. This course as a journey culminates with a client/community based sustainability practicum. Overall, this class emphasizes new ways of approaching work and life.

**SUS 710. Sustainable Urban Planning and the Built Environment. (3 h)**

This course will explore the tenets of sustainable construction and high performance building practices and prepare students for the U.S. Green Building Council's LEED Green Associate Exam. LEED, or Leadership in Energy & Environmental Design, is a certification program that recognizes best-in-class building strategies practices. Sustainable architecture and construction seeks to minimize the negative environmental impact of buildings by efficiency and moderation in the use of materials, energy, and development space. This course widens the conversation to include how buildings and other community planning impacts urban environments. The focus of this planning is to satisfy construction and design goals with sustainable outcomes.



**SUS 715. Environmental Sustainability in a Global Context. (2 h)**

Students will develop practical problem-solving skills that address the challenges of climate change in an international context. This experiential learning course employs a variety of interdisciplinary approaches to explore concepts related to climate change adaptation. Students will interact with practitioners and stakeholders in various economic and political sectors to develop a group client-based project that supports real policy and management decisions on sustainable practices. Students will have the opportunity to travel internationally to visit affected areas and meet with government officials, researchers, conservationists, and economic planners. This course offers students a firsthand opportunity to conduct field research, hone interviewing practices, draft policy reports, and engage clients.

**SUS 720. Sustainability Practices & Policy in a National Context. (1 h)**

This seminar is designed specifically for graduate students in sustainability, students who are early and mid-career professionals looking to transition into careers in sustainability or environmental protection through business, government, NGOs, policy institutes or non-profits. Students will hear from and meet with a range of experts in climate change and sustainability, learn about the work they do and get a clear understanding of the challenges they face (practically and politically) and the impact they can have. This seminar will model possible career paths and provide networking opportunities.

**SUS 791. Thesis Research. (1-4 h)**

Research directed toward fulfilling the capstone requirement. May be repeated for up to a total of 4 credits.

## Faculty

Program Director Ron Von Burg  
 Professors Miles Silman, John Knox, Dick Schneider  
 Associate Professor David Phillips  
 Assistant Professor Rowena Kirby-Straker  
 Assistant Teaching Professor Leslie Straker  
 Professor of Practice Scott Schang  
 Affiliate Faculty Jon Clift, Michael Curley, Rebecca Dickson,  
 Cassie Freund, Stan Meiburg, Elizabeth Pierce, Charlie Schwarze, Linda  
 Whited

## Sustainability, MA

### Degree Requirements

Students are required to complete a minimum of 30 credit hours from the following courses:

Code	Title	Hours
SUS 600	Communications Workshop	1
SUS 601	Professional&Leadership Skills	1
SUS 602	Scientific Literacy	1
SUS 603	Natural Capital Valuation and Ecosystem Services	1
SUS 701	Global Human Systems	3
SUS 702	Sustainable Organizational Mgt	3
SUS 703	Natural Science for Sustainability	3
SUS 704	Environmental Law & Policy	3
SUS 705	Applied Sustainability 1	2
SUS 706	Applied Sustainability: Creativity and Impact	2
Select 6 credit hours of electives		6

SUS 694 or SUS 791	Internship Thesis Research	4
<b>Total Hours</b>		<b>30</b>

For additional degree requirements, see Requirements for Degrees.

## Dual Degrees

- Bioethics, BA/BS & MA Five Year Program
- Bioethics, JD/MA
- Bioethics, MD/MA
- Bioethics, MDiv/MA
- Computer Science, BS & MS Five Year Program
- Counseling, MDiv/MA
- Education, MDiv/MAED
- MD/PhD
- PhD/MBA
- Religious Studies, JD/MA
- Sustainability, JD/MA
- Sustainability, MDiv/MA

## Bioethics, BA/BS & MA Five Year Program

(Available to WFU undergraduate students)

Program Co-Directors Nancy King and Ana Iltis

### Overview

Sponsored by Wake Forest College and the WFU Graduate School of Arts & Sciences, the Bachelor of Arts/Sciences & Master of Arts in Bioethics can be completed in as little as 5 years (10 semesters + 1 summer). By allowing students who are admitted to the program to begin graduate bioethics coursework while enrolled through the College, students are able to earn two degrees in less time than it would take to earn the two degrees separately.

Undergraduate students must complete all requirements for the undergraduate program, including major, minor, and general requirements (generally, 120 credit hours). Students who are in a position to complete the 120 credit hours required for the undergraduate degree in fewer than the typical four years and are accepted into the five year program may take up to nine credit hours of graduate level bioethics courses while they are enrolled in the College. The Graduate School will accept those credit hours toward the Master of Arts in Bioethics degree if they are above and beyond the minimum 120 hours required to receive a BA/BS. The graduate credit hours earned toward the MA degree during the undergraduate years may not be part of the 120 credit hours required for the undergraduate degree.

Students accepted to the program spend their first four years full-time in the College, followed by a year or more in the bioethics program. The year typically will consist of two semesters plus a summer for students who complete at least six hours of transferable graduate work during their undergraduate years. Because students must complete all of the requirements for the undergraduate degree independently of their Bioethics coursework, students receive their BA/BS degrees when they complete their BA/BS graduation requirements. The MA is awarded separately after completion of the MA requirements. The five



year program requires undergraduates to enroll in 700-level bioethics courses. As part of their acceptance into the program, all accepted students will meet criteria for enrollment of undergraduate students in graduate courses.

Typically, students interested in the BA/BS & MA in Bioethics apply no later than the spring semester of their junior year. Students should alert the Associate Director of the Bioethics Graduate Program of their intent to apply and follow the usual procedures for making an application for admission to a graduate program at the Graduate School of Arts & Sciences. The Graduate Record Examination (GRE) is optional. Only students in good academic standing according to the standards of Wake Forest College should apply.

To remain in the program, students must remain in good academic standing with both Wake Forest College and the Graduate School of Arts & Sciences.

## Degree Requirements

The degree requires 30 credit hours; 24-26 hours of coursework with an average grade of B or above plus either 4 hours of capstone project (BIE 795) OR 6 hours of thesis research (BIE 791-792). Students must take BIE 703 (3 hours) and BIE 706/BIE 707 (3 hours). Additionally, students must take two of the three following courses: (BIE 702 (3 hours), BIE 704 (3 hours), or BIE 705 (3 hours)). The remaining 12-14 hours may be in either 600 or 700 level Bioethics courses. With program permission, up to 6 of those hours may be from non-Bioethics graduate level courses. All work must be completed within six years of the date of initial enrollment in the graduate program.

For additional degree requirements, see Requirements for Degrees.

## Bioethics, JD/MA

Program Co-Directors Nancy King and Mark Hall

### Overview

Under the joint auspices of the Wake Forest University School of Law and the Graduate School of Arts and Sciences, the JD/MA in Bioethics facilitates an interdisciplinary and comparative study of law and bioethics and encourages students whose academic or career interests require gaining competence in both disciplines. By allowing some law courses to count as electives toward the MA degree, as well as by allowing some graduate bioethics courses to count among the elective credits permitted within the JD curriculum, students are able to earn the dual degree in less time than it would take to earn the two degrees separately. The student in the JD/MA divides their time between the School of Law and the Bioethics Graduate Program and benefits not only from an array of course offerings from both curricula, but also from the social and general intellectual life of both academic programs.

### Degree Requirements

Students may receive the dual degree in as little as seven semesters, usually registering with the School of Law for six semesters and with the Graduate School for at least one semester. The dual degree grants 12 hours of law credit for Bioethics coursework and 6 hours of bioethics credit for law coursework. Typically, students spend their first year full-time in the law school, complete 12 Bioethics hours during their 2nd and 3rd years of law school, and enroll for one semester full-time in

the Bioethics program to complete Bioethics coursework plus 4 hours capstone project (BIE 795) OR 6 hours of thesis research (BIE 791/792).

All students must take BIE 703(3 hours) and BIE 706/BIE 707 (3 hours).

Additionally, all students must take two of the three following courses: BIE 702 (3 hours), BIE 704 (3hours), BIE 705(3 hours). The remaining 6-8 hours may be in either 600 or 700 level Bioethics courses.

For additional degree requirements, see Requirements for Degrees.

## Admissions

Admission to the dual JD/MA program is a two-tiered process. Students interested in the program must apply separately to the School of Law and the Graduate School of Arts and Sciences and be accepted for admission by both schools. These applications do not need to be simultaneous, but they should indicate their intent to be considered for the dual degree program on their respective applications to the School of Law and the Graduate School. Alternatively, students may submit a separate application to enroll in the dual degree program if already admitted to either School. In order to be considered eligible for admission, the JD/MA candidate must complete Law School admission requirements for standardized test (currently, the Law School Admission Test (LSAT) or Graduate Record Examination (GRE)). Final decision about admission to the program is made by a joint committee of the JD/MA program. Students should consult the prospectuses of both schools for information about tuition and financial assistance.

To continue in the program, students must remain in good academic standing in both the School of Law and the Graduate School of Arts & Sciences.

## Bioethics, MD/MA

Program Co-Directors Nancy King and Mark Hall

### Overview

The Wake Forest University School of Medicine and Graduate School of Arts and Sciences offers a dual degree program, Doctor of Medicine (MD) and Master of Arts in Bioethics (MA). The program's objective is to facilitate an interdisciplinary and comparative study of bioethics and medicine, and to encourage students whose academic or career interests require gaining competence in both disciplines. Students are able to earn two advanced degrees in less time than it would take to earn the two degrees separately.

The dual degree program in bioethics and medicine signals the commitment of both the School of Medicine and the Graduate School of Arts and Sciences to interdisciplinary collaboration and learning.

By spending their time in both the Medical School and the Bioethics Graduate Program, students benefit not only from an array of course offerings from both curricula, but also from the social and general intellectual life of both academic programs.

Students accepted to the MD/MA in Bioethics dual degree program spend four full years in medical school and one year in the Bioethics Program. After completing initial clerkships in third year OR after initial rotations of the fourth year of medical school curriculum, students enroll in the MA in Bioethics program from August-August and then return to the School of Medicine to finish their medical school curriculum. The students in the program will complete their MA in Bioethics and have the

MA degree conferred at the conclusion of the time (11 ½ months) in the bioethics program.

## Degree Requirements

The Bioethics requirements of the MD/MA in Bioethics dual degree are 24-26 hours of (bioethics) coursework and either 4 hours capstone project (BIE 795) OR 6 hours of bioethics thesis research (BIE 791-792). At least 12 of the 24 hours must be in courses numbered 700 or above. The remaining 12-14 hours may be in either 600 or 700 level courses.

All MA students must take BIE 703 (3 hours) and BIE 706/BIE 707 (3 hours). Additionally, all MA students must take two of the three following courses: BIE 702 (3 hours), BIE 704 (3 hours), BIE 705 (3 hours). The remaining 12-14 hours may be in either 600 or 700 level Bioethics courses. With program permission, up to 6 of those hours may be from non-Bioethics graduate level courses.

For additional degree requirements, see Requirements for Degrees.

## Admissions

Admission to the MD/MA in Bioethics dual degree program is a two-tiered process. Students interested in the program must apply separately to the School of Medicine and the Graduate School of Arts and Sciences and be accepted for admission by both schools. Application to the Graduate School of Arts and Sciences should be made after notifying the appropriate individuals in the School of Medicine to discuss and receive approval for a leave of absence if accepted in the MA in Bioethics Graduate program. The applicant will have already taken the Medical College Admission Test (MCAT). In order to be considered eligible for admission to the dual degree program, the applicant will provide their MCAT scores as part of the Graduate School/bioethics application. Students should consult the prospectuses of both schools for information about tuition and financial assistance.

To continue in the program, students must remain in good academic standing under the minimum standards of both the School of Medicine and the Graduate School of Arts & Sciences.

## Bioethics, MDiv/MA

Program Co-Directors Nancy King and Mark Hall

### Overview

Sponsored by the Wake Forest University School of Divinity and the Graduate School of Arts & Sciences, the MDiv/MA in Bioethics facilitates an interdisciplinary conversation between theology and bioethics and provides resources for students whose vocational aims require knowledge and/or competence in both disciplines.

The MDiv/MA can be completed in as little as seven semesters. A student typically completes two and one-half years of work (five semesters) primarily in the School of Divinity. The final two semesters are completed in the Bioethics Graduate Program but with some electives taken in the School of Divinity. Shared courses are dual degree appropriate, selected from a list of courses agreed upon by the School of Divinity and the Bioethics Graduate Program.

### Degree Requirements

A MDiv/MA Bioethics student earns 61 credit hours from the Divinity program, 26 credit hours from the Bioethics program (including either 4 credit BIE capstone (BIE 795) or 6-credit BIE thesis requirement (BIE

791/792), and 4-6 elective hours from either program. All students must take BIE 703 (3 hours) and BIE 706/BIE 707 (3 hours). Additionally, students must take two of the three following courses: BIE 702 (3 hours), BIE 704 (3 hours), and BIE 705 (3 hours).

For additional degree requirements, see Requirements for Degrees.

## Admissions

Admission to the dual degree program is a two-tiered process. Interested students must apply separately to the School of Divinity and the Graduate School of Arts and Sciences and be accepted for admission by both schools. These applications do not need to be simultaneous, but students should indicate on each application their desire to be considered for the dual degree program. Applications are reviewed separately by each program's admissions committee. Alternatively, students may submit a separate application to enroll in the dual degree program if already admitted to either School. Typically, students make application to the dual degree program by the time they complete one semester in either School. A joint admissions committee composed of members from both schools makes final admissions decisions. The joint committee also oversees and reviews admissions policies for the dual degree. The Graduate Record Exam (GRE) is optional for applications to the Bioethics Graduate Program. The School of Divinity recommends, but does not require, GRE scores.

Students are required to follow the student handbook of the school through which they are enrolled. To continue in the program, a student must remain in good academic standing with both the School of Divinity and the Graduate School of Arts and Sciences.

## Computer Science, BS & MS Five Year Program

*(Available to WFU undergraduate students)*

Program Director Samuel S. Cho

### Overview

This program allows Wake Forest University undergraduates pursuing a B.S. degree in Computer Science to also complete an M.S. degree in Computer Science with one additional year of study. Admitted students begin computer science graduate coursework during their senior year, complete an approved internship the following summer, and then finish the remaining graduate coursework the following academic year. This program provides a unique combination of computer science graduate coursework and experiential learning in a professional setting, and it is an excellent option for students seeking a more industry-oriented career.

Applicants must be enrolled in and complete the B.S. degree in Computer Science at Wake Forest University. Students must apply for admission before the spring semester of their junior year and only after completing eighteen hours in the major that must include:

Code	Title	Hours
CSC 241	Computer Systems	4
CSC 201	Data Structures and Algorithms	3
MTH 121	Linear Algebra I	3
or MTH 205	Introduction to Linear Algebra and Differential Equations	

Applicants must have a major and overall GPA of 3.25 or better at the time of application and undergraduate graduation. In addition, applicants must provide three recommendation letters (submitted via the Graduate School), two of which must be from Wake Forest University computer science faculty. The Graduate Record Examination (GRE) is not required for admission.

## Degree Requirements

In addition to completing the requirements for the B.S. degree in Computer Science (this includes completion with a major and an overall GPA of at least 3.25), the program requires the completion of thirty-three semester hours of graduate coursework. The coursework must include the twelve-hour core consisting of:

Code	Title	Hours
CSC 631	Software Engineering	3
CSC 641	Operating Systems	3
CSC 702	Theory of Computation	3
CSC 721	Theory of Algorithms	3
<b>Total Hours</b>		<b>12</b>

Given the short duration of this program, the thirty-three hours of graduate coursework will be completed as follows: Admitted students must enroll in at least nine hours of computer science graduate coursework during their senior year. Students must also complete six hours of approved computer science graduate internship coursework during the summer following the completion of their undergraduate degree. The remaining eighteen hours of coursework will be completed during the next academic year and are selected from computer science graduate courses with at least six of these hours from 700-level courses. Note the following courses cannot be used to complete this program:

Code	Title	Hours
CSC 791	Thesis Research I	1-9
CSC 792	Thesis Research II	1-9
CSC 795	Project	3

For additional degree requirements, see Requirements for Degrees.

## Counseling, MDiv/MA

Program Co-Director (*Counseling*) Bob Nations

Program Co-Director (*Divinity*) Mark Jensen

### Overview

Students in the dual degree program will spend the first two years of the four-year program in the Divinity School. The second two years of the dual degree program will be spent satisfying the requirements of the Master of Arts degree in the on-campus program.

## Degree Requirements

### MDIV Program

First Two Years. The School of Divinity's regular Program of Study requires 50 hours of required courses and 28 hours of general electives for a total of 78 hours. The program of study for dual degree students would include 47 hours of required courses (with the internship met in CPE) and a minimum of 6 hours of electives in the School of Divinity. The remaining elective credits for the MDiv are satisfied by CNS courses in the second two years.

### MA Program

Second Two Years. The Department of Counseling's Program of Study requires 42 hours of Core Courses, 9 hours of Clinical Courses, and 9 hours in a Program Specialty Area for a total of 60 hours. The program of study for dual degree students would be the same as those students in the Counseling Program.

Upon successful completion of the counseling program, students will receive both the Master of Divinity and the Master of Arts degrees.

For additional degree requirements, see Requirements for Degrees.

## Admissions

Admission to the dual degree program is a two-tiered process. Up to three students per year will be admitted. Applicants must be accepted for admission by both the Graduate School and the Divinity School. Applicants are required to submit a separate application to each school by January 15. Applications for the Counseling Program are submitted through the Graduate School of Arts and Sciences at <http://graduate.wfu.edu>. Applications for the Divinity School are submitted directly to the Divinity School at <http://www.wfu.edu/divinity> (<http://www.wfu.edu/divinity/>).

## Education, MDiv/MAED

Program Director Leah McCoy

### Overview

The School of Divinity and the Graduate School offers a dual degree that:

1. promotes interdisciplinary conversation between theological education, public education, and community engagement; and
2. provides students pathways for developing skills and acquiring competencies necessary for achieving excellence in careers where religious leadership and education intersect.

These degrees provide distinctive vocational perspectives and opportunities not available separately in the education or divinity degree programs.

The dual degree curriculum includes foundational requirements from both divinity and education. It is estimated that the time required to complete the dual degree is seven semesters and two summer sessions. Integrative components include an education internship in a context approved by the Master of Arts in Education program in conversation with the School of Divinity's Art of Ministry (internship) director and a capstone requirement that either through research or an advanced internship encourages students to consider connections between the two fields of study. Advisers from both degree programs work with students to determine an elective course strategy that most effectively prepares each student to succeed as a religious leader who is also a public educator.

Typical Program Outline:

Year	Fall	Spring	Summer
One	Divinity	Divinity	Education (12 hrs)
Two	Mainly Education	Education	Education (6 hrs)
Three	Divinity	Divinity	
Four	Divinity		

Note: Year Two and Year Three are interchangeable.

## Admissions

Candidates for the dual degree must apply both to the Graduate School of Arts and Sciences and the School of Divinity, following the admissions' requirements of the respective programs, and be accepted to each program. A joint committee consisting of faculty/staff representatives both from divinity and education will make final determinations about an applicant's suitability for the dual degree.

## MD/PhD

Program Director Christopher Whitlow

## Overview

An MD/PhD dual degree offers graduates outstanding opportunities in the new era of biomedical research of the 21st century. The invaluable perspective of an MD/PhD graduate positions the physician scientist as a crucial link in translating scientific research into improving human health and reducing disease.

With the increasing sophistication of research tools, MD's without extensive formal research training rarely have the depth of knowledge needed to progress rapidly as a research scientist. The increasing pace of research, the need for knowledge in specific techniques, and the competition in funding have made it more difficult for MD clinicians to succeed in a research-intensive career. Optimal training is provided by combining an MD with a PhD academic program.

The MD/PhD program, a combined effort between the School of Medicine and the Graduate School of Arts and Sciences, is an integrated program where neither the MD nor the PhD degree is compromised. The student gains the full perspective for identification and analysis of problems related to human health while receiving rigorous training in a basic or translational research discipline—training which provides the depth of knowledge of scientific logic and techniques for an effective, exciting, and successful career in medical research.

The program seeks outstanding students who have already shown aptitude and enthusiasm for research.

## Structure of the Program

The duration of the program typically is seven years. During the summer before entry into medical school, beginning in early June, students attend an orientation program to introduce faculty and available research opportunities. An eight-week research rotation is conducted with a selected member of the participating graduate faculty. This research rotation (and subsequent ones, if needed) familiarize students with faculty and their fields of expertise; usually one of these faculty are chosen as the student's graduate (PhD) advisor.

Years One and Two. The first two academic years are spent as a medical student. Phase I (seven months) introduces core biochemical knowledge, including development and structure of the human body (gross, microscopic, embryological, and radiological anatomy) and basic cellular functions (biochemistry, molecular biology and genetics, immunology, introduction to pathology).

Phase II (months 8-20) includes courses in systems pathophysiology (physiology, pharmacology, microbiology and pathology), and a two-

month period for a second rotation in a lab of the selected graduate program in the summer after the first year.

Medicine as a profession, clinical decision making, and epidemiology studies are included in both Phases I and II.

During these years, the student usually attends a graduate seminar course. The seminar meets once a week and provides a continuing in-depth introduction to the chosen graduate discipline in addition to social and intellectual contact with other graduate students and faculty.

If possible, the student chooses a graduate adviser by the end of Phase II of the medical curriculum. Otherwise, the summer after Phase II may be used for another laboratory rotation, prior to choosing an adviser.

At the beginning of year three, students will remain with their medical school class for a three month clinical experience. These three months are spent learning basic clinical skills on internal medicine rotations and introduce the students to the practice of medicine providing basic skills in completing the history and physical exam experience during the graduate school years in an out-patient clinic. These three months of training will also increase the flexibility for returning to medical school upon completion of the graduate degree. After completion of the three clinical months the students will then join the graduate school with the new cohort of graduate students.

Years Three through Five: During the graduate school years, the student participates in a monthly outpatient clinical experience. Students rotate at a clinic for the underserved, working with faculty and private practice physicians. Participation in this clinic not only helps to maintain clinical skills but gives the student experience with balancing research and clinical responsibilities.

The third year is spent taking advanced basic science courses and conducting research. Didactic coursework is intended to supplement the biomedical knowledge base built in the medical school curriculum. Program or departmental courses also provide a more discipline-specific focus and, therefore, depend on the chosen graduate program.

The duration of the dissertation research may vary but typically is completed in years three-to-five and, if needed, a portion of year six. The PhD dissertation is completed and defended prior to returning to clinical studies.

Years Six and Seven. The student completes eighteen months of required clinical rotations (Phase III of the clinical curriculum) which include internal medicine, surgery, pediatrics, obstetrics, women's health, neurology, psychiatry, radiology, anesthesiology, family and community medicine, and emergency medicine. Four months of elective time are spent in other clinical experiences or may be used for completion of graduate studies prior to returning to the medical curriculum. This part of the schedule is tailored to the individual student with the approval of the graduate advisor, MD/PhD program director, and the Associate Deans for medical education and student services.

Conferring of Degrees. The PhD degree is conferred in the semester in which all requirements for that degree are met. The MD degree shall be awarded upon completion of the program.

## Participating Graduate Programs

- Track 3 - Biology
- Track 4 - Molecular and Cellular Biosciences:



- Biochemistry and Molecular Biology
- Cancer Biology
- Microbiology and Immunology
- Molecular Medicine and Translational Science
- Molecular Genetics and Genomics
- Track 5 - Integrated Physiology and Pharmacology
- Track 6 - Neuroscience
- Track 7 - Biomedical Engineering

## Mechanism of Application

Both the School of Medicine and the Graduate School evaluate the applicant's credentials. The MCAT is the required standardized test for all applicants.

Initial application is through the American Medical College Application Service (AMCAS). When the School of Medicine receives AMCAS applications, students are sent supplemental forms for application to the School of Medicine. The applicant should indicate interest in the combined MD/PhD program on the supplemental application. The School of Medicine supplemental packet requests an evaluation by the applicant's premedical advisory committee. For the MD/PhD program, the applicant should also include letters of evaluation specifically addressing his or her research experience and abilities.

This is a highly competitive, limited program. Students who matriculate receive tuition scholarships throughout the program. In addition to outstanding grades and MCAT scores, the applicant should provide evidence of enthusiasm and aptitude for research, with prior research experience beyond that of college courses. This is an important factor in evaluation of the application.

After the supplemental application packet, MCAT scores, and letter(s) of evaluation are received, the completed application is reviewed by the committees on admissions of the MD/PhD program. A small percentage of applicants are then asked to visit the University for interviews from October through March.

## PhD/MBA

Program Director Dwayne Godwin

### Overview

In addition to intensive doctoral training, the PhD/MBA program incorporates core knowledge of business and managerial skills to provide the student with a marketable, competitive advantage, whether the student finds employment in industry or academia. Graduates choosing to pursue a traditional tenure-track faculty position will have the managerial and business training to initiate and operate their own research laboratories and to collaborate more effectively with the private sector. Graduates choosing a non-traditional career path will be prepared to exercise their research training in management positions in the pharmaceutical industry, private foundations, government agencies, or university research and technology transfer offices.

### Structure of the Program

The program is a synthesis of curricula from the Graduate School and the Evening MBA Program of the Wake Forest University School of Business, with specialized coursework and opportunities for industrial and business internships. The joint program is open to all PhD-granting programs across all Wake Forest campuses. It has taken students approximately

5 years to complete the joint program, depending on the nature of the graduate research undertaken in the home program. The first year of the curriculum provides students with a core base of knowledge in biomedical sciences and includes training in the core competencies of the home graduate program. At the same time students begin to be exposed to issues related to research and design, career development, and journal clubs. Laboratory rotations usually occur in this first year in accord with Program or Track requirements, depending on program and campus. The students typically begin their dissertation research during the second year. At the end of the second year and before beginning MBA coursework, the student is required to take and pass a qualifying exam that will admit him or her to candidacy for the PhD.

A student enrolling in the PhD/MBA program will have 5-6 semesters of evening MBA courses added to his or her graduate degree requirements. Opportunities for industrial projects and internships are possible after ascent to PhD candidacy and during the MBA coursework phase. The PhD and MBA degrees are awarded simultaneously at the completion of all requirements for both degrees.

## Application Process

Admissions are administered through the Graduate School of Arts and Sciences. Students wishing to enroll in the program must apply to both programs and meet the respective admissions requirements of the Graduate School of Arts and Sciences and the Wake Forest University School of Business. Admission to the MBA portion of the program can occur separately after gaining admission to the home graduate program and after securing appropriate release from the home program for participation in the joint program (this is in the form of a letter from the thesis advisor cosigned by the program director). In addition to the application a copy of the letter should be submitted to Dr. Dwayne Godwin, Dean, Graduate School of Arts and Sciences and Director, PhD/MBA program. The Graduate Record Exam is accepted for admission to the MBA program. Prospective students should also submit a one-page statement of interest indicating future plans for use of the dual degree, official transcripts from each college or university attended, and three completed recommendation forms.

Before admission to the program, the applicants are required to complete a personal interview with the PhD/MBA program director and the Wake Forest University School of Business. After the interview phase, the top applicants may be offered admission to the joint program.

## Religious Studies, JD/MA

Program Director Mary Foskett

### Overview

The JD/MA in Religious Studies dual-degree program facilitates an interdisciplinary and comparative study of law and religion and encourages students whose academic or career interests require gaining competence in both disciplines. Students interested in this joint degree must apply to each program separately.

Students who enter the joint degree program can combine the standard three-year law curriculum and the standard two-year MA curriculum into a four-year dual-degree program. Students will first complete a year of work in the Department for the Study of Religions. Years 2 and 3 will be completed in the School of Law. For the 4th year, students will enroll in each school for one semester, completing any remaining degree



requirements and elective courses that are appropriate for the dual-degree.

## Degree Requirements

### Law School Requirements

When undertaken as part of the JD/MA in Religious Studies dual-degree program, the JD degree requires completion of the degree requirements prescribed by the law school for graduation. Applicants should familiarize themselves with requirements pertaining to the LSAT (<https://www.lsac.org/jd/lsat/>) or GRE (<https://www.ets.org/gre/>), the JD application (<https://os.lsac.org/release/startup.aspx?appl=5885A1>), the LSAC Credential Assembly Service (CAS) (<https://www.lsac.org/jd/applying-to-law-school/cas/>), and the MA in Religious Studies application (<http://graduate.wfu.edu/apply-now-to-the-wake-forest-graduate-school/>).

To submit your GRE score(s), applicants need to log into their ETS account and select Wake Forest University School of Law as a recipient using ETS institution code 3760. You must submit all GRE scores from the past 5 years. LSAT scores from the past 5 years are automatically provided to Wake Forest University when you apply. Any test scores provided (LSAT, GRE, or both) will be considered in your admissions decision.

## Department for the Study of Religions Requirements

The dual-degree requires completion of 27 hours of graduate coursework in Religious Studies. At least 9 of the 27 hours in coursework must be in courses numbered 700 or above, and one of these courses must be "REL 700: Theory and Method in the Study of Religion." The remaining 18 hours may be in courses at either the 600-level or 700-level. No less than one month before the end of their final semester, students must submit a final portfolio to a committee consisting of one professor of their choice and the graduate director. The final portfolio includes the student's resume, personal statement, a selection of 3 papers (at least 1 theoretical) from any graduate-level courses they have taken during their M.A. coursework, and a 12-15 page reflection paper that discusses their intellectual trajectory, engagement with theory and method, and personal growth across the 3 papers and the way in which the student's views of "religion," broadly defined, have developed. In addition, students will present and discuss their portfolio with their committee in a meeting lasting no longer than one hour. The portfolio will be graded pass/fail (with an option to resubmit) and the committee will consider its overall presentation, clarity of expression and purpose, depth of reflection, and the student's articulation of what they have learned through their course of study.

In special cases, students can finish the degree on the Thesis Option. To finish the JD/MA in Religious Studies dual-degree program on the Thesis Option, the student must submit a thesis proposal a full semester before their final semester in the Department for the Study of Religions and receive approval from the graduate program director. The student, however, must take a minimum of 24 hours of coursework as outlined above and complete an additional 6 hours of thesis research (REL 791 and REL 792), typically in the final semester of study. In total, the student would thus be required to finish the MA degree on the Thesis Option with 30 hours of coursework in Religious Studies, rather than the standard 27 hours.

For additional degree requirements, see Requirements for Degrees.

## Sustainability, JD/MA

Program Director Ron Von Burg

### Overview

The Sustainability Program and School of Law have designed an innovative dual degree program to provide students a pathway for succeeding in professional roles where legal scholarship and practice intersect with sustainability.

Students will expand their potential workforce networks, deepen their knowledge base, and cultivate leadership skills. Attorneys seeking to work in a sustainability related practice area will benefit greatly from foundational knowledge gained through coursework focusing on energy, environmental and sustainability related studies.

### Degree Requirements

The dual degree requires completion of 78 hours of law coursework including the degree requirements prescribed by the Law School for graduation and 22 hours of coursework in the Sustainability program. The joint degrees are designed to be completed in six semesters and one full summer session.

#### MA in Sustainability Course Requirements

Code	Title	Hours
SUS 600	Communications Workshop	1
SUS 601	Professional&Leadership Skills	1
SUS 602	Scientific Literacy	1
SUS 603	Natural Capital Valuation and Ecosystem Services	1
SUS 701	Global Human Systems	3
SUS 702	Sustainable Organizational Mgt	3
SUS 703	Natural Science for Sustainability	3
SUS 704	Environmental Law & Policy *	3
SUS 705	Applied Sustainability 1	2
or SUS 706	Applied Sustainability: Creativity and Impact	
SUS 694	Internship	4
or SUS 791	Thesis Research	

In addition, you must complete at least 9 credit hours of the following sustainability-related law courses:

Code	Title	Hours
LAW 512	Environmental Law	2-3
LAW 414	Energy Law	2-3
LAW 443	Sustainable Corporations	2-3
LAW 656	International Environmental Law	2-3
LAW 530	Natural Resources Law	2
LAW 642	Animal Law	2
LAW 536	Land Use Regulation and Planning	2-3
LAW 641	Regulatory Law and Policy	3
LAW 690	Environmental Law and Policy Clinic	4
SUS 704	Environmental Law & Policy **	3

\*

SUS 704 requirement may be fulfilled by taking 3 credit hours of sustainability-related law courses

**\*\***  
SUS 704 can count toward the nine sustainability-related law credits  
For additional degree requirements, see Requirements for Degrees.

Admissions

Candidates for the dual degree program must apply to both the Graduate School of Arts and Sciences and the School of Law, following the admissions' requirements of the respective programs. Applicants must be accepted to each program in order to pursue the dual degree. A committee consisting of faculty and staff from both the School of Law and the Sustainability Graduate Program will make final determination about an applicant's suitability for the program.

Wake Forest students already enrolled in the JD program are encouraged to apply in the spring semester of their 1st year. Current students may apply after this time, but completion of the program will not follow the traditional three-year plan of study.

Sustainability, MDiv/MA

Program Director Ron Von Burg

Overview

This dual degree program acknowledges the growing demand for professionals in religious leadership who have the knowledge and the skills to lead communities to respond to critical ecological and other social issues. Congregations and other religiously affiliated organizations are increasingly interested in sustainability concerns and seek leaders who can guide their efforts. Knowledge from the biological, physical, chemical, and earth sciences is critical to working professionals who design and implement sustainability practices. The humanities and social sciences incorporate information about spirituality, religious beliefs, and an understanding and appreciation of our relationship to the natural world.

This degree is a collaborative project shared by the Graduate School of Arts and Sciences and the School of Divinity.

Degree Requirements

The MDiv/MA in Sustainability dual degree is designed to be 93 credit hours completed in seven semesters plus one full summer session based on full-time enrollment.

- 21 hours of required course work specific to the MA in Sustainability
- 13 hours of required course work shared by the two degree programs; these courses constitute the integrative foundation of the joint degree.

Code	Title	Hours
SUS 701	Global Human Systems	3
SUS 702	Sustainable Organizational Mgt	3
SUS 703	Natural Science for Sustainability	3
SUS 704	Environmental Law & Policy	3
SUS 705	Applied Sustainability 1	2
or SUS 706	Applied Sustainability: Creativity and Impact	
SUS 694	Internship	4
or SUS 791	Thesis Research	
Any Sustainability elective		3

MIN 542A & MIN 542B & MIN 602A & MIN 602B	Internship and Internship and Internship Reflection Seminar and Internship Reflection Seminar (two semesters)	3
MIN 706	Directed Reflection in Applied Sustainability	1
Elective coursework in either the School of Divinity or Sustainability Graduate Program		9
Total Hours		34

For additional degree requirements, see Requirements for Degrees.

Admissions

Candidates for the dual degree program must apply to both the Graduate School of Arts and Sciences and the School of Divinity, following the admissions' requirements of the respective programs. Applicants must be accepted to each program in order to pursue the dual degree. A committee consisting of faculty and staff from both the School of Divinity and the Sustainability Graduate Program will make final determination about an applicant's suitability for the program.

Certificates

- Bioethics, Certificate
- Curriculum, Instruction, and Assessment, Certificate
- Data Science, Certificate
- Interpreting and Translation Studies, Certificates
- Medieval and Early Modern Studies, Certificate
- Structural and Computational Biophysics (SCB), Certificate
- Sustainability, Certificate

Bioethics, Certificate

(General, Biomedical Research Ethics, or Clinical Bioethics)

Program Co-Directors Nancy King and Mark Hall

Overview

This certificate provides students with basic knowledge and skills that enable them to better address bioethics issues that arise in biomedical research, clinical practice, and health policy. The Graduate Certificate is a freestanding program of graduate study in which students attend the same classes as students in the Master of Arts (MA) in the Bioethics Graduate Program.

Admitted students may enroll in the general Graduate Certificate program or may specialize by enrolling in the Graduate Certificate in Biomedical Research Ethics or the Graduate Certificate in Clinical Bioethics. The specialized certificate options require courses within the general requirements described below. In their first semester of study, all Graduate Certificate students must enroll in at least one required course prior to or concurrently with taking any elective course.

Course Requirements

The Graduate Certificate requires 12 hours of Bioethics course work with an average grade of B or above. At least 9 credit hours must come from core courses in the MA in Bioethics program (BIE 702, 703, 704, 705, 706/707). The last 3 hours may come from remaining BIE courses

or program approved non-BIE graduate level courses. There is no thesis requirement. All work must be completed within four years of the date of initial enrollment in the graduate program. Up to 3 hours of transfer credit may be considered in place of elective course work. Transfer credit acceptance is based on review and approval of grades, course syllabi, and other relevant information. The minimum GPA required for completion is 3.0.

The Graduate Certificate in Biomedical Research Ethics requires students to enroll in BIE 702: Biomedical Research Ethics for 3 of the 9 credit hours of required/core courses. The Graduate Certificate in Clinical Bioethics requires students to enroll in BIE 705: Clinical Ethics for 3 of the 9 credit hours of required courses. Students in the specialized certificate programs may utilize elective courses designed to provide supervised observational and experiential opportunities in relevant settings.

## Curriculum, Instruction, and Assessment, Certificate

Program Director Leah McCoy

### Overview

This program prepares graduate students in disciplines other than Education for teaching at any level. The program provides a solid grounding in educational curriculum, instruction, and assessment.

While this program does not qualify students for a public-school teaching license, it provides a base of knowledge of curriculum, instruction, and assessment. Teachers would be well-prepared to teach in settings which do not require a license, such as private or independent schools, or to enter programs such as Teach for America. International teachers would gain a good understanding of American education.

### Course Requirements

A total of fifteen credits, five three-hour courses, are required. The curriculum includes two required basic courses in Learning and Cognitive Science, and Educational Policy and Practice. The other three courses are selected from graduate courses in Education, which enables the students to focus on area of interest. The minimum GPA required for completion is 3.0.

## Data Science, Certificate

*(Programs of Computer Science, Statistics and Mathematics)*

### Overview

The Wake Forest University Certificate in Data Science program seeks to train and mentor students to become well qualified scientists and researchers. The certificate provides training in algorithms for structured and unstructured datasets, as well as statistical modeling techniques for such datasets. Students will study the theory and application of databases, data processing, data mining, statistical modeling and statistical learning.

Students who successfully complete the program will receive a certificate in Data Science, as well as a degree in any other graduate programs in which they matriculate. The program is implemented by collaboration among the programs of Computer Science, Statistics and Mathematics at Wake Forest University. For currently enrolled Wake Forest Graduate students, following matriculation and at least one semester of coursework in a graduate program, students can apply

for admission. Admission is initiated by meeting with one of the Co-Directors. The student will then submit a letter of intent and a Wake Forest University graduate transcript to the admissions committee. The letter of intent should express the student's interest in the program, a proposed plan of study, and how the program meets the student's career and academic goals. Following favorable evaluation, applicants may be recommended for admission by the admissions committee, with final approval determined by the Graduate School. Students not enrolled in a Wake Forest graduate program may apply directly to the program.

Prior to admission, applicants must have completed coursework (or demonstrate sufficient background) in calculus, linear algebra, and introductory statistics through the level of STA 112, as well as computer programming and also a background course covering data structures, algorithms, and complexity (material equivalent to CSC 201). Gaps in student preparation should be discussed with the program Co-Directors. Students enrolled in the certificate program as well as another graduate program must complete all graduate degree requirements in the individual department to which they were admitted.

## Requirements

Students must take 15 credits, with two courses selected from each of Areas A and B, and one elective. The Co-Directors are tasked with approving a student's plan of coursework. In particular, any courses from Areas A and B taken from outside a student's home department should not count towards both the certificate as well as their degree program.

Students completing a thesis related to Data Science may count up to three credits of independent study towards the Certificate, with approval from the DS Co-Directors. Graduate students who were previously Wake Forest University undergraduate students and took the 300-level equivalent of any courses in Area A or Area B are exempted from those course requirements, but still must complete a total of 15 credits at the 600 or 700 level by selecting additional electives.

## Area A -- Statistical Modeling and Statistical Learning

Code	Title	Hours
Select two of the following:		
STA 612	Linear Models	3
STA 662	Multivariate Statistics	3
STA 663	Introduction to Statistical Learning	3

## Area B -- Computational Data Science

Code	Title	Hours
Select two of the following:		
CSC 621	Database Management Systems	3
CSC 622	Data Management and Analytics	3
CSC 673	Data Mining	3
CSC 675	Neural Networks and Deep Learning	3
or CSC 674	Machine Learning	

## Electives

One additional graduate elective selected from STA, an approved course from MTH, or a CSC course selected from the table below.

Code	Title	Hours
Select one of the following:		
Any CSC course listed in but not taken as part of fulfilling the Area B requirements		3
CSC 652	Numerical Linear Algebra	3
CSC 655	Introduction to Numerical Methods	3
CSC 646	Parallel Computation	3
CSC 647	GPU Programming	3
CSC 671	Artificial Intelligence	3
CSC 726	Parallel Algorithms	3

Students in the program have access to state-of-the-art equipment and facilities in multiple departments, including the DEAC Linux cluster (deac.wfu.edu (<http://deac.wfu.edu>)). The Interdisciplinary Graduate Certificate Program in Data Science began in 2020.

## Faculty

Program Co-Directors Samuel Cho, Robert Erhardt  
 Professors Erin Fulp, Paül Pauca  
 Associate Professors Samuel Cho, Robert Erhardt,  
 Jennifer Erway, Stan Thomas, William Turkett  
 Assistant Professors Gray Ballard, Lucy D'Agostino-McGowan, Staci  
 Hepler, Sneha Jadhav, Natalia Khuri

## Interpreting and Translation Studies, Certificates

### Overview

Program Co-Directors, Olgierda Furmanek, Diego Burgos and Chaowei Zhu

For students who are not able or ready to commit to earning a Master of Arts degree in Interpreting and Translation Studies, but who would like to focus on an area of interest, the program offers three Graduate Certificates and one Post-Graduate Certificate in specialized areas. Pairing various certificates provides a comprehensive package for students to reach their career goals in a more flexible, customized manner.

### Certificates Offered

- Graduate Certificate in Interpreting Studies (language-specific)
- Graduate Certificate in Translation Studies (language-specific)
- Graduate Certificate in Intercultural Services in Healthcare
- Post-Graduate Certificate in Teaching of Interpreting (students with an MA, MS, or MBA)

## Course Requirements

Students are required to complete 15 credit hours of instruction within four consecutive semesters. The minimum GPA required for completion is 3.0.

## Medieval and Early Modern Studies, Certificate

*(Departments of English, Romance Languages, History, Politics, Philosophy, Music, Classics, Art History, Religion, German, Humanities, Art History)*

### Overview

This certificate is designed to allow students in English to both broaden their knowledge of and focus their studies on the medieval and early modern periods. The program provides pragmatic interdisciplinary coursework, training in the technical skills of medieval studies, linguistic preparation, and a variety of subject areas for specialization. The program offers students a competitive advantage in admission to doctoral programs. Students may enroll in the program by permission of the director upon admission or anytime during their first year.

Courses satisfying the certificate may overlap with program requirements but requires some coursework beyond that of the Master of Arts degree.

The certificate generally does not require more time to complete than the Master of Arts program in English. Students are strongly encouraged to apply for extramural fellowships to study one or more summers at the international sites where a medieval studies curriculum is available (e.g., We are aligned with the St. Peter's College, Oxford summer program in Medieval and Environmental Studies [see the medieval studies minor in the Wake Forest University Undergraduate Bulletin for details]). Students may apply two of the courses taken for the Master of Arts degree toward the certificate program with approval of the director.

Activities and opportunities include the medieval studies workshop and lecture series; the paper contest that awards winners with funding to the International Congress of Medieval Studies at Western Michigan University; the Gordon A. Melson Graduate Student Award in Medieval Studies, specifically awarded to an outstanding graduate student to attend the International Congress on Medieval Studies at Western Michigan University; the medieval studies summer program at St. Peter's College, Oxford; the medieval section of the department's library in the Archie Ammons English Department Faculty Lounge; and the establishment of an internship with the Medieval and Early Modern Studies Program Director.

## Course Requirements

Students are required to take a minimum of 12 credit hours with a medieval or early modern focus; these courses should represent two different disciplinary fields in addition to that of the student's home department. In consultation with the program director, one or more of these additional courses may be taken as directed reading or as medieval language courses. The graduate thesis must have a medieval focus, and the MA thesis committee should have at least two participating departments represented. The minimum GPA required for completion is 3.0.

## Faculty

Program Director Gale Sigal  
 Professors Stewart Carter, Gale Sigal, Herman Rapaport, Sol Miquel-Prendes, Monique O'Connell, Jeff Soloman, Jefferson Holdridge  
 Associate Professors Olga Valbuena-Hanson, Chanchal Dadlani, Tina Boyer  
 Assistant Professors Amy Clark  
 Visiting Assistant Professor Clara Wild, Patrick Kozenyi, Cesar Gutierrez



Teaching Professor John Smart  
 External Associate Professors Charles Wuest, Alison Gulley  
 Emeritiae Gillian Overing, Ulrike Wiethaus

## Structural and Computational Biophysics (SCB), Certificate

(Programs of Biology, Chemistry, Computer Science, Mathematics, Molecular and Cellular Biosciences, and Physics)

### Overview

This certificate is designed to meet the need for scientists and educators with broad, interdisciplinary training in the quantitative biological, biochemical, and biomedical sciences. Students who successfully complete the certificate and degree requirements will receive a certificate in Structural and Computational Biophysics, as well as the degree in the program in which they matriculate. The program is a collaboration among the programs of Biology, Chemistry, Computer Science, Mathematics and Statistics, Molecular and Cellular Biosciences and Physics.

Following matriculation and at least one semester of coursework in a participating program (currently Biology, Chemistry, Computer Science, Mathematics and Statistics, Molecular and Cellular Biosciences and Physics), students can apply for admission to this certificate program. Admission is initiated by meeting with the SCB program director. The student will then submit a letter of intent and a graduate transcript to their department representative or to their program director. The letter of intent should express the students interest in the program, a proposed plan of study, and how the program meets the students career and academic goals. Following favorable evaluation, applicants may be recommended for admission by the program director, with final approval determined by the Graduate School.

Students have access to state-of-the-art equipment and facilities in multiple departments, including the Wake Forest Structural Biology Facility ([csb.wfu.edu](http://csb.wfu.edu) (<http://csb.wfu.edu>)), the DEAC Linux cluster ([deac.wfu.edu](http://deac.wfu.edu) (<http://deac.wfu.edu>)), and well-equipped research laboratories in biophysics, biochemistry, and biomedical engineering.

The interdisciplinary certificate program in Structural and Computational Biophysics began in 2005. Information on the program and links to faculty research interests can be accessed at [scb.wfu.edu](https://scb.wfu.edu) (<https://scb.wfu.edu>).

### Course Requirements

Students will follow the curriculum for the Graduate Program in which they are seeking a degree. Masters degree students must be pursuing a thesis option. Fifteen hours in SCB-related courses including two hours in each of three areas below, one hour of discussion group for credit and two hours of journal club (the other six hours are in the student's area of specialty). Coursework is deliberately flexible, and courses will be approved by program director. Students will successfully complete a course in scientific ethics (GRD 713/ GRD 714 recommended). Student dissertation/thesis committee must have members from three different SCB associated departments. The dissertation/thesis must involve original, interdisciplinary research in the area of structural and computational biophysics or computational biology; broadly defined.

## Courses of Instruction

Approved courses are listed below. Additional courses or substitutions may be approved by the program director. Course descriptions can be found under the department which administers the course.

### SCB-Specific Courses

#### SCB 701. Structural and Computational Biophysics Journal Club. (1 h)

Seminal and current publications in structural and computational biophysics are read and discussed. P-Admission to the SCB graduate certificate program or POL.

#### SCB 710. Research Topics in Structural and Computational Biophysics. (1 h)

Lectures and discussions on research topics in the field of structural and computational biophysics and biology. Topics depend on the specialty of the instructors in a given semester. P-Admission to the SCB graduate certificate program or POL.

### Curriculum Area 1. Chemistry/Biochemistry

General prerequisites: Two semesters of undergraduate chemistry and one semester of undergraduate biochemistry or molecular biology. Additional prerequisites may be required by course.

Code	Title	Hours
BIO 670	Biochemistry: Macromolecules and Metabolism	3
BIO 672	Advanced Molecular Biology	3
BIO 775	Microscopy for the Biological Sciences	4
CHM 624	Medicinal Chemistry	3
CHM 641	Physical Chemistry	3
CHM 673	Biochemistry Protein and Nucleic Acid Structure and Function	3
CHM 676	Biophysical Chemistry	3
CHM 751	Biochemistry of Nucleic Acids	1.5-3
CHM 752	Protein Chemistry	1.5-3
CHM 753	Chemical Biology	3
CHM 755	Biomolecular Mass Spectrometry: Fundamentals and Applications	1.5-3
CHM 756	Biomolecular NMR	1.5
CHM 757	Macromolecular Crystallography	1.5
MCB 700	Analytical Skills	1
MCB 701	Molecular&Cellular Biosciences	1-6
MCB 711	Biological Systems&Structures	2

### Curriculum Area 2. Physics

General prerequisites: Two semesters of undergraduate physics. Additional prerequisites may be required by course.

Code	Title	Hours
PHY 607	Biophysics	3
PHY 620	Physics of Macromolecules	3
PHY 625	Biophysical Methods Lab	1
PHY 685	Bioinformatics	3

### Curriculum Area 3. Computer Science/Mathematics/Statistics

General computer science prerequisites: Programming in a high-level language. Additional prerequisites may be required by course.



Code	Title	Hours
CSC 621	Database Management Systems	3
CSC 631	Software Engineering	3
CSC 646	Parallel Computation	3
CSC 652	Numerical Linear Algebra	3
CSC/MTH 655	Introduction to Numerical Methods	3
CSC 671	Artificial Intelligence	3
CSC 685	Bioinformatics	3
CSC 687	Computational Systems Biology	3
CSC 721	Theory of Algorithms	3
CSC/MTH 753	Nonlinear Optimization	3
CSC/MTH 754	Numerical Methods for Partial Differential Equations	3
CSC 775	Neural Networks	3
MTH 605	Introduction to Linear Algebra and Differential Equations	3
MTH 606	Advanced Mathematics for the Physical Sciences	3
MTH 626	Numerical Linear Algebra	3
MTH 652	Partial Differential Equations	3
MTH 757	Stochastic Processes and Applications	3
PHY 635	Computational Physics	3
STA 611	Statistical Inference	3
STA 612	Linear Models	3
STA 652	Networks: Models and Analysis	3
STA 662	Multivariate Statistics	3
STA 663	Introduction to Statistical Learning	3

## Faculty

Program Director Freddie R. Salsbury Jr  
 Professors Rebecca Alexander, Edward E. Allen, Ulrich Bierbach, Keith D. Bonin, Martin Guthold, Thomas J. Hollis, W. Todd Lowther, Daniel B. Kim-Shapiro, S. Bruce King, Douglas S. Lyles, Jed C. Macosko, Gloria K. Muday, Paul Pauca, Leslie B. Poole, Freddie R. Salsbury Jr., Peter Santago  
 Associate Professors Adam Hall, Brian W. Tague, William H. Turkett Jr.  
 Assistant Professor Derek Parsonage

## Sustainability, Certificate

### Overview

Students are provided with exposure to sustainability issues in the natural sciences, social sciences, humanities, business management, law, and policy. Students will utilize our program as a mechanism for adding value to their professional endeavors while simultaneously satisfying the urgent societal need for highly knowledgeable leaders in the field of sustainability. The certificate can be obtained on a stand-alone basis or in conjunction with another graduate program. Students in the certificate program may transition to the Master of Arts degree. An application must be submitted, and admission approved.

### Course Requirements

Students will complete the following for a total of 12 credit hours to earn the certificate.

Code	Title	Hours
SUS 701	Global Human Systems	3
SUS 702	Sustainable Organizational Mgt	3
SUS 703	Natural Science for Sustainability	3
SUS 704	Environmental Law & Policy	3
<b>Total Hours</b>		<b>12</b>

## Faculty

Program Director Ron Von Burg  
 Professors Miles Silman, John Knox, Dick Schneider  
 Associate Professor David Phillips  
 Professor of Practice Scott Schang  
 Affiliate Faculty Rebecca Dickson, Cassie Freund

## Concentrations

- Religion and Public Engagement Concentration
- Women's, Gender, and Sexuality Studies Concentration

## Religion and Public Engagement Concentration

Director Lucas Johnston

### Overview

This unique concentration encourages theoretical and practical exploration at the intersection of religion and public life, the concentration is open to all students, who want to explore the world and make a difference, regardless of their major or academic background.

Students can take what they learn in the classroom and apply it to the real world by engaging in public work through research projects, service-learning opportunities, and internships for academic credit. These internships can take our concentrators to various parts of the world.

By working with the most qualified professors in various specialties, students develop competence in public engagement in reciprocal collaboration with diverse communities regionally, nationally, and globally. Embracing the spirit of pro-humanitate, this concentration allows students to pursue their deepest interests and directs them towards community development consistent with internationally accepted standards of human rights and the highest academic standards of teaching, research and collaboration.

The student must achieve a B or higher in the concentration and complete the major degree of study for it to be noted on the transcript. The RPE director will certify completion of the concentration.

## Requirements

### Course Requirements: 12 hours

Code	Title	Hours
<b>Required Core Courses</b>		
REL 632	Religion and Public Engagement	3
REL 709	Field Program in Religion and Public Engagement	3

### Elective Courses

Select six hours of the following with approval RPE Director and Program Director: 6

<i>Theory</i>		
REL 605	Ethnography of Religion	
REL 636	Religious Traditions and Human Rights	
REL 638	Religion Ethics and Politics	
THS 621	Christianity and Public Policy	
REL 700	Theory and Method in the Study of Religion	
*		
<i>Skills</i>		
REL 631	Religion and Law	
LAW 601	Community Law and Business Clinic I	
<i>Content</i>		
REL 618	Feminist and Contemporary Interpretations of the Bible	3
REL 669	Radical Christian Movements	
REL 690	Spec Topics in Religion	
REL 648	Race, Memory, and Identity	
REL 361	Topics in Buddhism	
MIN 790	Topics Courses	
THS 624	Church & State in America	
<i>Internship</i>		
A supervised internship with approved community partner for a total of one semester or one full summer **		
<b>Total Hours</b>		<b>15</b>

\*

All MA students must take REL 700, but this does not count toward the 12 hours required for the graduate RPE concentration.

\*\*

Includes assigned readings, a sustained research and writing portfolio, and an oral presentation.

## Women's, Gender, and Sexuality Studies Concentration

Director Wanda Balzano

### Overview

This concentration will provide students the opportunity to study gender and sexuality from a variety of disciplinary perspectives in conjunction with their study toward a graduate degree. Interdisciplinary by nature, Women's, Gender, and Sexuality Studies courses primarily address the diversity of gendered experiences based on race, ethnicity, class, religion, nationality, and sexual orientation. The concentration is an appropriate option for students who wish to focus on gender and/or sexuality in their disciplinary field.

Applicants must declare their interest in the concentration to both the WGSS program director and the director of their own program of studies. The students must achieve a B or higher in the concentration and complete the major degree of study for it to be noted on the transcript. The WGSS program director will approve course substitutions when needed and will also certify completion of the concentration.

## Requirements

### Course Requirements: 12 hours

Code	Title	Hours
<b>Required Core Courses</b>		
WGS 622	Introduction to Women's and Gender, and Sexuality Studies	3
or WGS 617	Introduction to Sexuality Studies	
WGS 698	Theory and Practice of Women, Gender, and Sexuality Studies	3
<b>Elective Courses</b>		
Select 6 hours of WGS courses		6
<b>Total Hours</b>		<b>12</b>

### Electives

Electives (6) are chosen from WGS courses which are cross listed in the home department and are selected with the assistance of the WGS advisor and program director.

If students have already taken any of the required courses in their undergraduate years, substitutions for electives are admitted, in consultation with the WGSS program director.

Additionally, students will be required to present their research at a conference, or at the WFU annual symposium on gender and sexuality, or at the WGSS colloquium for the S.P.E.A.K. series (Student Presentations on Experience, Arts, and Knowledge).

## Courses

### Women's and Gender Studies (WGS)

#### WGS 600. The WGS Field Guide to Museums. (1.5, 3 h)

This hands-on course consists of gender/sexuality-focused lectures, readings, workshops, digital storytelling, and guided visits of university and art galleries, museums, historical societies and homes, community centers, and other local institutions that have relevant artwork or archive materials, whether print or digital. Provides opportunities to develop expertise in interpretation of collections through a gender lens while considering the role of public education and creative thinking in community settings.

#### WGS 601. Feminist Political Thought. (3 h)

Introduces feminist thought and its implications for the study and practice of political theory. Topics includes feminist critiques of the Western political tradition and schools of feminist political theory.

#### WGS 602. Studies in Gender and Literature. (3 h)

Addresses ways in which gender and literary practices intersect in various cultures and historical periods. Attention will be paid to the role of literature in formulating, subverting, or resisting gender norms. May be repeated for credit if topic differs.

**WGS 603. Gender and Sexuality in Literary Adaptations. (1.5, 3 h)**

Focuses on understanding the relationship between written literature (novel, play, short story, poem) and its adaptation to another genre or medium (film, painting, video game, song, etc.) through the lens of gender and sexuality. It can also involve adapting the same literary work in the same genre or medium for different purposes, i.e. to work with a cast of differing gender or race, in a smaller or larger venue (or on the road), for a different demographic or ethnic group, or in a different geographical/historical setting. This course studies how adaptations enable us to rework literature and rethink attitudes about issues of gender, ethnicity, class, history, and identity.

**WGS 604. Transgender History, Identity, and Politics. (3 h)**

Explores the experiences of and responses to transgender, gender non-conforming, and intersex (TGI) people in nineteenth- and twentieth-century America. We will examine how scientific/medical authorities, legal authorities, and everyday people have understood and responded to various finds of gender non-conformity.

**WGS 606. Queer Public Histories. (3 h)**

This course explores how public history projects (oral histories, museums, archives, documentaries) document gay, lesbian, and queer communities in the U.S. Discusses how historical and contemporary LGBTQ stories have been collected and examines the various queer identities that merge through this process.

**WGS 609. Gender, Humanities, and the Environment. (3 h)**

Provides a framework for understanding how the Humanities can contribute to civic conversations about environmental change, examining in particular the role of women environmentalist and eco-feminist in constructing global environmental narratives.

**WGS 610. Gender, Power, and Violence. (3 h)**

A research-centered study of various issues related to violence, power, and gender in American society. Emphasizes sociological analysis of competing theoretical explanations of violence with respect to race, class, gender, religion, and sexual orientation.

**WGS 617. Introduction to Sexuality Studies. (3 h)**

Provides an interdisciplinary grounding in the foundations of queer culture and studies, with a critical interrogation of sex, gender, sexuality, pleasure, and embodiment in popular culture, literature, health, science, and politics.

**WGS 618. Film Lab in Women's, Gender, and Sexuality Studies. (1.5 h)**

Viewing, dissecting, and analyzing films. Fosters the skills to create complex cinematic analyses and explore feminist theoretical issues related to spectatorship.

**WGS 619. Women Playwrights. (3 h)**

Examination of selected plays and/or performance texts by women. Focus varies, for example, looking at works by contemporary American women or early women dramatists such as Hrosvitha, Sor Juana, and Aphra Behn.

**WGS 621. Introduction to Women's, Gender, and Sexuality Studies. (3 h)**

An interdisciplinary course that integrates materials from the humanities and the sciences, taught by WGS faculty representing at least two fields. Topics include critical methods and practical solutions, history and theory of women's gender, and sexuality studies, women in culture and society, and cross-cultural issues of gender, ethnicity, social class, disability, and sexual orientation.

**WGS 622. Introduction to Women's and Gender, and Sexuality Studies. (3 h)**

An interdisciplinary course that integrates materials from the humanities and the sciences, taught by WGS faculty representing the least two fields. Topics include critical methods and practical solutions, history and theory of women's gender, and sexuality studies, women in culture and society, and cross-cultural issues of gender, ethnicity, social class, disability, and sexual orientation.

**WGS 623. Feminist, Womanist, and Mujerista Theologies: Constructive Perspectives on Christian Thought. (3 h)**

Discourse featuring womanist and feminist theologies as "lived" and "living" religious orientations that shape ethical worldviews, earth communal landscapes, and experiences of spiritual life.

**WGS 624. Queer Theologies. (1.5-3 h)**

This seminar-style reading course surveys classic and new works in queer theology. Queer theology transgresses dominant constructions of gender identity and sexuality; and as such, it can be seen as an expression of the Christian gospel that subverts human understandings of life, community, and the divine. The course explores biblical and Christian theological perspectives on sexuality, social constructions of sexuality, and issues such as power, marriage equality, and sexual ethics.

**WGS 625. Feminist Leadership Project. (1.5 h)**

Explores the principles of feminist leadership to deepen self-awareness about personal leadership skills and gain tools for creating feminist social change. This highly interactive class welcomes students who are new to feminist thought/activism as well as those seeking to deepen their engagement with feminism. Satisfactory/Unsatisfactory.

**WGS 626. Telling Women's Lives: Writing about Entrepreneurs, Activists, and Thought Leaders. (3 h)**

This course will use an interdisciplinary approach to address fundamental issues of female leadership by examining recent developments in long- and short-form narratives about women (biography, essays, profiles) and employing journalistic tools to interview and write profiles of women entrepreneurs, activists, and thought leaders.

**WGS 627. The Feminist Book Society. (1.5 h)**

A reading course designed to introduce students to classic and contemporary feminist texts. Emphasis on close reading, discussion, and writing. May be repeated for credit if texts differ.

**WGS 629. Politics of Gender and Sexuality: Cross-Cultural Perspectives. (3 h)**

Examines cultural constructions of gender and sexuality from a cross-cultural perspective and the relationship between feminism and cultural rights activism through time. Emphasizes how varied forms of feminisms are constituted within diverse social, cultural, and economic systems. Students consider how feminists are negotiating positions at the intersection of cultural and human rights.

**WGS 630. Gender and the Politics of Health. (3 h)**

This course examines the intersections of gender, medicine, health, and illness, with a focus on the U.S. context. Topics include: reproduction, mental illness, breast cancer, heart disease, and HIV/AIDS, among others. We explore the following questions: How have women and men interacted differently with the field of medicine, as healers, patients, and subjects of medical research? How do social and cultural norms about gender influence the definition of illness categories? What role does medicine play in defining and enforcing the boundaries of what is considered socially acceptable in terms of gender? How does gender as social role affect health outcomes?

**WGS 632. Men, Masculinity, and Power. (3 h)**

Introduces the burgeoning interdisciplinary field of masculinity studies. Students will explore the social, historical, and cultural constructions of masculinity and male roles (as fathers, sexual and romantic partners, and workers) and how these constructions differ according to race, class, sexuality, etc. In addition, the course will examine how norms about masculinity simultaneously empower men as a group and many individual men, while also disadvantaging any individual men and regulating the behavior of all men. Students will explore possibilities for challenging hegemonic forms of masculinity and for creating new types of masculinity.

**WGS 633. Sexual Politics in the United States. (3 h)**

This course explores the politics of sexuality in the United States. Drawing on feminist scholarship, queer theory, and lesbian, gay and transgender studies, we will explore different historical and theoretical approaches to thinking about issues of power and sexuality. We will discuss sexual identities and cultures, state regulation of sexuality, sexual commerce, and cultural representations of sexuality, among other topics. Throughout we will examine how other social categories such as race, class, gender, and disability intersect with the politics of sexuality.

**WGS 640. Feminist Philosophy. (3 h)**

Examines feminist approaches to philosophical theorizing. Topics may include feminist critiques of the scope and methods of mainstream philosophy, feminist approaches to ethics, epistemology and philosophy of language, and feminist conceptions of the self, sexuality, and moral agency.

**WGS 645. Girls Gone Wild: A Century of Misbehavior. (3 h)**

This course analyzes what made girls and women “bad” and “wild” in the twentieth-century United States, and how such judgments changed over time. This class engages closely with novels, short stories, movies, comics, podcasts, and an opera with an eye to what behaviors were considered appropriate, and how they interrelated with sexual attraction, with economics, and with love. We examine the relationship between being configured as a sexual object (a recipient of desire) and a sexual subject (a possessor of desire) and come to a critical understanding of how the “proper” and “improper” forms of both were constantly in flux. We ask how race, ethnicity, and queerness interacted with hegemonic concepts of beauty and desire, and whether “masculinity” and “femininity” are necessarily attached to men and women. We read theories of sex and gender, examine concepts of projection and male hegemony, and ask how men as well as women are shaped by rules of appropriate behavior.

**WGS 646. Visual Narratives: Image, Sequence, Story. (3 h)**

This class investigates the relationship of image, sequence, and story in typography, comics, woodcut novels, and photographic books, and films, as well as fiction and poetry with unusual visual elements, and then asks how these various elements offer different visual and textual expressions of sexuality. Students will conduct formalist analyses and further investigate visual narrative through creative exercises with the goal of developing an aesthetic sensibility and a technical vocabulary that enable them to discuss visual narrative with precision. Please note that some visual narrative will include graphic scenes of sexuality.

**WGS 647. Joan Didion/Edmund White: Personal/History. (3 h)**

This course examines Didion and White, two of the most important American writers of the past fifty years. Both are known for their journalism as well as their fiction, and their interest in U.S. cultural and political history, especially in terms of gender and sexuality, permeates their novels. This course analyzes three works by each author, developing themes from motherhood, sexuality, imperialism, rebellion and AIDs.

**WGS 649. Invert, Pervert, Bull Dagger, Queen: U.S. Queer Fiction in the 20th Century. (3 h)**

This class explores the history of lesbians, gay men, bisexuals, the transgendered, and other queers through fiction by and about them written over the last century in the United States. We also consider biography, artifacts of popular culture, comics, drama, and film. Topics include the relationship between homosexual desire and queerness in a broad sense; LGBTQ children; biological and psychological understandings of sexual orientation; and how social construction informs sexual identity and desire.

**WGS 650. Biocultural Perspectives on Women and Aging. (3 h)**

Examines biological, socio-psychological, and cultural issues affecting older women.

**WGS 651. Race and Ethnic Diversity in America. (3 h)**

Different race and ethnic experiences are examined through an institutional approach that examines religion, work, gender, schooling, marriage patterns, and culture from a cross-cultural perspective. Grand theoretical schemes like the “melting pot” are critiqued for their relevance in an age of new cultural expectations among the many American ethnic groups.

**WGS 658. Mothers and Daughters Literature and Theory. (3 h)**

Examines literature and feminist theories on motherhood and the mother-daughter relationship. A cross-cultural perspective is taken.

**WGS 659. Fathers and Daughters. (3 h)****WGS 662. Feminism and Theatre. (3 h)**

Introduces the student to the intersection of theater and feminism and experience its interdisciplinary lineage and academic interventions. Students will learn and apply feminist theory which looks beyond the conventional theater for a continuum of performance that includes play, ritual, sports, everyday life and social roles, as well as performance art, global and intercultural performance. Engaging with various feminist theoretical approaches from radical and liberal feminism to intersectional and transnational feminism, students will be encouraged to critically examine race, class, gender, sexuality, ethnicity, and nationality expressed on and offstage. Through readings, discussions, lectures, research and creative assignments, indoor and outdoor classroom activities, and campus events, students will explore historical and socio-political factors entangled with representation, identification, and spectatorship, and strengthen their capacity to exercise feminist practice in theater and performance.

**WGS 663. Gender and Sexuality in Contemporary Korea. (3 h)**

This course will examine gender and sexuality in Korean TV, film, K-pop, protests, and everyday performances, focusing on diverse socio-political issues within and beyond the Korean Peninsula. Topics include: the evaluation of feminism, #metoo movement, LGBTQ cultures, sex work, aging, plastic surgery industry, postcolonial and post-Korean war conflicts, and transpacific affinities.

**WGS 664. Women of Color, Feminism, and the Politics of Resistance in the US. (3 h)**

Examines historical and contemporary issues and current events affecting the lives of African American, Asian American, Latina, and Native American women. Exploring major theoretical and practical viewpoints in women's studies scholarship, the course will reveal the importance of intersectionality between race, gender, sexuality, class, and/or ethnicity in the everyday lives of multicultural women. Through arts-based civic engagement projects and activities, this course will also encourage students to formulate their own language of resistance against multiple forms of oppression.

**WGS 665. Transnational Asia and Asian American Feminism. (3 h)**

This course will analyze historical, socio-political, and cultural events as well as contemporary issues structuring the lives of Asian American women and queer community. Students will learn intersectional and transnational feminist approaches to examine race, class, gender, sexuality, ethnicity, nationality, and kinship in Asian American art and activism.

**WGS 671. Making Sense of the News through a Feminist Lens. (1-3 h)**

Inquiry into news literacy from a feminist perspective, with the intention to identify gender bias and consider questions of empowerment, exclusion, consumerism, and how to navigate the digital landscape to distinguish verified, reliable news from propaganda.

**WGS 677. Special Topics. (1.5-3 h)**

Includes such a wide range of women's, gender, and sexuality studies topics as gender issues in the 21st century, critical approaches to gender issues, and the emergence of feminist thought. May be repeated for credit if topic differs.

**WGS 680. Sexuality, Law, and Power. (3 h)**

Explores a wide variety of issues related to sexual identity and orientation by looking at the ways in which law can constrict development as well as a catalyst for change. Examines how religion and popular morality shape the law, and are shaped by it.

**WGS 681. Gender and the Law. (3 h)**

This course will examine how the law affects women's lives in a number of contexts. The class will consider a number of different areas, including but not limited to employment, education, family responsibilities, violence against women, and other issues affecting women's bodies, including pornography and prostitution. The class will also review a number of feminist legal theories and issues relating to the intersection of gender with race and class.

**WGS 683. Race, Gender and the Courts. (3 h)**

This course examines the impact of state and federal court cases upon the evolution of race and gender relations in the U.S. from 1789 to the present. Each case is placed within the political, economic and social historical context for the given time periods. Race includes Native Americans, African Americans, Asian Americans, and Latino Americans. This class will analyze government intervention, inaction, and creative interpretation.

**WGS 688. South Asian Women: Religion, Culture, and Politics. (3 h)**

Using a feminist and post-colonial perspective, and taking into account the histories, experiences, and lives of South Asian women this course, examines the intersection of religion, race, and gender from both a theoretical and a practical point of view. It focuses on issues of representation and identity formation, recognizing how categories such as "South Asian" and "women" become tools for a simultaneous understanding of both culture and gender, creating a place for both oppression and empowerment.

**WGS 696. Independent Study. (1-3 h)**

Independent projects in women's gender, and sexuality studies, which either continue study begun in regular courses or develop new areas of interest. By prearrangement. May be repeated for credit.

**WGS 697. Public Engagement in Women's, Gender, and Sexuality Studies. (1.5, 3 h)**

This class provides an opportunity for students to engage in work and research that is shared with the broader public, either on campus or in a local community. A maximum of 3 hours may apply to the major or minor.

**WGS 698. Theory and Practice of Women, Gender, and Sexuality Studies. (3 h)**

Examines the major themes and terminology in Women, Gender, and Sexuality Studies, with focus on its diverse and multicultural expressions through time. Themes to be explored include schools of feminisms, interlocking systems of oppression and the connection between theory and practice.

**WGS 699. Research Seminar in Women, Gender, and Sexuality Studies. (3 h)**

A capstone, research-centered course in which students complete a significant research or creative project of their choosing situated within the field of Women's, Gender, and Sexuality Studies.

## Courses A-Z

### A

- Anthropology (ANT)
- Arabic (ARB)
- Art (ART)

### B

- Bioethics (BIE)
- Biology (BIO)

### C

- Chemistry (CHM)
- Communication (COM)
- Computer Science (CSC)
- Counseling (CNS)
- Creative Writing (CRW)

### D

- Documentary Film Program (DOC)

### E

- Education (EDU)
- English (ENG)

### F

- French (FRH)

### G

- Graduate (GRD)

### H

- Health and Exercise Science (HES)
- Hindi-Urdu (HNU)
- History (HST)

### L

- Liberal Arts Studies (LBS)
- Linguistics (LIN)



## M

- Mathematics (MTH)

## P

- Philosophy (PHI)
- Physics (PHY)
- Politics&International Affairs (POL)
- Psychology (PSY)

## R

- Religion (REL)

## S

- Spanish (SPA)
- Statistics (STA)
- Sustainability (SUS)

## T

- Translation and Interpreting Studies (TIS)

## W

- Women's, Gender, and Sexuality Studies (WGS)
- Writing (WRI)

## Legend Overview

The Graduate School offers several courses; some are required by the program while others serve as general electives. Please consult the program requirements to determine which courses are mandatory.

## Course Legend

Semester hours of credit are shown by numerals immediately after the course title. The symbols P— and C— followed by course numbers or titles are used to show prerequisites and corequisites in the department. POI indicates permission of instructor is required. Because graduate study occurs at a level of complexity and specialization exceeding that of undergraduate education, the work required of graduate students in any course in which instruction is combined with undergraduate students will reflect this difference.

## Anthropology (ANT)

### ANT 601. Free Trade, Fair Trade: Independent Entrepreneurs in the Global Market. (3 h)

Field-based seminar compares the barriers to market participation experienced by independent entrepreneurs cross-culturally. Free trade policies are contrasted with fair trade practices to determine why so many independent producers have trouble succeeding in a globalizing world.

### ANT 605. Museum Anthropology. (3 h)

Examines the historical, social, and ideological forces shaping the development of museums. Emphasizes the history of anthropology, the formation of anthropological collections, representation, and the intellectual and social challenges facing museums today.

### ANT 607. Collections Management Practicum. (1.5 h)

The principles of collections management including artifact registration, cataloging, storage, and handling; conservation issues and practices; disaster planning and preparedness; and ethical issues are covered through lectures, readings, workshops, and hands-on use of the Museum's collections.

### ANT 608. Archaeological Theory and Practice. (3 h)

Examination of a contemporary archaeological topic through participation in the formulation and implementation of an archaeological research design. Building knowledge relevant to contemporary society through understanding the interdependent nature of archaeological theory and method.

### ANT 615. Artifact Analysis and Laboratory Methods in Archeology. (3 h)

Introduces methods for determining the composition, age, manufacture, and use of different prehistoric and historic artifact types. Techniques for reconstruction of past natural environments from geological or ecoclast samples. Exploration of data display tools including computer-based illustration, and archeological photography.

### ANT 618. Prehistory and Archaeology of Europe. (3 h)

Problem-based survey of the archaeological record of Europe. Complex interrelationships of material culture, economy, ideology, and social life from earliest peopling to the late Iron Age. Offered only in WFU Study Abroad programs.

### ANT 625. Roots of Racism: Race and Ethnic Diversity in the U.S. (3 h)

Examines biological myths of race and race as a social construction; historical, economic, and political roots of inequalities; institutions and ideologies that buttress and challenge power relations; and implications of anthropological teaching and research for understanding social class and race discrimination in the U.S.

### ANT 627. Global Justice and Human Rights in Latin America. (3 h)

Examines anthropological understandings of human rights, with emphasis on activism and rights-in-practice in Latin America. Explores how human rights are understood, mobilized, and reinterpreted in specific contexts. Investigates how anthropologists negotiate tensions between culture and rights, universalism and relativism, and advocacy and neutrality.

### ANT 629. Feminist Anthropology. (3 h)

### ANT 632. Anthropology of Gender. (3 h)

Focuses on the differences between sex, a biological category, and gender, its cultural counterpart. An anthropological perspective is used to understand both the human life cycle and the status of contemporary women and men worldwide. In section one, topics covered include evolution and biological development, sexuality and reproduction, parenting and life cycle changes. The second section includes a cross-cultural comparison examining roles, responsibilities and expectations, and how these interact with related issues of class and race in diverse locations, including Africa, South Dakota, China, India and the Amazon.

### ANT 633. Language and Gender. (3 h)

Uses an anthropological perspective to examine relationships among language structure, language use, persons, and social categories.

### ANT 634. Peoples and Cultures of South Asia. (3 h)

Survey of the peoples and cultures of the Indian subcontinent in the countries of Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. Reviews major topics of interest to anthropologists, including prehistory, history and politics, religion, social organization, caste, gender, development and population.

**ANT 635. Anthropology of Space and Place in the U.S. (3, 4 h)**

Examines the spatial dimensions of culture by focusing on housing disparities in the U.S. Particular attention is paid to the cultural, gendered, economic, political, and regional contexts of housing policies and the impact policies have on children, families and communities. Course includes an optional Service-Learning community asset mapping assignment of a local Winston-Salem neighborhood.

**ANT 636. Myth, Ritual, and Symbolism. (3 h)**

Explores how people envision and manipulate the supernatural in cross-cultural perspective. Emphasizes functional aspects of religious beliefs and practices.

**ANT 637. Economic Anthropology. (3 h)**

Examines the relationship between culture and the economy and its implications for applied anthropology. The variable nature and meaning of economic behavior will be examined in societies ranging from non-industrial to post-industrial. Discusses the impact of economic development programs, foreign aid and investment, technology transfer, and a variety of other economic aid programs.

**ANT 639. Culture and Nature: Introduction to Environmental Anthropology. (3 h)**

Exploration of humanity's "place" in the cosmo, focusing on different worldviews of nature and culture. Case studies from anthropology, archeology, and environmental science examine conceptions of technology, resources, environment, and ownership in the context of environmental change, "natural" disasters, and resource scarcity.

**ANT 640. Anthropological Theory. (3 h)**

Study and evaluation of the major anthropological theories of humans and society. The relevance and significance of these theories to modern anthropology are discussed.

**ANT 642. Development Wars: Applying Anthropology. (3 h)**

Explores the application of anthropological concepts and methods in the understanding of contemporary problems stemming from cultural diversity, including competing social and economic development models and ideologies of terror. Emphasis on conflict and change in developing areas but also considers the urban experience.

**ANT 647. Warfare and Violent Conflict. (3 h)**

Seminar focusing on the causes and nature of warfare and violent group interaction across cultures and through time. Compares case studies from around the globe and of varying sociopolitical organization, past and present. Includes explorations of primate behavior, forms of warfare, and competing theoretical explanations for its existence and for particular occurrences.

**ANT 650. Language, Indigeneity and Globalization. (3 h)**

Taking a global case-study approach, this seminar explores the role language plays in contemporary identity formation and expression, from indigenous to transnational contexts. Addresses relationships among language and colonialism, postcolonialism, nationalism, cultural revitalization, standardization, social and economic inequality, boundary-formation, and processes of cultural inclusion and exclusion.

**ANT 653. Language in Education. (3 h)**

This seminar explores the role of language in educational contexts; includes the study of bilingual and bicultural education, second language education, cross-cultural education, and communication in the classroom. Service-learning component.

**ANT 654. Field Methods in Linguistic Anthropology. (3 h)**

Trains students in basic skills of collecting and analyzing linguistic data at the levels of phonetics-phonology, grammar, lexico-semantics, discourse, and sociocultural context. Students will learn about the research questions that drive linguistic fieldwork as well as the relevant methods, tools, and practical and ethical concerns.

**ANT 655. Language and Culture. (3 h)**

Covers theoretical and methodological approaches to the study of language and culture, including: semiotics, structuralism, ethnoscience, the ethnography of communication, and sociolinguistics. Topics include: linguistic relativity; grammar and worldview; lexicon and thought; language use and social inequality; language and gender; and other areas.

**ANT 658. Native Peoples of North America. (3 h)**

Ethnology and prehistory of the indigenous peoples and cultures of North America since European contact. Explores historic and modern cultures, social and political relationships with Euro Americans, and social justice.

**ANT 660. Anthropology of Global Health. (3 h)**

A critical introduction to the interdisciplinary field of global health, focusing on contributions from medical anthropology. Compares a diversity of health experiences and evaluates interventions across the globe. Explores how biocultural, political, and economic forces shape patterns of illness and disease with special attention to improving the health of the world's most vulnerable citizens.

**ANT 661. Evolution of Human Behavior. (3 h)**

The application of Darwinian principles to the study of human nature and culture. Considers the existence, origin, and manifestation of human behavioral universals and the theoretical and practical implications of individual variability.

**ANT 662. Medical Anthropology. (3 h)**

Examines Western and non-Western conceptions of health, illness, the roles of patient and healer, and the organization of health in Western and non-Western cultures. Service learning.

**ANT 663. Primate Behavior & Biology. (3 h)**

Examines the evolution and adaptations of the order primates. Considers the different ways that ecology and evolution shape social behavior. A special emphasis on the lifeways of monkeys and apes.

**ANT 664. Primate Evolutionary Biology. (3 h)**

Examines the anatomy, evolution, and paleobiology of members of the order Primates. Emphasizes the fossil evidence for primate evolution. Major topics include: primate origins, prosimian and anthropoid adaptations, patterns in primate evolution, and the place of humans within the order Primates.

**ANT 666. Human Evolution. (3 h)**

The paleontological evidence for early human evolution, with an emphasis on the first five million years of bio-cultural evolution.

**ANT 667. Human Biological Diversity. (3 h)**

Seminar focusing on current issues in human biological diversity. Special emphasis on the nature of human variation, and the relationship between human biological diversity and human behavioral diversity. Students learn what is known about how modern human biological variation is patterned, and investigate how this variation is interpreted culturally.

**ANT 668. Human Osteology. (3 h)**

Survey and analysis of human skeletal anatomy, emphasizing archeological, anthropological, and forensic applications and practice.

**ANT 670. Old World Prehistory. (3 h)**

Survey of Old World prehistory, with particular attention to geological and climatological events affecting culture change.

**ANT 674. North American Archaeology. (3 h)**

The development of indigenous cultures in North America from the earliest arrival of people to European contact as outlined by archaeological research, with an emphasis on ecology and sociocultural processes.

**ANT 677. Ancestors, Indians, Immigrants: A Southwest Cultural Tapestry. (3 h)**

Exploration of factors that shaped the lives of people in the Southwest, with attention to Native American and Hispanic experience. From kivas to casinos, coyotes, to cartels, links archeological and prehispanic history to contemporary lifeways in the canyons, deserts, and cities of the U.S./ North Mexico.

**ANT 678. Conservation Archeology. (1.5 h)**

Study of the laws, regulations, policies, programs, and political processes used to conserve prehistoric and historic cultural resources.

**ANT 680. Anthropological Statistics. (3 h)**

Basic statistics. emphasizing application in anthropological research.

**ANT 681. Field Program in Anthropological Archaeology. (3 h)**

Integrated training in archaeological field methods and analytical techniques for researching human prehistory. Students learn archeological survey, mapping, excavation, recording techniques and artifact and ecofact recovery and analysis.

**ANT 682. Field Program in Anthropological Archaeology. (3 h)**

Integrated training in archaeological field methods and analytical techniques for researching human prehistory. Students learn archeological survey, mapping, excavation, recording techniques and artifact and ecofact recovery and analysis.

**ANT 683. Field Program in Cultural Anthropology. (3 h)**

Comparative study of culture and training in ethnographic and cultural analysis carried out in the field.

**ANT 684. Field Program in Cultural Anthropology. (3 h)**

Comparative study of culture and training in ethnographic and cultural analysis carried out in the field.

**ANT 685. Special Problems Seminar. (3 h)**

Intensive investigation of current scientific research within the discipline, concentrating on problems of contemporary interest.

**ANT 686. Special Problems Seminar. (3 h)**

Intensive investigation of current scientific research within the discipline, concentrating on problems of contemporary interest.

**ANT 687. Ethnographic Research Methods. (3 h)**

Designed to familiarize students with ethnographic research methods and their application. Considers the epistemological, ethical, political, and psychological aspects of research. Field experience and data analysis.

**ANT 698. Individual Study. (1-3 h)**

Reading or research course designed to meet the needs and interests of selected students, to be carried out under the supervision of a departmental faculty member. May be repeated for a maximum of 6 hours.

**ANT 785. Directed Research and Reading. (1-3 h)**

Research and reading course, including field component, designed to meet the needs of individual students and resulting in a professional-quality paper and/or presentation. May be repeated for a maximum of 6 hours. P-POI.

## Arabic (ARB)

**ARB 611. Elementary Arabic I. (3 h)**

The first semester of a two-semester course designed for student with no or very limited knowledge of the language. Introduction to Arabic sounds and script as well as basic grammar, with oral and written drills and reading of simple texts. Focus is laying the foundation for reading, writing, listening, and speaking skills in Modern Standard Arabic.

**ARB 612. Elementary Arabic II. (3 h)**

The second semester of a two-semester course designed for students with no or very limited knowledge of the language. Mastery of Arabic sound and script is assumed. Building of vocabulary and grammar through oral and written drills and reading of simple texts. Focus is on developing proficiency in reading, writing, listening, and speaking skills in Modern Standard Arabic. P-ARB 611.

**ARB 653. Intermediate Arabic I. (4 h)**

Review of grammar and focus on the acquisition of more complex grammatical structures, vocabulary building, and expansion of reading, writing, listening, and speaking skills in Modern Standard Arabic. P-ARB 612.

**ARB 701. Intermediate Arabic II. (3 h)**

Further building of vocabulary and grammar and expansion of reading, writing, listening, and speaking skills in Modern Standard Arabic. P-ARB 653.

**ARB 730. Upper Intermediate Arabic I. (3 h)**

With an emphasis on speaking and writing, this course will develop students' oral and written proficiency on an upper intermediate level of fluency. P-ARB 701.

**ARB 731. Upper Intermediate Arabic II. (3 h)**

A continuation of ARB 730. P-ARB 730.

## Art (ART)

**ART 600. Introduction to Filmmaking. (4 h)**

Introduces historical, aesthetic, and technical principles of contemporary filmmaking in a fine art context. Students will work in groups to produce an experimental film and work individually to create a video that focuses on a personal story. P-Some Video Art/Filmmaking experience required.

**ART 614. Filmmaking: Site Specific. (4 h)**

A historical, aesthetic, and technical exploration of contemporary filmmaking in a fine art context. Students will produce multi-channel video projects that interact with physical space. P-Video Art/Film-making experience required.

**ART 624. Filmmaking: Cyberspace. (4 h)**

A historical, aesthetic, and technical exploration of contemporary filmmaking in a fine art context. Students will produce multi-channel video projects that interact with cyberspace. P-Some Video Art/Filmmaking experience required.

**ART 628. Filmmaking: Theatre Works. (4 h)**

A historical, aesthetic, and technical exploration of contemporary filmmaking in a fine art context. Students will produce single-channel video projects for theatre viewing P-Some Video Art/Filmmaking experience required.

**ART 685. Global Contemporary Art. (3 h)**

A global perspective on contemporary artistic trends since 1990, including discussions about art criticism, exhibitions and the changing art world.

**ART 696. Art History Seminar. (3 h)**

Offered by members of the faculty or visiting faculty on topics of their choice. a. Ancient Art b. Medieval Art c. Renaissance Art d. Baroque Art k. Film e. Modern Art f. Contemporary Art g. American Art h. Modern Architecture i. American Architecture j. Global Art and Architecture l. Architecture and Urbanism m. Museums n. Special Topics.

**ART 696E. Art History Seminar: Modern Art. (3 h)****ART 696F. Art History Seminar: Contemporary Art. (3 h)****ART 697. Advanced Topics in Studio Art. (3 h)**

Focus on selected studio projects, critical readings, and discussions on topics selected by members of department faculty. May be repeated for a maximum of 6 hours. a. Drawing b. Painting c. Printmaking d. Sculpture e. Photography f. Digital Art g. Special Topics h. Video Art.

## Bioethics (BIE)

**BIE 619. Concepts of Health and Disease. (2-3 h)**

Concepts of health and disease and shape discussions in bioethics and health policy. This course examines and critically evaluates competing conceptions of health and disease. The implications of adopting different understandings of health and disease for bioethics and health policy will be explored. Permission of Instructor required (POI)

**BIE 690. Special Topics. (1-3 h)**

Study of bioethics topics not covered in the regular curriculum. Topics may be drawn from any theory or content area in the field of bioethics. May be repeated for a maximum of 6 hours. Permission of instructor required (POI)

**BIE 701. Historical Foundations of Bioethics. (2, 3 h)**

This elective explores the origins of bioethics thought, through examination of core concepts in philosophy, moral theory, social and cultural studies and law and policy. Topics may include, for instance the ancient Greeks, Confucius, and key religious teaching on health, the civil rights movement; the history of scientific medicine; and the legal conceptualization of medical practice. This course expands and extends students' knowledge of the contemporary history of bioethics as incorporated into various aspects of their required courses. Permission of instructor required (POI)

**BIE 702. Biomedical Research Ethics. (3 h)**

A historical and conceptual survey of ethical, regulatory, and policy issues in biomedical research. Emphasis will be place on research involving human subjects. Master of Arts students are required to take any 2 of the following 3 courses: BIE 702, 704, or 705. Permission of instructor required (POI)

**BIE 703. Bioethics Theory. (3 h)**

An investigation of the main theoretical approaches to contemporary bioethics and their philosophical foundations. Each approach will be examined critically and students will explore how each approach informs analysis of contemporary issues in bioethics. Permission of Instructor required (POI)

**BIE 704. Public Policy, Medicine and Justice. (3 h)**

An examination of the organization of medicine and biomedical science in the United States today. The relationships between scientific and medical institutions and the implementation of public policies will be critically analyzed in light of the requirements of the principle of justice. Topics include conflicts of interest, broadly understood, within and between institutional and professional actors; the regulation of medical practice; access to health care; and the balance between the public good and market forces. Master of Arts students are required to successfully complete any 2 of the following 3 courses: BIE 702, 704, or 705. Permission of Instructor required (POI)

**BIE 705. Clinical Ethics. (3 h)**

This course will focus on "ethics at the bedside" and will make extensive use of case studies. The course begins with sessions on the role of ethics in health care, the theoretical tools of bioethics, and the relationships among law, culture, and clinical ethics. The course reviews the moral foundations of therapeutic relationships, and concludes with examining moral issues encountered in health care at the beginning and at the end of life. Master of Arts students are required to successfully complete any 2 of the following 3 courses: BIE 702, 704, or 705. Permission of Instructor required (POI)

**BIE 706. Learning and Doing Bioethics: Methods, Professionalism, and Communication. (3 h)**

A seminar on bioethics topics of interest featuring Wake Forest University and invited external faculty, with additional student presentations. Participants engage with presenters and scholarly literature on a variety of aspects of bioethics, including, but not limited to, the scholarly and professional practice of bioethics, the role of empirical scholarship in bioethics and related disciplines, the relationship of bioethics to advocacy and policy, and bioethics communication and mediation. Permission of Instructor required (POI)

**BIE 707. Learning and Doing Bioethics: Methods, Professionalism, and Communication. (3 h)**

A seminar on bioethics topics of interest featuring Wake Forest University and invited external faculty, with additional student presentations. Participants engage with presenters and scholarly literature on a variety of aspects of bioethics, including, but not limited to, the scholarly and professional practice of bioethics, the role of empirical scholarship in bioethics and related disciplines, the relationship of bioethics to advocacy and policy, and bioethics communication and mediation. Permission of Instructor required (POI)

**BIE 708. Research Methods. (2 h)**

An introduction to the methods, concepts and tools used in quantitative and qualitative empirical research in bioethics. Students will develop skills in the design, conduct, interpretation, and evaluation of bioethics research. Permission of Instructor required (POI)

**BIE 711. Current Topics in Clinical and Biomedical Research Ethics. (2, 3 h)**

An in-depth critical examination of selected topics of current interest in clinical and research ethics. Topics are identified by staff and students. Examples of pertinent topics include human pluripotent stem cell research; assisted-reproduction; research without consent; the sale of human organs; pandemic and biodefense preparedness; synthetic body parts and transhumanism; genetic enhancement; regenerative medicine and biogerontology. May be repeated for credit up to a maximum of 6 hours. Permission of Instructor required (POI)



**BIE 713. Medical Liability and Treatment Relationships. (2, 3 h)**

An examination of the relationships between law and medicine, including the legal regulation of medical practice, concepts of medical malpractice, informed consent, confidentiality and privacy, and institutional liability. The ethical implications of the intersection of law and medicine will be critically analyzed. This course is cross listed as LAW 524. Permission of instructor required (POI)

**BIE 715. Bioethics and Religion. (2, 3 h)**

This course explores fundamental themes, methods, and issues in religious bioethics. It seeks to determine the ways that religious approaches offer distinctive, complementary or overlapping perspectives with secular approaches. Specific topics will include assisted reproductive technologies, family planning and abortion, genetic therapy and enhancement, withholding life-sustaining treatment, suicide and euthanasia and justice issues in the allocation of health care resources. The course will combine lectures and discussions with analysis of cases. Permission of Instructor required (POI)

**BIE 721. Research Independent Study. (1-3 h)**

Students may work with a faculty member on a project of mutual interest. May be repeated for credit up to a maximum of 6 hours. Permission of Instructor required (POI)

**BIE 722. Research Independent Study. (1-3 h)**

Students may work with a faculty member on a project of mutual interest. May be repeated for credit up to a maximum of 6 hours. Permission of Instructor required (POI)

**BIE 725. Health Care Law & Policy. (2, 3 h)**

This course examines the public policy and legal dimensions of the financing and regulation of health care delivery. Its focus is on how medical institutions (hospitals, insurers, HMOs) are structured and regulated, and how these institutions relate to their physicians and patients. Ongoing debate over health care reform is a main focus. The dominant theme is how law shapes and responds to the rapid economic and structural changes that are taking place in the health care sector. This course is cross-listed as LAW 525. Permission of Instructor required (POI)

**BIE 731. Bioethics at Work: The IRB. (1-3 h)**

Provides students with the opportunity to experience and understand human research oversight by attending Institutional Review Board (IRB) meetings, reviewing submitted protocols, and considering the ethical issues arising therein. Students assigned to a single IRB for a single semester will receive 1 credit. They will attend monthly meetings, meet periodically with course faculty and staff, and meet with IRB senior staff at the beginning and end of the semester. Students are also required to maintain and submit a journal of commentary on meetings and protocols and the ethical issues arising therein and an end of semester paper. Initial enrollment must be concurrent with enrollment in BIE 702: Biomedical Research Ethics. Additional credits may be earned by students who attend the meetings of more than one IRB or who continue attendance during the summer terms and/or in the fall semester. Course may be repeated up to a maximum of 3 hours. Co-requisite - BIE 702. Permission of Instructor required (POI)

**BIE 733. Bioethics at Work: The Clinical Context. (1-3 h)**

This course is designed to introduce students to central clinical ethics activities in health care facilities, including ethics consultation, ethics policy development and review, and continuing education in bioethics. In addition to weekly seminar classes, students will attend meetings of the Wake Forest Baptist Medical Center Clinical Ethics Committee and its standing subcommittees and continuing education conferences in bioethics. Students will meet with a variety of health care professionals to learn about their contributions to clinical ethics, will observe the process of clinical ethics consultation at WFBMC, and will study and practice ethics consultation skills. P-BIE 705. Permission of Instructor required (POI)

**BIE 737. Genetics and Bioethics. (3 h)**

An exploration of some of the ethical issues generated by the acquisition and application of knowledge about the human genome. Topics include eugenics, confidentiality, gene therapy, genetic testing of minors, genetic testing of adults, and ownership of genetic information. Permission of Instructor required (POI)

**BIE 739. Neuroethics. (3 h)**

This course explores some of the major philosophical and ethical issues that arise with the advancement in neuroscience research and neurology case. The course is divided into two areas of neuroethics: (1) the ethics of neuroscience and (2) the neuroscience of ethics. The ethics of neuroscience investigates the ethical implications of the application of neurotechnology for individuals and society, and the neuroscience of ethics attempts to answer traditional ethical questions through neuroscience. In the first half of the course, we will examine some ethical issues (e.g. mind reading, memory manipulation, BCI, AI, and cognitive enhancement) that arise in the applied and clinical contexts of neurotechnology and neurological disease. In the second half, we will consider the ethical, legal, and philosophical implications (e.g. free will, consciousness, personal identity, and criminal law) of neuroscientific discoveries and claims. This course is cross-listed in the Divinity School (THS 739). Permission of instructor required (POI)

**BIE 741. Narrative and Bioethics. (3 h)**

This team-taught course provides bioethics students with an overview of the different ways in which narratives of diverse types are instrumental to bioethics thinking. Four to six faculty will teach individual course units of 2-3 sessions, addressing topics including but not limited to: illness narratives; bioethics in fiction and film; performable case studies addressing bioethics issues; the voice of the medical case presentation; narrative reading and narrative writing; bioethics in the news; and the ethics of "thick description." Involvement of multiple faculty enables critical reflection on narrative from a variety of disciplinary perspectives common to bioethics. Permission of Instructor required (POI)

**BIE 757. Biotechnology Law & Policy. (2, 3 h)**

This course surveys a range of legal and public policy topics in biotechnology, such as: FDA regulation of drugs and devices, regulation of medical research, products liability, insurance coverage of pharmaceuticals, intellectual property, and genetics. This course is cross-listed with the School of Law (LAW 657). Permission of Instructor required (POI)



**BIE 790. Biotechnology and Ethics. (3 h)**

With the convergence of medicine, nanotechnology, computer science, molecular biology, genetic engineering, and business, biotechnologies are emerging not only as an important provider of life-saving and life-enhancing treatments but also a fast-growing and very profitable industry. This course explores some of the major ethical issues related to the current and proposed uses of biotechnologies with particular attention to the reasons and arguments that are often used to support various views on the use of biotechnology. This course is cross listed in the Divinity School. Permission of Instructor required (POI)

**BIE 791. Thesis Research. (1-6 h)**

Research directed toward fulfilling the thesis requirement. May be repeated for up to a total of 6 credits. P-POI.

**BIE 792. Thesis Research. (1-6 h)**

Research directed toward fulfilling the thesis requirement. May be repeated for up to a total of 6 credits. P-POI.

**BIE 795. Capstone Project. (1-4 h)**

Work towards completing a capstone project. P- at least nine BIE credits or at least six credits of core courses (BIE 702, 703, 704, 705, 706/707), unless otherwise approved. Permission on Instructor required (POI)

## Biology (BIO)

**BIO 601. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 602. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 603. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 604. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 605. Topics in Biology. (1-4 h)**

Seminar and/or lecture courses in selected topics, some involving laboratory instruction. May be repeated for credit.

**BIO 607. Biophysics. (3 h)**

Introduction to macromolecules with studies of important biophysical tools, such as sedimentation, centrifugation, electrophoresis, X-ray crystallography, absorption and emission light spectroscopy, fluorescence, single molecule techniques and a survey of membrane biophysics. Also listed as PHY 607.

**BIO 608. Biomechanics. (3 h)**

Analyzes the relationship between organismal form and function using principles from physics and engineering. Solid and fluid mechanics are employed to study design in living systems.

**BIO 608L. Biomechanics Lab. (1 h)**

Laboratory study of biomechanics. P or C-BIO 608.

**BIO 609. Comparative Anatomy. (4 h)**

Study of the vertebrate body from an evolutionary, functional, and development perspective. Labs emphasize structure and function, primarily through the dissection of representative vertebrates.

**BIO 610. Community Ecology and Global Change. (4 h)**

An advanced ecology course covering mechanisms that determine the dynamics and distribution of plant and animal assemblages and their responses to and roles in global change. Lectures focus on ecological principles and theory. Lab includes local field trips and discussion of the primary literature. Weekend field trips to Outer Banks and mountains.

**BIO 611. Ecology & Conservation Biology of Coral Reefs. (4 h)**

In-depth study of the various biotic and abiotic components that come together to structure ecosystem function and biodiversity at all spatial scales in one of Earth's most productive and diverse environments, yet one most threatened by human use and climate change. Lab component is a one-week field trip over Spring Break.

**BIO 613. Herpetology. (4 h)**

Lecture course on the biology of reptiles and amphibians, emphasizing the unique morphological, physiological, and behavioral adaptations of both groups, and their evolutionary histories and relationships. Two local field trips are planned.

**BIO 614. Evolution. (3 h)**

Study of the evolutionary analysis of biological change in populations, lineages, and the history of Earth. Explores reconstruction of evolutionary histories, adaptation, complexity, and biodiversity through primary literature.

**BIO 614L. Evolution Lab. (1 h)**

Introduces evolutionary analytic methods and interpretation of trait and molecular data through practical tutorials. P or C-BIO 614.

**BIO 615. Population Genetics. (3 h)**

Study of the amount and distribution of genetic variation in populations of organisms, and of how processes such as mutation, recombination, and selection affect genetic variation. Lectures present both an introduction to theoretical studies and discussion of molecular and phenotypic variation in natural populations.

**BIO 615L. Population Genetics Lab. (1 h)**

Introduces quantitative modeling of population genetic dynamics, and experiments using populations of organisms. P or C-BIO 615.

**BIO 616. Biology of Birds. (4 h)**

Lecture plus lab course emphasizing ecological and evolutionary influences on the physiology, behavior, diversity, and population biology of birds, and case studies in conservation biology.

**BIO 617. Plant Physiology & Development. (3 h)**

Examines the growth, development, and physiological processes of plants. The control of these processes is examined on genetic, biochemical, and whole plant levels.

**BIO 617L. Plant Physiology and Development Lab. (1 h)**

Consists of structured experiments and an independently designed research project. P or C-BIO 617.

**BIO 619. Biology of Soils. (3 h)**

A survey of soil structure and biodiversity, with a detailed study of ecological interactions within soil communities and the impact of the soil biota on soil formation, nutrient cycling, and bioremediation within pristine, managed, and damaged soils.

**BIO 619L. Biology of Soils Lab. (1 h)**

Laboratory study of physical, chemical, and biological methods for analyzing the soil habitat. P or C-BIO 619.

**BIO 623. Animal Behavior. (3 h)**

Survey of laboratory and field research on animal behavior.

**BIO 623L. Animal Behavior Lab. (1 h)**

Laboratory study of animal behavior. P or C-BIO 623L.

**BIO 624. Hormones and Behavior. (3 h)**

Exploration of the mechanisms of hormonal influences on behavior.

**BIO 627. Mycology: Biology of Fungi. (4 h)**

Introduces fungi, their evolution and natural taxonomy; cell and molecular biology; genetics, mating and development; primary and secondary biochemistry; and their interactions with other organisms and the environment. Lab introduces culturing, microscopic and molecular techniques.

**BIO 630. Land and Natural-Resources Management. (3 h)**

Provides a fundamental understanding of land and resource management. The major focus is on federal oversight and policies but state, local, non-profit, and international aspects are included.

**BIO 632. Microbiology. (4 h)**

Overview of the biology of microorganisms with emphasis on prokaryotes. Topics include cell structure and function, genetics and evolution, metabolic and ecological diversity, and medical microbiology. Lab emphasizes inquiry-based study of environmental microorganisms through a blend of classical and modern techniques.

**BIO 634. Parasitology. (4 h)**

Survey of protozoan, helminth, and arthropod parasites with a focus on cellular biology, life cycles, host-parasite relationships, and public health implications. Laboratory emphasizes microscopy-based techniques for examining parasite morphology and intracellular structures.

**BIO 636. Development. (3 h)**

A study of the molecular, cellular, and anatomical aspects of embryonic development of invertebrate and vertebrate organisms.

**BIO 636L. Development Lab. (1 h)**

Laboratory study of the molecular, cellular, and anatomical aspects of embryonic development of invertebrate and vertebrate animals. P or C-BIO 636.

**BIO 639. Animal Cognition. (3 h)**

A survey of learning, reasoning and social cognition in animals, with an emphasis on species other than widely-used models such as rodents or primates. Classes are initially mostly lecture, and then mostly discussion of empirical studies from the primary literature.

**BIO 640. Ecology. (4 h)**

Interrelationships among living systems and their environments, structure and dynamics of major ecosystem types, contemporary problems in ecology. Weigl.

**BIO 641. Marine Biology. (3 h)**

Introduction to marine organismal and habitat diversity and marine ecological processes.

**BIO 641L. Marine Biology Lab. (1 h)**

Develops practical knowledge of marine environments through extensive field work. P or C-BIO 641.

**BIO 642. Oceanography. (4 h)**

Introduces the geological, physical, chemical, and biological processes that govern the global oceans and their role in climate change. Lab focus is on tools and research questions pertinent to the field of biological oceanography and includes a five-day trip over Fall Break.

**BIO 646. Neurobiology. (3 h)**

Introduces the structure and function of the nervous system including the neural basis of behavior.

**BIO 646L. Neurobiology Lab. (1 h)**

Laboratory emphasizing electrophysiological techniques with experiments from the cellular to the behavioral level. Students will design and complete their own projects. P or C-BIO 646.

**BIO 648. Physiological Plant Ecology. (3 h)**

Provides a fundamental understanding of how plants have adapted to the stresses of their habits, particularly in harsh or extreme environments such as deserts, the alpine, the arctic tundra, and tropical rain forests.

**BIO 648L. Physiological Plant Ecology Lab. (1 h)**

Physiological plant ecology lab. P or C-BIO 648.

**BIO 649. Tropical Biodiversity of the Amazon and Andes. (4 h)**

Intensive field course in tropical biodiversity focusing on ecosystems, natural resource management, and conservation. Students will travel to major tropical biomes in the vast tropical wildernesses of Andean and Amazonian Peru. Lectures emphasize the basic ecological principles important in each ecosystem. Field-based labs focus on student-designed projects. Offered in the summer only. POI required.

**BIO 652. Developmental Neuroscience. (4 h)**

Examines the development of neural structures and the plasticity of the mature nervous system. Laboratory covers the basics of embryology, immunocytochemistry, and primary neuron culture.

**BIO 653. Functional Neuroanatomy. (3 h)**

Focuses on the functional organization of the vertebrate central nervous system, including regions, systems, and circuits, with emphasis on application to current topics, neuropathology, and clinical cases.

**BIO 656. Ecology and Resource Management of Southeast Australia. (4 h)**

Intensive field-oriented course focusing on ecosystems, natural resource management and environmental conservation of southeastern Australia. Students travel to major biomes including sub-tropical rainforests, coral reefs, and the Australian urban environment. Labs are field-based with some consisting of study-designed field projects. Taught only in summers in Australia.

**BIO 660. Metabolic Diseases. (3 h)**

Explores genetic and biochemical pathways in the context of inborn errors of metabolism.

**BIO 662. Immunology. (3 h)**

Study of the components and protective mechanisms of the human immune system, including innate and acquired immunity.

**BIO 663. Sensory Biology. (3 h)**

Lecture course that examines a variety of sensory systems. Emphasis is on sensory physiology, although other aspects of sensory systems, e.g. molecular biology and anatomy, are also covered. Silver.

**BIO 663L. Sensory Biology Lab. (1 h)**

Laboratory emphasizing electrophysiological and behavioral techniques to examine sensory systems. Students will design and complete their own projects. P or C-BIO 663.

**BIO 665. Biology of the Cell. (3 h)**

Lecture and lab course on recent advances in cell biology. Lectures emphasize analysis and interpretation of experimental data in the primary literature, focusing on topics such as the large scale architecture of the cell, targeting of macromolecules, cell-cell communication, cell signaling, and the control of cell division. The labs introduce basic techniques in cell biology and leads to an independent project. Tague.

**BIO 665L. Biology of the Cell Lab. (1 h)**

Laboratory course introducing basic techniques in cell biology, leading to an independent project. P or C-BIO 665.

**BIO 667. Virology. (3 h)**

Designed to introduce students to viruses, viral/host interactions, pathogenicity, methods of control and their use in molecular biology, including gene therapy. Curran, Lord.

**BIO 669. Cancer Biology. (3 h)**

Analysis of molecular and cellular mechanisms that transform normal cells, trigger abnormal proliferation, and lead to tumor formation. Emphasis is on the biological basis of cancer, with some exploration of clinical and social consequences.

**BIO 670. Biochemistry: Macromolecules and Metabolism. (3 h)**

Lecture course introducing the principles of biochemistry, with an emphasis on the experimental approaches that elucidated these principles. Major topics include structure, function, and biosynthesis of biological molecules, analysis of enzyme function and activity, bioenergetics, and regulation of metabolic pathways. Muday.

**BIO 670L. Biochemistry Lab. (1 h)**

Overview of biochemical approaches to study structure and function of macromolecules. Cannot receive credit for both BIO 670L and 671L. P or C-BIO 670.

**BIO 671L. Advanced Biochemistry Lab. (1 h)**

Emphasizes approaches for isolation and analysis of enzymes. Cannot receive credit for both BIO 670L and 671L. P or C-BIO 671.

**BIO 672. Advanced Molecular Biology. (3 h)**

Presents molecular mechanisms by which stored genetic information is expressed including the mechanisms for and regulation of gene expression, protein synthesis, and genome editing. Emphasizes analysis and interpretation of experimental data from the primary literature.

**BIO 672L. Advanced Molecular Biology Lab. (1 h)**

Introduces modern methods of molecular biology to analyze and manipulate expression of genes and function of gene products. P or C-BIO 672.

**BIO 674. Neuroparmacology. (3 h)**

An introduction to how pharmacological agents affect cellular and molecular functions in the nervous system of normal and disease states. Lecture and case studies will be used to examine topics including drugs targeting mood and emotion, memory and dementia, and movement disorders. Drugs of abuse and the neurological basis of addiction will also be evaluated.

**BIO 679. Introduction to Geographic Information Systems (GIS). (4 h)**

Lecture and laboratory course that introduces the concepts and uses of GIS as a mapping and analytical tool. Lectures cover the history of GIS, GIS data structures and sources of data, map projections, GIS tools, applications, and resources. Exercises include example of GIS applications in environmental modeling, socio-demographic change and site suitability analyses.

**BIO 680. Biostatistics. (3 h)**

Introduction to inferential methods in biology. Focuses on recognizing, quantifying, and communicating uncertainty in biological data. Topics include summarizing data, making predictions, and testing hypotheses. Special emphasis on communicating statistics to scientific and general audiences.

**BIO 681. Epigenetics. (3 h)**

Studies the molecular mechanisms for inheritance of genome modifications. Uses primary literature to explore the environmental and developmental signals that influence epigenetic controls of gene expression and disease.

**BIO 681L. Epigenetics Lab. (1 h)**

Provides hands-on experiences with genome editing and molecular genetics to address the function and expression of genes. P or C-BIO 681.

**BIO 682. Molecular Signaling. (3 h)**

Examines the molecular and biochemical mechanisms by which hormones, neurotransmitters, and other signaling molecules act to change growth, development, and physiological and behavioral responses of organisms with a focus on discussion of primary literature.

**BIO 683. Genomics. (3 h)**

Examines the architecture, expression, and evolution of genomes. Uses current primary literature to examine the functional and evolutionary dynamics of genomes and the modern analytic techniques used to investigate genome-wide phenomena.

**BIO 683L. Genomics Lab. (1 h)**

Introduces analytic methods and interpretation of genome wide data through practical tutorials. P or C-BIO 683.

**BIO 685. Bioinformatics. (3 h)**

Introduction to computational approaches essential to modern biological inquiry. Approaches may include large biological dataset analyses, sequence similarity and motif searches, and analysis of high-throughput genomic technologies. Emphasizes interdisciplinary interaction and communication. Also listed as CSC 685 and PHY 685.

**BIO 686. Genetics & African Diaspora. (3 h)**

Study of modern human population divergence from a genomic perspective, focusing on the role of parasites in driving evolutionary adaptations. Explores the intersection of genetic diversity, health and disease in humans of the African diaspora.

**BIO 687. Computational Systems Biology. (3 h)**

Introduction of concepts and development of skills for comprehension of systems biology problems, including both biological and computational aspects. Topics may include genome-wide transcriptomic analysis, protein interaction networks, large-scale proteomics experiments, and computational approaches for modeling, storing, and analyzing the resulting data sets. Emphasizes interdisciplinary interaction and communication.

**BIO 688. Methods in Molecular Genetics. (4 h)**

Hybrid lecture/laboratory course gives students a hands-on introduction to a diverse array of techniques commonly used in molecular genetics laboratories.

**BIO 701. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 702. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 703. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 704. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 705. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 706. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 707. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 708. Topics in Biology. (1-4 h)**

Seminar courses in selected topics, some involving laboratory instruction. At least one offered each semester. Staff.

**BIO 711. Directed Study in Biology. (1 h)**

Reading and/or laboratory problems carried out under and by permission of a faculty member. Staff.

**BIO 712. Directed Study in Biology. (1 h)**

Reading and/or laboratory problems carried out under and by permission of a faculty member. Staff.

**BIO 715. Foundations of Physiology. (1-4 h)**

Covers classical and current topics and techniques in comparative physiology. Format varies from seminar to a full laboratory course. Staff.

**BIO 716. Signal Transduction. (2 h)**

Focuses on the mechanisms of inter- and intra-cellular communications. Topics range from receptors to signaling molecules to physiological responses. Largely based on the primary literature and requires student presentation of primary research articles. C. Browne, Muday, Tague.

**BIO 717. Developmental Mechanism. (2 h)**

Seminar course examining the molecular, biochemical, and cellular mechanisms of animal and/or plant development. Relevant topics selected from the current literature are discussed in lecture and presentation formats. C. Browne, Tague, Muday.

**BIO 718. Gene Expression. (2 h)**

Seminar covers gene expression in eukaryotic and prokaryotic systems. Topics range from transcription to translation to other aspects of gene regulation. Emphasis is on the experimental basis of understanding the mechanisms of gene expression. Students present, in seminar format, appropriate papers from literature. All students participate in discussion and evaluation of presentations. Tague, C. Browne, Curran, Muday.

**BIO 720. Integrative Biology I. (3 h)**

Inquiry into the fundamentals of scientific thought and practice in the biological sciences. Course will emphasize key biological theories and contemporary techniques in the context of current literature. Each semester will be based on three thematic areas chosen by a committee of faculty and students to encompass a breadth of areas of biological knowledge and integrate biological subdisciplines.

**BIO 721. Integrative Biology II. (3 h)**

Inquiry into the fundamentals of scientific thought and practice in the biological sciences. Course will emphasize key biological theories and contemporary techniques in the context of current literature. Each semester will be based on three thematic areas chosen by a committee of faculty and students to encompass a breadth of areas of biological knowledge and integrate biological subdisciplines.

**BIO 725. Plant Genetics. (1, 2 h)**

Covers various aspects of plant genetics in a seminar format. Topics range from classical Mendelian genetics to genomics and bioinformatics, depending on the interests of the students. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentation. Muday, Tague.

**BIO 726. Plant Physiology. (1, 2 h)**

Covers various aspects of plant physiology and hormones in a seminar format. Topics range from auxin transport to properties of light within the leaf. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentations. Muday, Smith.

**BIO 727. Plant Evolution. (1, 2 h)**

Covers various aspects of plant evolution in a seminar format. Topics range from problems in phylogeny reconstruction and patterns of diversity to major evolutionary innovations in various plant groups. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentations. Kron, Silman.

**BIO 728. Plant Ecology. (1, 2 h)**

Covers various aspects of plant ecology in a seminar format. Topics vary depending on graduate student interest. Students present the results, conclusions, and significance of appropriate papers from the literature. All students participate in discussion and evaluation of presentations. Silman, Smith.

**BIO 735. Foundations of Evolutionary Genetics. (2 h)**

Inquiry into the fundamental concepts in genetic evolution through discussion of foundational primary literature. Topics explored include population genetic processes, speciation and extinction.

**BIO 740. Physiological Ecology. (4 h)**

Introduction to evolutionary/ecological physiology, with emphasis on the interactions between organisms and major abiotic factors of the environment including water balance-hydration, gaseous exchange-respiration, temperature tolerance-thermal physiology. Dimock.

**BIO 757. Techniques in Mathematical Biology. (3 h)**

Offers students a framework for understanding the use of mathematics in both biological theory and empirical research. Emphasis is on practical applications of mathematical techniques, and learning by doing. A central goal is to give students tools to use in their own research. Topics covered include continuous and discrete population models, matrix models, stochastic models, life-history theory, and fitting models for data. Mathematical skills are taught and refreshed, but knowledge of basic calculus is required. Silman, Anderson, Baxley.

**BIO 767. Foundations of Ecology. (3 h)**

A graduate seminar focusing on understanding the seminal developments in the field of ecology and then tracing their intellectual impacts on the modern literature.

**BIO 775. Microscopy for the Biological Sciences. (4 h)**

An introduction to the various types of light, confocal, and electron microscopy. Students will learn technical and theoretical aspects of microscopy, methods of sample preparation, digital image acquisition and analysis and the preparation of publication quality images. The course will emphasize practical applications of microscopy, microscopy experimental design, and hands-on use of microscopes and digital imaging systems. Students will be expected to design and conduct a microscopy project and present their results to the class. Additionally, students will be expected to participate in class discussions regarding newly emerging microscopy techniques in various biological disciplines.

**BIO 778. Advanced Ecology. (4 h)**

Covers current research in the field of ecology with a focus at the community level. Experimental design, data analysis, and interpretation are emphasized. Silman.

**BIO 781. Statistical Models and Data in R. (4 h)**

Provides an introduction to statistical modeling and data management in the R computer language. The course objectives are to introduce student to: (i) methodologies for the design and analysis of ecological and organismal experiments, (ii) programming with an emphasis on good coding and data management habits, and (iii) producing figures and reproducible workflows for publication.



**BIO 783. Teaching Skills & Instructional Development. (3 h)**

Introduction to teaching college-level science courses. Emphasis is on: defining and achieving realistic course goals; mechanics of selecting, developing and refining topics for lecture or laboratory; effective presentation strategies; and creating an active learning environment. Students develop a teaching portfolio containing course syllabi, lecture outlines, and student-ready laboratory materials. Format combines didactic lectures, individual projects, and group discussions and critiques. Course meets for two, 2-hour periods each week. D. Johnson.

**BIO 785. Teacher-Scholar Professional Development I. (1 h)**

Training in professional skills for early-career biological scientists through interactive discussion and exercises. Topics include scientific ethics and professional practices, scientific publishing, and scientific communication.

**BIO 786. Teacher-Scholar Professional Development II. (1 h)**

Training in professional skills for early-career biological scientists through interactive discussion and exercises. Topics include grant preparation and submission, professional bias and discrimination in the sciences, career paths, and job interviewing.

**BIO 789. Research Seminar. (1 h)**

Introduction to scientific presentation skills through active participation in scientific seminars and symposiums, discussion, and exercises. May be repeated for credit.

**BIO 791. Thesis Research I. (1-9 h)**

Staff.

**BIO 792. Thesis Research II. (1-9 h)**

Staff.

**BIO 891. Dissertation Research I. (1-9 h)**

Staff.

**BIO 892. Dissertation Research II. (1-9 h)**

Staff.

## Chemistry (CHM)

**CHM 621. Intermediate Organic Chemistry. (3 h)**

Survey of advanced topics in organic chemistry including stereochemistry, conformational analysis, reaction mechanisms, organometallic chemistry and asymmetric synthesis.

**CHM 623. Organic Analysis. (4 h)**

The systematic identification of organic compounds.

**CHM 624. Medicinal Chemistry. (3 h)**

This course is an introduction to drug targets, mechanism, design, and synthesis. Topics of study include the review of biomolecular structure and function; druggable/targetable enzymes and signaling networks; the replisome- and transcriptome as targets; molecular and cellular pharmacology, molecular mechanism of action at the target level; drug metabolism and pharmacokinetics/pharmacodynamics. A significant portion of the course will be devoted to drug discovery, which includes design, SAR, optimization, synthetic methodologies, computer-assisted drug design; QSAR; prodrugs and "bench-to-bedside", approaches.

**CHM 625. Organic Synthesis. (4 h)**

Reagents for and design of synthetic routes to organic molecules.

**CHM 626. Organic Synthesis. (4 h)**

Reagents for and design of synthetic routes to organic molecules.

**CHM 634. Chemical Analysis. (3, 4 h)**

Theoretical and practical applications of modern methods of chemical analysis. C-CHM 641.

**CHM 641. Physical Chemistry. (3, 4 h)**

Fundamentals of physical chemistry.

**CHM 642. Physical Chemistry. (3, 4 h)**

Fundamentals of physical chemistry.

**CHM 644. Physical Chemistry. (3, 4 h)**

Fundamentals of physical chemistry.

**CHM 648. Electronic Structure Theory and Computational Chemistry. (3 h)**

Introduction to quantum mechanical foundation of electronic structure theory and its application to problems in computational chemistry.

**CHM 651. Special Topics in Biochemistry. (3 h)**

Fundamentals of biochemistry, with particular emphasis on mechanistic analysis of metabolic pathways, enzymatic activity, and drug action.

**CHM 656. Chemical Spectroscopy. (1.5 h)**

Fundamental aspects of the theory and application of chemical spectroscopy, as found in the areas of analytical, inorganic, organic, and physical chemistry. Emphasis varies. Seven week courses. P-CHM 642 or 644, 661 or POI. May be repeated for credit.

**CHM 657. Chemical Spectroscopy. (1.5 h)**

Fundamental aspects of the theory and application of chemical spectroscopy, as found in the areas of analytical, inorganic, organic, and physical chemistry. Emphasis varies. Seven week courses. P-CHM 642 or 644, 661 or POI. May be repeated for credit.

**CHM 661. Inorganic Chemistry. (3, 4 h)**

Principles and reactions of inorganic chemistry. C-CHM 641.

**CHM 662. Nanochemistry in Energy and Medicine. (3 h)**

New optoelectronic science and technologies, often involving nanotechnologies, photochemistry, and laser are revolutionizing many fields for solar energy conversion has inspired many researchers across different chemical, physical and engineering disciplines. Implementation of new laser-based optical techniques, photochemistry, and nanotechnology concepts have enabled dramatic progress in biomedical science where their potential is still developing rapidly. The goal of this course is to familiarize students with advanced topics in nanomaterials science, nanosynthesis, photochemistry, energy conversion, optoelectronics, and biomedical photonics. In this course nanomaterials structures, nanodevices, and time-resolved (fs-ms) photochemical processes involved in energy conversion and biomedical applications will be discussed. The energy and optoelectronic materials sections cover a broad range of different systems including organic, inorganic molecular materials, polymers, and semiconductors, applied in energy conversion and optoelectronics. The photochemical processes in these optoelectronic systems will be described. This includes light-driven optical, electronic, and chemical processes in a broad range of materials such as organic molecular materials, metal-organic dyes, polymers and semiconductors, that govern the behavior of optoelectronic and photovoltaic devices. Practical applications, device schemes, different generations, and recent progress in the field will be overviewed. The use of ultrafast laser techniques for the photochemical understanding of optoelectronic materials and interfaces will be covered. The application of nanomaterials and laser spectroscopy techniques in biomedical imaging (biomedical photonics) will be discussed. This includes nanodevices such as biosensors, drug delivery/release systems, for biomedical applications. The laser biomedical imaging techniques and optoelectronic approaches for clinically monitoring of early disease states and molecular diagnostics will be discussed.



**CHM 664. Materials Chemistry. (3 h)**

A survey of inorganic-, organic-, bio-, and nano-materials, including hybrid materials and applications.

**CHM 664L. Materials Chemistry Lab. (1 h)**

Synthesis of inorganic and organic based materials and their characterization. Lab-four hours.

**CHM 666. Chemistry and Physics of Solid State Materials. (3 h)**

Design, synthesis, structure, chemical and physical properties, and the application of solid state materials.

**CHM 670. Biochemistry: Macromolecules and Metabolism. (3 h)**

A lecture course introducing the principles of biochemistry, with emphasis on the experimental approaches that elucidated these principles. Major topics include structure, function, and biosynthesis of biological molecules, analysis of enzyme function and activity, bioenergetics, and regulation of metabolic pathways.

**CHM 673. Biochemistry Protein and Nucleic Acid Structure and Function. (3 h)**

Special topics in biochemistry including catalytic mechanisms of enzymes and ribozymes, use of sequence and structure databases, and molecular basis of disease and drug action. P-CHM 670 or POI.

**CHM 676. Biophysical Chemistry. (3 h)**

Introduction to a variety of technologies (e.g. thermochemistry, electrochemistry, spectrometry, and spectroscopy) for determining physical properties of biomolecules. From these properties, the biological function can be more readily understood and leveraged for medical gain. In addition to problem sets, students will have opportunities to hone science communication skills through a writing assignment and oral presentation. P-CHM 670 or POI.

**CHM 681. Chemistry Seminar & Literature. (0.5 h)**

Discussions of contemporary research and introduction to the chemical literature and acquisition of chemical information. May be repeated for credit. Pass/Fail only.

**CHM 682. Chemistry Seminar & Literature. (0.5 h)**

Discussions of contemporary research and introduction to the chemical literature and acquisition of chemical information. May be repeated for credit. Pass/Fail only.

**CHM 701. Advanced Physical Chemistry. (3 h)**

An accelerated survey of classical and statistical thermodynamics, chemical kinetics, and quantum chemistry.

**CHM 711. Directed Study in Chemistry. (1, 2 h)**

Reading and/or lab problems carried out under supervision of a faculty member. P-Permission of graduate committee. May be repeated for credit if topic varies.

**CHM 712. Directed Study in Chemistry. (1, 2 h)**

Reading and/or lab problems carried out under supervision of a faculty member. P-Permission of graduate committee. May be repeated for credit if topic varies.

**CHM 721. Advanced Organic Chemistry. (3 h)**

An accelerated survey of organic reactions and mechanisms.

**CHM 722. Physical Organic Chemistry. (3 h)**

Physical methods for determining structure-activity correlations and reaction.

**CHM 723. Transition-Metal Organic Chemistry. (3 h)**

Introduction to principles of bonding in organometallic chemistry and organometallic reaction mechanisms. Uses of transition-metal complexes in organic synthesis.

**CHM 724. Organic Synthesis. (3 h)**

Modern principles of organic synthesis and retrosynthetic analysis. Stereoselective synthesis of complex natural products.

**CHM 725. Structure Identification in Organic Chemistry. (3 h)**

Theory and use of spectroscopic techniques for structural identification of organic compounds.

**CHM 726. Reactive Intermediates. (3 h)**

Mechanistic and preparative photochemistry. Structure and chemistry of excited states, free radicals, carbenes, and selected ions.

**CHM 735. Spectrochemical Analysis. (3 h)**

Principles of atomic and molecular spectrometric methods; discussion of instrumentation, methodology, and applications.

**CHM 736. Chemical Separations. (3 h)**

Theory and practice of modern separation methods with emphasis on gas and liquid chromatographic techniques.

**CHM 737. Electrochemical Processes. (3 h)**

Principles of electrochemical methods, ionic solutions, and electrochemical kinetics.

**CHM 738. Statistics for Analytical Chemistry. (3 h)**

Practical investigation of the statistical procedures employed in modern analytical chemistry.

**CHM 739. Special Topics in Analytical Chemistry. (3 h)**

The study of topical fields of research in analytical chemistry, with a focus on one or more specialties, such as ICP-MS; fluorescence, LIBS; Raman spectroscopy; nanoparticles in analysis; biosensors; or others. May be repeated for credit if course content differs.

**CHM 740. Drug Discovery, Design, and Development - Molecules to Medicines. (3 h)**

Conducted as a combination of lectures, reading assignments, and student-led discussions. Examines drug discovery and development pathways from target and lead compound identification through metabolic and toxicology studies, clinical trials, FDA approval, and marketing. Regulatory processes, intellectual property, and ethical issues are also considered. Taught by WFU faculty from both the Reynolda and Bowman Gray campuses and colleagues in the pharmaceutical and biotechnology industries, students work in teams to present case studies on the discovery, development, and marketing of recently approved pharmaceuticals. Also listed as BAMB 740. P-Organic chemistry and biochemistry.

**CHM 745. Statistical Thermodynamics. (3 h)**

The application of statistical mechanics to chemistry to understand and predict the thermodynamic properties.

**CHM 746. Chemical Kinetics. (3 h)**

Kinetics and mechanisms of chemical reactions; theories of reaction rates.

**CHM 747. Self-Organization in Nonequilibrium Chemistry. (3 h)**

Study of the phenomena of self-organization, such oscillations, multistability, propagating waves, and formation of spatial patterns. Kinetic systems with autocatalysis will be studied using bifurcation theory and other methods of non-linear systems.

**CHM 751. Biochemistry of Nucleic Acids. (1.5-3 h)**

Advanced survey of the structure, reactivity, and catalytic properties of RNA and DNA, including modern experimental techniques. Current literature will be presented and critically evaluated.

**CHM 752. Protein Chemistry. (1.5-3 h)**

Advanced survey of protein biochemistry with an emphasis on structural families, enzyme catalytic mechanisms, expression and purification methods, and biophysical and structural experimental techniques.

**CHM 753. Chemical Biology. (3 h)**

Survey of the origins and emerging frontiers of chemical biology, with a focus on the impact of chemical methods on our understanding of biology. Topics include protein design, chemical genetics, and methods in genomics and proteomics research.

**CHM 755. Biomolecular Mass Spectrometry: Fundamentals and Applications. (1.5-3 h)**

Designed for graduate and advanced undergraduates focusing on the principles of mass spectrometry and use in the analysis of small molecules, peptides, proteins, and nucleic acids. Covers sample preparation, data acquisition and interpretation, database searching, and quantification of molecules using a variety of techniques.

**CHM 756. Biomolecular NMR. (1.5 h)**

One half-semester course designed for graduate and advanced undergraduates focusing on NMR of small oligonucleotides and proteins. Covers sample preparation, data acquisition and processing as well as generating solution structures from NMR data. A student should have command of 1D acquisition and processing as well as experience with 2D acquisition and processing before taking this class. All computational exercises will involve some familiarity with UNIX operating system. P-POI.

**CHM 757. Macromolecular Crystallography. (1.5 h)**

This is a one-half semester course designed for graduate and advanced undergraduates focusing on structural characterization of macromolecules utilizing x-ray crystallography. The course will cover sample preparation, diffraction theory, data acquisition and processing as well as structure solution and refinement techniques. P-CHM 356A/656 highly recommended.

**CHM 761. Chemistry of the Main Group Elements. (3 h)**

Principles of bonding, structure, spectroscopy, and reactivity of compounds of the main group elements. Synthesis and applications of organometallic compounds of the main group.

**CHM 762. Coordination Chemistry. (3 h)**

Theory, structure, properties, and selected reaction mechanisms of transition metal complexes. Design and synthesis of ligands and their applications in bioinorganic chemistry.

**CHM 764. Chemical Applications of Group Theory and Symmetry. (3 h)**

Symmetry, group theory, bonding, and spectroscopy. Applications to structure, stereoisomers, multicenter bonding and symmetry-controlled reactions.

**CHM 765. Bioinorganic Chemistry. (3 h)**

The inorganic chemistry of life. a) Metals in biocatalysis: elucidation of structure and function of metalloenzymes by various spectroscopic and molecular biology methods; biomimetic ligands; synthetic models of active sites. b) Metals and toxicity. c) Inorganic compounds in therapy and diagnosis.

**CHM 771. Quantum Chemistry. (3 h)**

The quantum theory and its application to the structure, properties, and interactions of atoms and molecules. Theoretical and computational approaches.

**CHM 791. Thesis Research I. (1-9 h)**

Staff.

**CHM 792. Thesis Research II. (1-9 h)**

Staff.

**CHM 829. Tutorial in Organic Chemistry. (3 h)****CHM 830. Heterocyclic Chemistry. (3 h)**

Survey of the major groups of heterocyclic compounds. Modern applications of heterocycles.

**CHM 831. Principles of Chemical Carcinogenesis. (3 h)**

Fundamental chemistry of carcinogenesis. Survey of the chemistry and structure of carcinogenic compounds. Defense and chemotherapeutics.

**CHM 832. Theoretical Organic Chemistry. (3 h)**

Molecular orbital treatment of structure and reactivity of organic molecules with emphasis on the applications of MO theory in pericyclic and photochemical reactions.

**CHM 833. Advanced Reaction Mechanisms. (3 h)**

Detailed analysis of mechanisms with emphasis on characterization of transition state structure.

**CHM 838. Advances in Analytical Chemistry - Luminescence Spectroscopy. (3 h)**

Instrumentation, methods, and applications of molecular luminescence spectroscopy.

**CHM 839. Tutorial in Analytical Chemistry. (2-3 h)****CHM 843. Tutorial in Advanced Kinetics. (3 h)****CHM 844. Tutorial in Thermodynamics/Statistical Mechanics. (3 h)**

Kondepudi.

**CHM 848. Lasers in Physical Chemistry. (3 h)**

Survey of lasers and their use to study physical-chemical processes. Topics include types of lasers, range of spectral and temporal operation, methods of detection, and application to specific chemical problems.

**CHM 849. Tutorial in Chiral Asymmetry in Chemistry and Physics. (3 h)**

Chiral asymmetry in nuclear, atomic, and molecular interactions. General group theoretic approach to spontaneous chiral symmetry breaking and the study of specific mechanisms.

**CHM 861. Applications of Electrochemistry. (3 h)**

Determination of inorganic and organic reaction mechanisms, electrochemical synthesis, applications to materials science. Noftle.

**CHM 862. Special Topics in Coordination Chemistry. (3 h)**

Selected applications of transition metal chemistry such as in paramagnetic resonance (NMR, EPR), bioinorganic chemistry, and industrial process.

**CHM 863. Crystallography. (3 h)**

Crystal structure determination using powder and single crystal X-ray diffraction.

**CHM 864. Modern Chemical Spectroscopy. (3 h)**

Applications of vibrational, rotational, electronic, and nuclear spectroscopy to current problems in chemistry.

**CHM 865. Metallopharmaceuticals. (3 h)**

Design and mechanism of metal-containing pharmaceuticals in cancer therapy and diagnosis.

**CHM 869. Tutorial in Inorganic Chemistry. (3 h)****CHM 871. Advanced Quantum Chemistry. (3 h)**

Advanced quantum mechanical methods for the investigation of electronic structure and radiation-molecule interaction.

**CHM 879. Tutorial in Theoretical Chemistry. (3 h)****CHM 888. Dependent Proposal. (3 h)**

Course requires a written document detailing a proposed project and an oral exam covering the basic chemical principles, foundation of the plan and experimental design. Pass/Fail. Must be taken by the 6th semester of residence.

**CHM 891. Dissertation Research I. (1-9 h)****CHM 892. Dissertation Research II. (1-9 h)**

## Communication (COM)

**COM 602. Argumentation Theory. (3 h)**

Examination of argumentation theory and criticism; emphasis on both theoretical issues and social practices. Offered in alternate years. Hazen, Zulick.

**COM 603S. Directing the Forensics Program. (1-3 h)**

A pragmatic study of the methods of directing high school and college forensics. Laboratory work in the High School Debate Workshop. Summer only. Staff.

**COM 604. Freedom of Speech. (3 h)**

Examination of the philosophical and historical traditions, significant cases, and contemporary controversies concerning freedom of expression. Offered in alternate years. Llewellyn, Zick.

**COM 605. Communication and Ethics. (3 h)**

A study of the role of communication in ethical controversies. Hyde.

**COM 607. The Prophetic Mode in American Public Discourse. (3 h)**

Investigates prophetism as a rhetorical act by examining Biblical forms of prophetic speech and investigating how these forms influence American public discourse.

**COM 610. Media Production II. (3 h)**

Students produce advanced media projects over which they assume significant creative control.

**COM 612. Film History to 1945. (3 h)**

Survey of the developments of motion pictures to 1945. Includes lectures, readings, reports, and screenings. Dalton.

**COM 613. Film History since 1945. (3 h)**

Survey of the development of motion pictures from 1946 to present day. Includes lectures, readings, reports, and screenings. Dalton.

**COM 614. Media Effects. (3 h)**

Theoretical approaches to the role of communication in reaching mass audiences and its relationship to other levels of communication. Mitra.

**COM 615. Communication and Technology. (3 h)**

Exploration of how communication technologies influence the social, political, and organizational practices of everyday life. Hyde, Mitra.

**COM 616. Screenwriting. (3 h)**

Introduction to narrative theory as well as examination of the role of the screenwriter in the motion picture industry, the influence of genre on screenwriting, and exploration of nontraditional narrative structures. Students complete an original, feature-length screenplay.

**COM 617. Communication and Popular Culture. (3 h)**

Explores the relationship between contemporary media and popular culture from a cultural studies perspective using examples from media texts. Mitra.

**COM 619. Media Ethics. (3 h)**

Examines historical and contemporary ethical issues in the media professions within the context of selected major ethical theories while covering, among other areas, issues relevant to journalism, advertising, public relations, filmmaking, and media management.

**COM 620. Media Theory and Criticism. (3 h)**

Critical Study of media including a survey of major theoretical frameworks.

**COM 629. The Arab-Israeli-Palestinian Conflict as a Communication Phenomenon. (3 h)**

Explores the evolution of the Arab-Israeli-Palestinian conflict from the end of the Nineteenth Century to its contemporary dynamic as a communication phenomenon; focusing on the narratives of the parties to the conflict as viewed through the lens of extant communication-grounded conflict theory.

**COM 630. Communication and Conflict. (3 h)**

Review of the various theoretical perspectives on conflict and negotiation as well as methods for managing relational conflict. Rogan.

**COM 631. Communication and Terror. (3 h)**

Examines domestic and international terrorism as grounded in extant communication theory, with emphasis on explicating the role that communication plays in current conceptualizations and responses to terrorism.

**COM 634. Narrative Approaches to Entrepreneurship. (3 h)**

Embraces narrative theory to examine how myths, stories, and other tropes form the basis on which we understand entrepreneurship. We will consider diverse and alternative stories as well as the construction of the neoliberal individual in a postmodern epoch.

**COM 635. Survey of Organizational Communication. (3 h)**

Overview of the role of communication in constituting and maintaining the pattern of activities that sustain the modern organization. Llewellyn, McMillan.

**COM 636. Organizational Rhetoric. (3 h)**

Explores the persuasive nature of organizational messages - those exchanged between organizational members and those presented on behalf of the organization as a whole. Offered in alternate years. McMillan.

**COM 637. Rhetoric of Institutions. (3 h)**

A study of the communication practices of institutions as they seek to gain and maintain social legitimacy. Offered in alternate years. Llewellyn.

**COM 638. The Art of Twentieth-Century African-American Rhetoric. (3 h)**

Explores how African Americans have invented a public voice in the twentieth century. Focuses on how artistic cultural expression, in particular, has shaped black public speech. Watts.

**COM 639. Practices of Citizenship. (3 h)**

Explores the history and theory of citizenship as a deliberative practice linked to the rhetorical tradition of communication with an emphasis on participatory and deliberative skills as part of the process in which communities are formed and citizens emerge as members.

**COM 640. Democracy, Slavery, and Sex: Emancipation Discourse from the Founding to the Civil War. (3 h)**

Examines the influence of emancipation movements on American public discourse by reading and analyzing original speeches and documents with emphasis on abolition of slavery and woman's rights.

**COM 641. Class, Race, Sex and War: Emancipation Discourse from the Civil War to the Second Wave of Feminism. (3 h)**

Examines the influence of emancipation movements on American public discourse by reading and analyzing original speeches and documents. Among the movements addressed are labor, civil rights, student protest, and women's liberation.

**COM 642. Political Communication. (3 h)**

Study of electoral communication including candidate and media influences on campaign speeches, debates and advertising. Offered in alternate years. Louden.

**COM 643. Presidential Rhetoric. (3 h)**

Examines theory and practice of speechmaking and mediated presidential communication. Louden.

**COM 646. Sport, Media and Communication. (3 h)**

Examines the role of sport in society, cultural, and institutional practice. Surveys the value represented by interpersonal and mediated messages regarding key dimensions of sport including competition, ethics, gender, and race.

**COM 650. Intercultural Communication. (3 h)**

Introduction to the study of communication phenomena between individuals and groups with different cultural backgrounds. Offered in alternate years. Hazen, Mitra, Rogan.

**COM 651A. Comparative Comm Japan. (1.5, 3 h)**

Comparison of communicative and rhetorical processes in the U.S. with one or more other national cultures with an emphasis on both historical and contemporary phenomena. a) Japan; b) Russia; c) Great Britain; d) Multiple countries. Offered in alternate years. Hazen.

**COM 653. Persuasion. (3 h)**

An examination of theories and research concerning the process of social influence in contemporary society.

**COM 654. International Communication. (3 h)**

In-depth look at the role of mass media in shaping communication between and about cultures using examples from traditional and emerging media systems. Hazen, Mitra.

**COM 655. Health Communication. (3 h)**

Examination of theories, research, and processes of health communication in contemporary society. May be repeated for credit.

**COM 656. Health Comm: Patient-Provider. (3 h)**

Explores contemporary issues related to communication in health care contexts, notably theories and research on patient-provider communication.

**COM 657. Health Comm Campaigns. (3 h)**

Examination of the principles behind designing, implementing, and evaluating a health campaign, including message design and application of media theories for behavior change.

**COM 664. Narrative, Communication, and Health. (3 h)**

Combines theory and research in social science with narrative in multiple forms: film, visual art, memoir, short story, and poetry. Explores the power of story to transform human lives with an emphasis on health. Asks: What is narrative? How does narrative shape who we are? How does narrative inform our understanding and experience of wellness and illness? How does narrative influence health communication in our personal relationships? What role can narrative play in medical education, medical practice, and public health campaigns? Through careful study and reflection, students discover how story can create positive change on a personal, professional, and societal level.

**COM 670. Special Topics. (1-4 h)**

Examination of topics not covered in the regular curriculum. Staff.

**COM 680. Great Teachers. (3 h)**

Intensive study of the ideas of three noted scholars and teachers in the field of communication. Students interact with each teacher during a two- or three-day visit to Wake Forest. Staff.

**COM 719. Theory and Research Design in Communication Science. (3 h)**

Examination of communication science theory with a focus on critiquing and utilizing theory in research, accompanied by an overview of quantitative research design and methodology. Giles, Helme, Mitra, Rogan.

**COM 720. Quantitative Analysis in Communication Science. (3 h)**

Overview of statistical data analysis, interpretation, and reporting for communication research. P-COM 719. Giles, Helme, Mitra, Rogan.

**COM 752. Contemporary Rhetorical and Communication Theory. (3 h)**

Introduction to theory building in human communication and rhetoric, with a survey and evaluation of major contemporary groups of theorists. Approaches studied are those which emphasize the symbol (George Herbert Mead and Kenneth Burke), human relations (Martin Buber), the media (Marshall McLuhan), and systems (Norbert Wiener). Hazen, Watts.

**COM 753. Seminar in Persuasion. (3 h)**

Study of contemporary social science approaches to persuasion theory and research. Influence is examined with interpersonal, social, and mass media contexts. Louden.

**COM 758. Rhetorical Theory. (3 h)**

Introduction to primary texts in the theory of rhetoric including classical theories, dramatism, semiotics, and critical/cultural studies. Llewellyn, McMillan, Watts, Zulick.

**COM 759. Rhetorical Criticism. (3 h)**

The critical application of rhetorical theories aligning with the traditions covered in Communications 758. P-Communications 758.

**COM 763. Proseminar in Communication. (1.5 h)**

Introduction to graduate study in communication. Mitra.

**COM 764. Proseminar in Communication. (1.5 h)**

Introduction to graduate study in communication. Mitra.

**COM 773. Seminar in Interpersonal Communication. (3 h)**

Study of recent research and theoretical developments in dyadic communication. Methodology examined includes conversational analysis, field, and experimental approaches. Rogan.

**COM 774. Research and Theory of Organizational Communication. (3 h)**

Advanced study of theoretical approaches to the role of communication in organizations and empirical application of such theories. Llewellyn, McMillan.

**COM 780. Special Seminar. (1-3 h)**

Intensive study of selected topics in communication. Topics may be drawn from any theory or content area of communication and offer a wide variety of special topics across a two year program. May be repeated for credit for a maximum of 12 hours.

**COM 781. Readings and Research in Speech Communication. (1-3 h)**

Students may receive credit for a special reading project in an area not covered by regular courses or for a special research project not related to the master's thesis. May be repeated for credit for a maximum of 16 hours.



**COM 782. Readings and Research in Speech Communication. (1-3 h)**

Students may receive credit for a special reading project in an area not covered by regular courses or for a special research project not related to the master's thesis. May be repeated for credit for a maximum of 16 hours.

**COM 791. Thesis Research I. (1-9 h)**

Staff.

**COM 792. Thesis Research II. (1-9 h)**

Staff.

## Computer Science (CSC)

**CSC 611. Computer Architecture. (3 h)**

An in-depth study of computer systems and architecture design. Topics include processor design, memory hierarchy, external string devices, interface design, and parallel architectures.

**CSC 621. Database Management Systems. (3 h)**

Introduction to large-scale database management systems. Topics include data independence, database models, query languages, security, integrity, and transactions.

**CSC 622. Data Management and Analytics. (3 h)**

Management, analysis, and visualization of large-scale data sets. Topics include key-value databases, distributed file systems, map reduce techniques, similarity measures, link analysis, and clustering. P - CSC 621.

**CSC 631. Software Engineering. (3 h)**

Study of fundamental topics in software engineering including software processes, agile software development and project management, requirements engineering, system modeling, design patterns and implementation, and software testing. Students practice software engineering principles through team projects.

**CSC 632. Mobile and Pervasive Computing. (3 h)**

Study of the fundamental design concepts and software principles underlying mobile and pervasive computing, including mobile interface design, data management, mobile networks, location aware computing, and mobile security. Involves significant programming on modern mobile platforms.

**CSC 633. Principles of Translators for Compilers and Interpreters. (3 h)**

Study of techniques for translating high-level programming languages to a target language. Typical target languages include Java bytecode and assembly language. Topics include lexical analysis, parsing, intermediate representatives, language semantics, code generation, and optimization.

**CSC 641. Operating Systems. (3 h)**

Study of the different modules that compose a modern operating system. In-depth study of concurrency, processor management, memory management, file management, and security.

**CSC 643. Internet Protocols. (3 h)**

Study of wide area connectivity through interconnection networks. Emphasis is on Internet architecture and protocols. Topics include addressing, routing, multi-casting, quality of service, and network security.

**CSC 646. Parallel Computation. (3 h)**

Study of techniques for parallel and high performance computing. Topics include an overview of modern high-performance computer design, pipelining, concurrency, data dependency, shared memory, message passing, and graphics processors. Select parallel algorithms and methods for asymptotic scalability analysis are also presented. Assignments may include coding with OpenMP, MPI, and CUDA.

**CSC 647. GPU Programming. (3 h)**

An introduction to general purpose parallel program development on Graphics Processing Units (GPUs). Topics covered will include data parallelism, memory and data locality, parallel algorithm patterns and performance metrics, and application test studies.

**CSC 648. Computer Security. (3 h)**

Introduction to computer security concepts and associated theory. Detailed coverage of the core concepts of access control, cryptography, trusted computing bases, digital signatures, authentication, network security, and secure architectures. Legal issues, security policies, risk management, certification and accreditation are covered in their supporting roles. Students will learn to analyze, design, and build secure systems of moderate complexity.

**CSC 652. Numerical Linear Algebra. (3 h)**

Numerical methods for solving matrix and related problems in science and engineering using a high-level matrix-oriented language such as MATLAB. Topics include systems of linear equations, least squares methods, and eigenvalue computations. Special emphasis is given to applications. Credit is not allowed for both CSC 652 and MTH 626.

**CSC 655. Introduction to Numerical Methods. (3 h)**

An introduction to numerical computations on modern computer architectures; floating point arithmetic and round-off error including programming in a scientific/engineering language such as MATLAB, C or Fortran. Topics include algorithms and computer techniques for the solution of problems such as roots of functions, approximations, integration, systems of linear equations and least squares methods. Credit not allowed for both MTH 655 and CSC 655.

**CSC 661. Digital Media. (3 h)**

Study of the mathematics and algorithms underlying digital sound, image, and video manipulation. Topics may include sampling and quantization, resolution, filters, transforms, data encoding and compression, multimedia files types and transmission, 3D printing, and digital media in multimedia and web programming.

**CSC 663. Computer Graphics. (3 h)**

Study of software and hardware techniques in computer graphics. Topics include line and polygon drawing, hidden line and surface techniques, transformations, and ray tracing.

**CSC 665. Image Processing Fundamentals. (3 h)**

Study of the basic theory and algorithms for image enhancement, restoration, segmentation, and analysis.

**CSC 671. Artificial Intelligence. (3 h)**

An overview of areas of study in artificial intelligence. Topics are chosen from among knowledge representation, formal logic, fuzzy logic, intelligent agents, expert systems, machine learning, robotics, and natural language processing.

**CSC 673. Data Mining. (3 h)**

An overview of data mining methods and algorithms for classification, association analysis, clustering, and anomaly detection. A major focus will be on the implementation of algorithms for and design and construction of solutions to data mining problems. Applications and ethical considerations of data mining in humanities, arts, and healthcare are discussed.



**CSC 674. Machine Learning. (3 h)**

An introduction to concepts and application of machine learning algorithms and techniques, focusing on supervised and unsupervised learning. Students learn the theoretical concepts behind several types of machine learning algorithms and gain practical experience applying them. Algorithms covered could include logistic regression, support vector machines, regularization, dimensional reduction, clustering, and neural networks.

**CSC 675. Neural Networks and Deep Learning. (3 h)**

An introduction to concepts and applications of neural networks and deep learning, a branch of machine learning that uses additional layers of high-level representations of data to maximize performance on a given task. The topics covered may include basic neural networks, deep neural networks, and convolutional and recurrent neural networks. Students learn the theoretical concepts behind several of types of neural network algorithms and gain practical experience applying them.

**CSC 685. Bioinformatics. (3 h)**

Introduction to bioinformatics and computing techniques essential to current biomedical research. Primary focus is gene and protein sequence and structure databases and algorithms for sequence and structure analysis. Emphasizes interdisciplinary interactions and communication. Also listed as PHY 685 and BIO 685.

**CSC 687. Computational Systems Biology. (3 h)**

Introduction of concepts and development of skills for the comprehension of modern systems biology research problems, including both biological and computational aspects. Topics may include microarrays, protein interaction networks, large-scale proteomics experiments, and algorithms and computational approaches for modeling, storing, and analyzing the resulting data sets. Emphasizes interdisciplinary interactions and communication.

**CSC 691. Selected Topics. (1-3 h)**

Topics in computer science that are not studied in regular courses or which further examine topics begun in regular courses. P-POI.

**CSC 693. Individual Study. (1, 2 h)**

Independent study directed by a faculty adviser. By prearrangement.

**CSC 702. Theory of Computation. (3 h)**

Basic theoretical principles of computer science. Topics include the relationship between automata and grammars, Church's thesis, unsolvability, and computational complexity.

**CSC 721. Theory of Algorithms. (3 h)**

Design and analysis of algorithms. Topics may include time and space complexity analysis, divide-and-conquer algorithms, the fast Fourier transform, NP-complete problems, and efficient algorithms for operations on lists, trees, graphs, and matrices.

**CSC 726. Parallel Algorithms. (3 h)**

A thorough, current treatment of parallel processing and supercomputing. Modern high-performance commercial architectures, parallel programming, and various supercomputing applications are discussed. Hands-on experience is emphasized. Students are given access to a variety of machines.

**CSC 731. Compiler Optimization. (3 h)**

Design and implementation of optimizing compilers. Optimization techniques, parallelizing transforms, and comparative examples form the literature. P-CSC 633.

**CSC 743. Topics in Operating Systems. (3 h)**

Issues in operating system development; resource management, queuing theory, concurrent processing, and languages for operating system development. P-CSC 641.

**CSC 753. Nonlinear Optimization. (3 h)**

The problem of finding global minimums of functions is addressed in the context of problems in which many local minima exist. Numerical techniques are emphasized, including gradient descent and quasi-Newton methods. Current literature is examined and a comparison made of various techniques for both unconstrained and constrained optimization problems. Credit not allowed for both CSC 753 and MTH 753. P-CSC 655 or MTH 655.

**CSC 754. Numerical Methods for Partial Differential Equations. (3 h)**

Numerical techniques for solving partial differential equations (including elliptic, parabolic, and hyperbolic) are studied along with applications to science and engineering. Theoretical foundations are described, and emphasis is on algorithm design and implementation using either C, FORTRAN or MATLAB. Also listed as MTH 754. P-CSC 655 or MTH 655.

**CSC 765. Image Processing. (3 h)**

Advanced techniques in image processing including image formation and corruption models, digitization, Fourier domain methods, enhancement, restoration, and tomographic reconstruction. P-CSC 721.

**CSC 766. Pattern Recognition. (3 h)**

Study of statistical pattern recognition techniques and computer-based methods for decision-making, including discriminant functions, feature extraction, and classification strategies. Emphasis is on applications to medical image analysis. P-POI.

**CSC 767. Computer Vision. (3 h)**

Techniques for extracting features from images: optimal thresholding, 2D and 3D feature measurement, graph isomorphism and graph matching methods. P-CSC 766.

**CSC 775. Neural Networks. (3 h)**

Design of artificial neural networks. Introduction to the relevant neurophysiology, feedforward networks, recurrent networks, and applications to pattern recognition and optimization.

**CSC 779. Topics in Artificial Intelligence. (3 h)**

Advanced topics in artificial intelligence. Individual projects are assigned. P-CSC 671.

**CSC 781. Computer Science Seminar. (0 h)**

Discussions of contemporary research. No credit.

**CSC 790. Advanced Topics in Computer Science. (3 h)**

Advanced topics of current interest in computer science not covered by existing courses. P-POI.

**CSC 791. Thesis Research I. (1-9 h)**

May be repeated for a maximum of 18 hours each. Satisfactory/Unsatisfactory.

**CSC 792. Thesis Research II. (1-9 h)**

May be repeated for a maximum of 18 hours each. Satisfactory/Unsatisfactory.

**CSC 795. Project. (3 h)**

Satisfactory/Unsatisfactory.

**CSC 796. Internship. (1-6 h)**

Provides students an opportunity to integrate computer science theory and practice by working in a supervised and professional setting. The course is limited to those seeking the fifth-year Master's in computer science and approval must be obtained by the Computer Science Graduate faculty prior to enrollment. Credit hours may be adjusted based on the length of the internship. May be repeated. Satisfactory/Unsatisfactory. P-CSC 631 (admission to the 5th year program).

# Counseling (CNS)

## **CNS 721. Research and Statistical Analysis in Counseling. (3 h)**

Qualitative and quantitative research methods. Analysis and evidence-based evaluation of research-based literature in the counseling field. Grant writing. Program evaluation. Descriptive, Inferential, parametric and non parametric statistical procedures involved in research.

## **CNS 723. Statistical Analysis for the Helping Professions. (3 h)**

Descriptive and inferential (parametric and nonparametric) statistical procedures involved in research. Computer methods for statistical analysis. Counseling students only.

## **CNS 736. Appraisal Procedures for Counselors. (3 h)**

Appraisal, assessment, and diagnosis of personality, emotional, intellectual, and learning characteristics and disorders of clients in schools, colleges, and community human service agencies. Use of tests in counseling as an adjunct to clinical impressions.

## **CNS 737. Basic Counseling Skills and Techniques. (3 h)**

Basic communication skills, helping relationships, and strategies for personal change. Issues and ethics in counseling.

## **CNS 738A. Counseling Practicum - School. (3 h)**

Supervised experience for the development of individual and group counseling skills under individual and group supervision in a school or clinical mental health agency. Involvement in direct service work and activities similar to those of regularly employed professional staff. P - CNS 737.

## **CNS 738B. Counseling Practicum - Clinical Mental Health. (3 h)**

Supervised experience for the development of individual and group counseling skills under individual and group supervision in a school or clinical mental health agency. Involvement in direct service work and activities similar to those of regularly employed professional staff. Henderson, Newsome. P - CNS 737.

## **CNS 739. Advanced Counseling Skills and Crisis Management. (3 h)**

Topics covered will be advanced and specialized counseling interventions including crisis intervention, suicide prevention, and emergency management models. Students will be required to demonstrate appropriate skill level. P-CNS 737.

## **CNS 740. Professional Orientation to Counseling. (3 h)**

Covers the history, roles, organizational structures, ethics, standards, specializations, and credentialing in the profession of counseling. Public policy processes and contemporary issues are also considered.

## **CNS 741. Theories and Models of Counseling. (3 h)**

Study of theories and approaches to professional counseling: psychoanalytic (Freud, Adler, Jung), person-centered (Rogers), existential (May, Frankl), behavioral (Skinner, Glasser), cognitive/rational (Ellis), holistic/systemic, eclectic. Professional orientation, issues, ethics, cultural pluralism, and trends in counseling.

## **CNS 742. Group Procedures in Counseling. (3 h)**

An experiential and conceptual exploration of the psychological dynamics and interpersonal communication of small groups, including group structure, leadership models, group process and practice, stages of group development, group techniques, and ethical principles.

## **CNS 743. Career Development and Counseling. (3 h)**

Vocational development throughout life; psychological aspects of work; occupational structure and the classifications of occupational literature; theories of vocational choice and their implications for career counseling.

## **CNS 744A. Counseling Internship I A. School. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. Case review. P-CNS 738.

## **CNS 744B. Counseling Internship I: Clinical Mental Health. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. Case review. P-CNS 738.

## **CNS 744C. Counseling Internship I: Addiction. (2, 3 h)**

Internship is a supervised counseling experience in a school, college, addictions recovery setting, community agency, or medical center in which students provide direct counseling services and engage in activities relevant to their counseling specialty area. P-CNS 738.

## **CNS 745A. Counseling Internship II A. School. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. P- CNS 744: Internship I.

## **CNS 745B. Counseling Internship II: Clinical Mental Health. (2, 3 h)**

Supervised counseling experience in a school, college, or community agency under a regularly employed staff member professionally trained in counseling. Observation of and active participation in direct service work to clients. Monitoring of audio or videotaped interviews. P- CNS 744: Internship I.

## **CNS 745C. Counseling Internship II: Addiction. (2, 3 h)**

Internship is a supervised counseling experience in a school, college, addictions recovery setting, community agency, or medical center in which students provide direct counseling services and engage in activities relevant to their counseling specialty area. P-CNS 744.

## **CNS 746. Counseling Children. (3 h)**

Theory and practice of counseling with children in schools and community agencies. Elementary school counseling; models, methods, and materials. Counseling children with special emotional, learning, psychological, or behavioral concerns.

## **CNS 747. Cultures and Counseling. (3 h)**

The influence of culture in human development and in counseling relationships. A study of personal and ethnic diversity and commonality.

## **CNS 748. Life Span Development: Implications for Counseling. (3 h)**

Examination of major theories and principles of human development across the life span, including physical, psychological, intellectual, social, and moral perspectives.

## **CNS 749. School Guidance and Counseling. (3 h)**

The organization and management of comprehensive school guidance and counseling programs. Individual and group counseling, consultation, coordination, and collaboration in student services in schools. Program development in elementary, middle, and secondary schools.

**CNS 750. The Vienna Theorists-Freud, Adler, Moreno and Frankl. (3 h)**

Examination of the original writings of four of the leading theorists of modern counseling, which is enhanced by a visit to the city in which they initially formulated their clinical ideas. Students read and discuss several original writings of each practitioner-Freud, Adler, Moreno, and Frankl-prior to and during a two-week stay in the Wake Forest University Flow House in Vienna during which they visit relevant historical sites and institutes.

**CNS 752. Human Services Administration. (3 h)**

This course will focus on the knowledge, theory, and skills used in the administrative aspects of the human services delivery systems including organizational management, supervision, strategic planning, budgeting, grant and contract negotiation, and legal/regulatory issues. The course also covers managing the professional development of staff, recruiting and managing volunteers, and advocacy techniques. P-CNS 737, 741, 742.

**CNS 753. Human Services Program Planning and Evaluation. (3 h)**

This course will focus on the range and characteristics of human services delivery systems and major conceptual models used to integrate prevention, maintenance, intervention, and rehabilitation and healthy functioning. The course includes the history of human services as well as the systematic analysis of service needs. The course also covers the selection of strategies or interventions and the evaluation of outcomes. P-CNS 741, CNS 737 and CNS 742.

**CNS 754. Human Services Field Experience. (1-3 h)**

Field experience is a learning experience in a human services delivery organization in which the student will complete 350 hours of on-site volunteer work with an agency. Students, university supervisors, and on-site partners will determine the student's role, activities, outcomes, and instructional needs based on placement site possibilities. P-CNS 752 and CNS 753.

**CNS 755A. Counseling Internship III A. School. (2 h)****CNS 755B. Counseling Internship III B. Clinical Mental Health. (2 h)****CNS 755C. Counseling Internship III: Addiction. (2 h)**

Internship is a supervised counseling experience in a school, college, addictions recovery setting, community agency, or medical center in which students provide direct counseling services and engage in activities relevant to their counseling specialty area. P-CNS 745C.

**CNS 760. Issues in School Counseling. (3 h)**

This course is designed to allow students to investigate current issues related to the practice of school counseling. The emphasis will be on identifying appropriate prevention responses to these issues. Counseling students only.

**CNS 762. Case Formulation and Treatment Planning in Clinical Mental Health Counseling. (3 h)**

Examines case conceptualization (e.g., assessment, diagnosis) and treatment planning in clinical mental health counseling settings as well as contemporary issues related to clinical mental health counseling. Explores ethical and professional considerations for counselors' interfacing with the legal system and in integrated behavioral health settings.

**CNS 763. Specialized Study in Counseling. (1-3 h)**

"Exploration of special topics or areas of practice in the field of counseling. a. School Guidance and Counseling h. Rehabilitation b. College Student Development Services Counseling i. Adult Development/ Aging c. Mental Health Counseling j. Religious Counseling d. Marriage and Family Counseling k. Health Counseling e. Business/Industry Counseling l. Multicultural Counseling f. Correctional Counseling m. Holistic Counseling g. Career Counseling n. Tests, Measurements and Interpretation .

**CNS 764. Creative Arts in Counseling. (1-3 h)**

Examines history, theories, processes, and techniques of using the creative arts in counseling with clients throughout the life span. Particular attention is given to the visual and verbal arts, such as drawing, imagery, photography, cartooning, cinema, movement, dance, literature, drama, and music.

**CNS 765. Addiction Counseling. (3 h)**

Introduces the concepts of chemical dependency, counseling procedures and techniques, and treatment considerations. The student has opportunities to apply models of chemical dependency counseling to hypothetical situations at various stages of substance use.

**CNS 766. Crisis Prevention and Response. (3 h)**

This course will present counseling approaches which effectively address crises. The course will examine the characteristics and impact of trauma and crisis and potential neurobiological responses. Students will gain knowledge and skills useful in theory-based prevention and response models and community-based strategies for a diverse society. Students will also explore counseling and human service contexts for application of assessment and intervention approaches in addressing specific crisis situations.

**CNS 767. Human Sexuality. (3 h)**

This course is designed for counseling students whose work will bring them into contact with clients experiencing problems and concerns with their sexuality. The course is designed to develop: a) students' knowledge base related to human sexuality, b) an understanding of the varied sexuality issues which may be encountered in professional counseling practice, c) students' skills in assessment and intervention skills with sexuality issues and d) increased awareness of one's personal perceptions, attitudes and affect related to sexuality issues. Course participants will become more effective in identifying, assessing, and intervening with human sexuality related counseling issues.

**CNS 768. PsychoPharmacology for Counselors. (3 h)**

Students will learn the basic principles of psychopharmacology, pharmacokinetics, and neurobiology as they pertain to their role as a professional counselor. They will learn how psychopharmacological drugs are classified, prescribed, and managed. The information presented in this course will prepare student to function as knowledgeable members of multi-disciplinary treatment teams serving clients seeking counseling services. Finally, students will gain knowledge about the important and complex ethical and legal issues that surround the use of psychopharmacological drugs.

**CNS 769. Advanced Counseling in a Diverse Society. (3 h)**

An advanced investigation into the complex elements of racism, social justice, and advocacy in the counseling relationship and beyond. An exploration of systemic disparities (ex. food deserts and health care) as well as anti-racist perspectives and actions in a diverse society, further promoting an in-depth personal and professional examination of implicit and explicit biases.

**CNS 770. Classification of Mental and Emotional Disorders. (3 h)**

Analyzes healthy and unhealthy personality, as well as developmental and situational problems in adjustment. Studies the classification of mental disorders, as defined by the American Psychiatric Association in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders. Examines appropriate ways in which diagnosis can be utilized by counselors to explore personality and systemic interventions for career, educational, and relationship concerns.

**CNS 771. Clinical Mental Health Counseling. (3 h)**

History, philosophy, organization, management, and delivery of counseling services in various clinical mental health settings. Preventative, developmental, and remedial strategies for use with various populations.

**CNS 772. Marriage and Family Systems. (3 h)**

Study of the institutions of marriage and the family from a general systems perspective. Exploration of how changes in developmental and situational aspects of the family life cycle influence individuals within the systems of marriage and the family. Both horizontal and vertical dimensions of change are focused on through the use of genograms. Different forms of family lifestyles, such as dual career, single parent, and blended are covered.

**CNS 773. Family Counseling. (3 h)**

Examination of the philosophy and goals of seven major theories of family counseling (Bowenian, Adlerian, psychodynamic, experiential/humanistic, behavioral, structural, strategic) as well as the development of the profession of family counseling from a historical and current trends perspective. Differences between family counseling and individual/group counseling are highlighted and ethical/legal considerations for working with family units are stressed. Techniques associated with theories are demonstrated through video and play simulations. Research methods for gathering data on families are highlighted.

**CNS 774. Marriage Counseling. (3 h)**

Study of the philosophy and goals of six main theories of marriage counseling (psychoanalytic, social learning, Bowenian, structural-strategic, experiential/humanistic, and rational-emotive) and the techniques associated with each. Historical and current trends associated with the field of marriage counseling are explored, along with related issues such as premarital counseling, family-of-origin influences within marriage, and widowhood. Appropriate marriage assessment instruments, research methods, and ethical/legal questions involved in marriages counseling are addressed.

**CNS 775. Marital and Family Health and Dysfunctionality. (3 h)**

Examines system and individual dynamics associated with marital and family health and dysfunctionality. Longitudinal research on factors connected with healthy, long-term marriages and functional family life are explored. Interactive patterns that lead to such marital and family dysfunctionality as spouse and child abuse, anorexia nervosa, addictive disorders, and dependency are examined.

**CNS 776. Assessment and Treatment Planning in Addictions. (3 h)**

Examines screening, assessment, and diagnosis of addiction and co-occurring disorders. P-CNS 765, POI or a master's degree in the counseling field.

**CNS 777. Addictions Counseling Skills. (3 h)**

Explores the development of skills for individual and group counseling with persons diagnosed with addictive and co-occurring disorders.

**CNS 778. Addiction and the Family. (3 h)**

Explores the influence of addiction on family systems. Covers knowledge and skills for assisting individuals and families with substance abuse and addiction. P-CNS 765, POI or a master's degree in the counseling field.

**CNS 780. Professional, Ethical and Legal Issues in Counseling. (2 h)**

Provides an overview of the critical professional issues in counseling with emphasis on current ethical, legal, and values-related questions and the relationship of these issues to the counselor's role in training, supervision, consultation, appraisal, and research. P-Advanced graduate standing or permission of instructor.

**CNS 782. Developmental Counseling Psychology. (3 h)**

Theoretical, research, and methodological aspects of a developmental/holistic/systems framework for counseling. Integration and application of major theories and approaches to counseling.

**CNS 786. Consultation and Program Development in Counseling. (2 h)**

Consultation theory and process. Consultation with families, schools, colleges, and community agencies. Models for facilitating change in human systems.

**CNS 790. Professional Identity Capstone Course. (2 h)**

Review and application of counseling skills, settings, practice parameters and other current issues necessary to integrate students into the profession of counseling. P-CNS 744.

## Creative Writing (CRW)

**CRW 600. Topics in Creative Writing. (3 h)**

Workshop centering on theme instead of genre. Students study creative writing through the lens of ideas such as hybridity, ecology, and the visual. Through analyzing important texts, workshops, and class discussions, students hone their skills in fiction, poetry, and nonfiction, as well as improve their abilities to revise and offer feedback on classmates' work. May be repeated with permission.

**CRW 684. Playwriting. (3 h)**

Examines the elements of dramatic structure and their representations in a variety of dramatic writings. Explores the fundamentals of playwriting through a series of writing exercises.

**CRW 685. Poetry Workshop. (3 h)**

Emphasis on reading and discussing student poems in terms of craftsmanship and general principles. May be repeated once.

**CRW 686. Fiction Workshop. (3 h)**

Primarily a short story workshop, with class discussion on issues of craft, revision, and selected published stories. May be repeated once.

**CRW 687. Literary Nonfiction Workshop. (3 h)**

Emphasis on the theory and craft of creative nonfiction as well as on contemporary writers of creative nonfiction. May be repeated once.

## Documentary Film Program (DOC)

**DOC 701. Internship I. (1.5 h)**

Internships may be taken for 1.5 credits on a pass/fail basis when approved by faculty members. These internships provide students the opportunity for experiential learning at production houses, television networks, public television stations, and at other facilities deemed useful as well as with independent producers.



**DOC 702. Internship II. (1.5 h)**

Internships may be taken for 1.5 credits on a pass/fail basis when approved by faculty members. These internships provide students the opportunity for experiential learning at production houses, television networks, public television stations and at other facilities deemed useful as well as with independent producers.

**DOC 703. Internship. (3 h)**

Internships provide students the opportunity for experiential learning at production houses, television networks, public television stations, and at other facilities deemed useful as well as with independent producers.

**DOC 713. Documentary Storytelling I. (3 h)**

The course provides an introduction to the fundamental theory and craft of non-fiction visual storytelling and familiarizes students with concepts such as drama, structure, story development and visual style.

**DOC 715. Cinematography and Sound. (3 h)**

Through a combination of lectures, film screening and hands-on demonstrations, this course will familiarize students with the basics of documentary shooting, lighting, and sound gathering.

**DOC 717. Fundamentals of Documentary Editing. (1.5 h)**

Through a combination of lectures, film screenings, hands-on demonstrations, and assignments, this course familiarizes students with the basics of documentary editing.

**DOC 718. Social Media and Marketing in the Creative Arts. (3 h)**

This course examines how social media is changing not just what content creators produce, but also the way creators engage with their audience by using social media and marketing techniques to drive attention to their work and enhance their overall brand. Through guest lectures, case studies and hands-on production - students will study each social media platform, learn how it's being used and see how it can be leveraged to enhance all aspects of the creative arts. Course may be offered on campus or online.

**DOC 722. Documentary Storytelling II. (3 h)**

This course teaches students how to research, conceptualize and develop a non-fiction story idea. Students receive instruction on effective research strategies, idea development, production planning, and proposal writing and pitching. P-DOC 713, 715, 717.

**DOC 724. Advanced Story Editing. (3 h)**

This course builds upon the storytelling skills learned in the Foundations of Story Editing course and complements the production techniques learned in Cinematography and Sound. Special emphasis will be placed on the aesthetics of editing and other post-production techniques. P-DOC 717.

**DOC 726. Advanced Sports Storytelling. (3 h)**

Introduces students to both the theoretical and technical aspects of non-fiction sports storytelling. Students will examine both historical and contemporary examples of sports storytelling, including various styles of documentaries, branded and commercial content, social media and web-based content, and podcasts. P-DOC 717.

**DOC 728. Documentary History. (3 h)**

Acquaints students with the historical development of documentary film from its roots in 19th-century art forms to the present. Examines various styles and techniques of documentary and analyzes the contribution of the documentary as a persuasive means of communication to achieve social and political goals. Open to all Wake Forest University graduate students with POI.

**DOC 730. Sports, Culture and Society. (3 h)**

Through films, case studies and discussions with sports professionals, media industry leaders and scholars we will look at how sports helps frame our common understanding of society's biggest social issues including race, gender, and human rights.

**DOC 733. The Business of Sports Media. (3 h)**

Students will get a high level understanding of the business of sports media and how the digital revolution is changing the game for content creators, leagues and teams. Through lectures, current periodicals, projects and guest speakers, students will learn to look beyond the final score and better understand the entire sports communication ecosystem.

**DOC 734. Adv Cinematography & Sound. (3 h)**

This course provides instruction in advanced cinematography, sound, and lighting techniques.

**DOC 735. Documentary Law and Ethics. (3 h)**

Provides students with the opportunity to explore the ethical issues that can arise in documentary filmmaking. The discussion points will evolve from the in-depth examination of a select group of films and directors.

**DOC 737. Documentary Storytelling III. (3 h)**

The class focuses on advanced principles of writing, producing, directing and editing documentary films. Theoretical, aesthetic, technical and ethical aspects of the creative non-fiction storytelling process will be the focus. The class format will be a combination of theory and practice as it relates to the dramaturgical process of filmmaking. P-DOC 713, 715, 717, 728, 722, 750.

**DOC 746. Documentary Storytelling IV. (3 h)**

The course combines lectures, screenings, and exercises to build a technical and aesthetic foundation in digital post-production. Special emphasis will be placed on advanced visual storytelling techniques—including continuity, pacing, character development and dramatic structure. Students will also explore various distribution strategies and transmedia applications P-DOC 713, 715, 717, 728, 722, 724, 750, 735, 737, 748.

**DOC 748. Creative Thesis Project. (1-9 h)**

Students will work under faculty supervision on their creative thesis projects.

**DOC 750. The Imagination Project. (3 h)**

Students will produce short films, digital study guides or E-books and/or other types of multimedia materials on important social, political, cultural and economic issues. The course, structured around digital media projects, provides opportunities for students to immerse themselves in a single topic and interact with scholars from various disciplines. The topics will vary each year. P-DOC 713, 715, 717.

**DOC 751. Professional Seminar: Teaching in Higher Education. (3 h)**

Provides an understanding of pedagogical practices and major theories of curriculum and a foundation for students interested in pursuing careers in academe.

**DOC 753. Individual Study. (1-3 h)**

For students who wish to perform independent study in a cognate area with a professor from the Documentary Film Program or another program. May be repeated for credit for a maximum of 9 hours.

**DOC 755. Professional Seminar: Entrepreneurial Filmmaking. (3 h)**

This course will provide students with the knowledge and skills to help them create their own creative arts venture and help them design and teach a course in entrepreneurship in the creative arts, particularly digital media and non-fiction filmmaking.

**DOC 764. Individual Study. (1-3 h)**

For students who wish to perform independent study in a cognate area with a professor from the Documentary Film Program or another program. May be repeated for credit for a maximum of 9 hours.

**DOC 766. Teaching Practicum. (3 h)**

Students work closely with Documentary Film program faculty during the teaching of an undergraduate course. Students participate in the design and development of course material and observe classroom and organizational aspects of teaching in an apprenticeship role.

**DOC 780. Special Topics. (3 h)**

Intensive study of selected topics in documentary film. Topics may be drawn from any content area of documentary studies and production. May be repeated for credit for a maximum of 6 hours.

## Education (EDU)

**EDU 601. Microcomputer and Audiovisual Literacy. (3 h)**

Introduction to microcomputers for educators and other users, emphasizing familiarity with computers, use and evaluation of software, and elementary programming skills. Experience with audiovisual materials and techniques is included.

**EDU 602. Production of Instructional Materials. (3 h)**

Methods of producing instructional materials and other technological techniques. P-EDU 601 and senior or graduate standing.

**EDU 603. History of Western Education. (3 h)**

Educational theory and practice from ancient times through the modern period, including American education.

**EDU 604. Social Justice Issues in Educ. (3 h)**

This course facilitates exploration of issues of social justice and schooling from both theoretical and practical perspectives. It includes a focus on multicultural education, global awareness, issues of equity in school funding, urban and rural education, poverty, and marginalized populations.

**EDU 605. The Sociology of Education. (3 h)**

Study of contemporary educational institutions. Examines such issues as school desegregation, schooling and social mobility, gender equity, and multiculturalism.

**EDU 606. Studies in the History and Philosophy of Education. (3 h)**

Study of selected historical eras, influential thinkers, or crucial problems in education. Topics announced annually.

**EDU 609L. Introduction to Secondary Education. (3 h)**

This course includes practical experiences in classrooms with focus on secondary classrooms and students. It involves public school experience and seminar.

**EDU 610. Race, Class, and Gender in a Color-blind Society. (3 h)**

Examines issues surrounding race, class, and gender in the U.S. Topics include income and wealth, theories of discrimination, public education, gender bias, and patterns of occupational and industrial segregation.

**EDU 612. Teaching Exceptional Children. (3 h)**

This course examines the various types of learning differences in K-12 schools. Emphasis is on instructional planning, identification of interventions, and assessment techniques to support diverse learners.

**EDU 613. Human Growth and Development. (3 h)**

Theories of childhood and adolescent development, their relation to empirical research, and their educational implications. Consideration of the relation to learning of physical, intellectual, emotional, social, and moral development in childhood and adolescence.

**EDU 614L. Elementary Teaching Rounds. (2 h)**

Involves practical experiences in elementary classrooms with focus on pedagogy and content. Weekly public school experience and seminar. Pass/Fail.

**EDU 616. Elementary Literacy Interventions. (3 h)**

This course is a field experience for elementary education candidates focused on early literacy, including diagnosis and remediation of reading and writing skills. It includes public school experience and seminar.

**EDU 621. Advanced Issues and Trends in Education. (3 h)**

Special topics course related to advanced educational issues and trends with a focus on K-12 schools and teachers. Focus will vary by instructor. Course can be repeated if topic differs.

**EDU 637. TESOL Linguistics. (3 h)**

An introduction to the theoretical and practical linguistics resources and skills for teaching English to speakers of other languages (TESOL) within the US or abroad.

**EDU 641. Teaching Elementary Literacy. (3 h)**

Methods and materials for implementing research-based strategies for teaching and assessing reading, writing, listening and speaking in grades K-6.

**EDU 642. Teaching Elementary Social Studies. (3 h)**

Methods and materials for teaching K-6 social studies, including adaptations for diverse and exceptional learners. Also includes experience in diverse elementary classrooms.

**EDU 643. Teaching Elementary STEM (Science, Technology, Engineering, Mathematics). (3 h)**

Methods and materials for teaching STEM subjects in elementary schools, emphasizing inquiry teaching and learning, and including adaptations for diverse and exceptional learners.

**EDU 650L. Student Teaching: Elementary. (9 h)**

Supervised teaching experience in grades K-6. Full-time. Service Learning. Satisfactory/Unsatisfactory.

**EDU 651. Adolescent Psychology. (4 h)**

Introduction to theories of adolescent psychology as related to teaching and counseling in various settings. Readings emphasize researchers' suggestions for parenting, teaching, and counseling adolescents between the ages of 13 and 19.

**EDU 654. Content Pedagogy. (3 h)**

Methods, materials, and techniques used in teaching particular secondary subjects (English, mathematics, science, second languages, social studies).

**EDU 654A. Content Pedagogy: Teaching Secondary English. (3 h)**

Methods and materials used in teaching secondary English.

**EDU 654B. Content Pedagogy: Teaching Secondary Mathematics. (3 h)**

Methods and materials used in teaching secondary mathematics.

**EDU 654C. Content Pedagogy: Teaching Secondary Social Studies. (3 h)**

Methods and materials used in teaching secondary social studies.

**EDU 654D. Content Pedagogy: Teaching Secondary Science. (3 h)**

Methods and materials used in teaching secondary science.

**EDU 654E. Content Pedagogy: Teaching World Languages. (3 h)**

Methods and materials used in teaching world languages.

**EDU 654L. Content Pedagogy Rounds. (2 h)**

Practical experiences in classrooms with focus on pedagogy and content. Weekly public school experience and seminar. Satisfactory/Unsatisfactory.

**EDU 655. Professional Seminar: Elementary. (3 h)**

Reflection on the elementary school curriculum, including the needs of diverse learners, lesson planning, best practices, classroom management, and leadership. Provides additional field experience focused on early literacy, including diagnosis and remediation of reading and writing skills.

**EDU 661. Foundations of Education. (3 h)**

Philosophical, historical, and sociological foundations of education, including analysis of contemporary issues and problems.

**EDU 664L. Student Teaching Internship. (9 h)**

Supervised teaching experience in grades 9-12 (K-12 for foreign language). Full-time, 15-week field experience. Includes a weekly on-campus seminar. Satisfactory/Unsatisfactory.

**EDU 665. Professional Development Seminars. (3 h)**

Analysis and discussion of problems and issues in secondary school teaching. Examination of research and practice-based strategies. Pass/Fail only.

**EDU 668. Professional Experience in Education. (3 h)**

This course offers students a placement in an educational setting under the supervision of a professional mentor. During this internship, students examine a critical topic in a local school, a community agency, a nonprofit organization, or other educational setting.

**EDU 673. Comparative and International Education. (3 h)**

A study of various historical, political, economic, and social issues shaping education in selected countries throughout the world. The course aims to expand student understanding of differing educational and pedagogical structures and comparatively investigate educational issues around the globe.

**EDU 674. Student Teaching Seminar. (1.5 h)**

Analysis and discussion of practical problems and issues in the teaching of particular secondary subjects (English, mathematics, science, second languages, social studies). Emphasis is on the application of contemporary instructional methods and materials. Includes prior (intercession) 20 hours field experience requirement.

**EDU 677. Literacy in the 21st Century. (3 h)**

This course examines the impact of emerging literacy trends on the 21st Century students in a digital global world. There is specific focus on engaging reluctant and struggling readers.

**EDU 681. Special Needs Seminar. (1 h)**

Analysis and discussion of practical problems and issues in the teaching of special needs students in the secondary classroom. Topics include classroom management, reading and writing in the content area, inclusion, and evaluation. Satisfactory/Unsatisfactory.

**EDU 682. Reading and Writing in the Content Areas. (2 h)**

Survey of methods for teaching reading and writing to help students learn in the various content areas, and of techniques for adapting instruction to the literacy levels of students.

**EDU 683. Classroom Management Seminar. (1 h)**

Examination of research and practice-based strategies for secondary school classroom management and discipline. Satisfactory/Unsatisfactory.

**EDU 684. Creative Research Methodologies. (2 h)**

Investigation of source materials, printed and manuscript, and research methods which are applied to creative classroom experiences and the preparation of research papers in literature and social studies.

**EDU 685. Diversity Seminar. (1 h)**

Exploration of multi-cultural issues and relevant Spanish language and cultural teaching practices essential for classroom communication. Satisfactory/Unsatisfactory.

**EDU 687. Tutoring Basic Writing. (2 h)**

Review of recent writing theory applicable to teaching basic writers (including the learning disabled and non-native speakers). Special attention to invention strategies and heuristic techniques. Includes experience with tutoring in the Writing Center. (Credit not allowed for both EDU 387 and ENG 387.)

**EDU 688. Writing Pedagogy. (3 h)**

This course blends theory and practice, providing students from all content areas with a foundational understanding of writing pedagogy methods and approaches. Topics of study will include writing across the curriculum, writing research and writing assessment.

**EDU 690. Methods and Materials for Teaching Foreign Language. (3 h)**

Survey of the basic materials, methods, and techniques of teaching foreign languages in the elementary and middle grades. Emphasis is on issues and problems involved in planning and implementing effective second language programs in grades K-6. Spring only.

**EDU 693. Individual Study. (1-3 h)**

A project in an area of study not otherwise available in the department; permitted upon departmental approval of petition presented by a qualified student. May be repeated for credit.

**EDU 695. Teaching Diverse Learners. (3 h)**

This course addresses diversity in the classroom, particularly the needs of English Language Learners (ELL) and Exceptional Children (EC). It examines differentiated instruction with appropriate instructional and behavioral strategies to meet the needs of all students.

**EDU 698. Seminar in Secondary Education. (1 h)**

Investigation of the issues that form the context for teaching in secondary schools.

**EDU 705. Sociology of Education. (3 h)**

Study of contemporary society and education, including goals and values, institutional culture, and the teaching/learning process.

**EDU 707. Educational Policy & Practice. (3 h)**

Examination of the impact of race, ethnicity, and social class on educational achievement and attainment, including consideration of philosophical, historical, and sociological issues.

**EDU 708. School and Society. (3 h)**

Study of continuity and change in educational institutions, including analysis of teachers, students, curriculum, assessment and evaluation, and contemporary problems and reform movements.

**EDU 711. Reading Theory and Practice. (3 h)**

Study of current reading theory and considerations of its application in the teaching of reading, grades K-12.

**EDU 712. Learning & Cognitive Science. (3 h)**

Examination of patterns of human development, and theories and principles of cognition applied to teaching and learning.

**EDU 713. Classroom Climate: Classroom Management and Conflict Resolution. (3 h)**

This course focuses on the development and maintenance of a safe, orderly, and respectful classroom environment in conjunction with advanced pedagogical strategies. Students learn classroom management and conflict resolution techniques while considering their own teaching practices.

**EDU 714. Advanced Content Pedagogy. (3 h)**

This course assists students in developing skills for content-specific teaching of critical thinking and problem solving while building upon existing pedagogical content knowledge through collaboration that is rooted in current practice, and addressing state and national standards.

**EDU 715. Action Research. (3 h)**

Individual planning for action research study on a specific pedagogical topic in a school setting. Includes definition of research problem, literature review, and proposal for collection of field data, and reporting of results.

**EDU 716. Professional Growth Seminar. (3 h)**

Students will provide reflections on their teaching experiences, report the results of their action research, and define their professional goals.

**EDU 717. Instructional Design, Assessment and Technology. (3 h)**

Introduction to contemporary technologies and their applications for supporting instruction, assessment, professional practice, and school leadership.

**EDU 718. Adv Multimedia Tech in Educ. (3 h)**

This course develops advanced technology skills and knowledge of how to incorporate technology tools into pedagogical practice through a variety of assignments including an implementation project.

**EDU 721. Educational Research. (3 h)**

Theory, construction, and procedures of empirical research on teaching and learning. Analysis and evaluation of research studies.

**EDU 723. Educational Statistics. (3 h)**

Descriptive, inferential, and nonparametric statistical procedures involved in educational research. Computer methods for statistical analysis.

**EDU 725. Action Research II. (1 h)**

Reporting of results of action research study on pedagogical topic. Includes oral and written presentations.

**EDU 730L. Service Learning: Tutoring. (1 h)**

Practical experiences in classrooms with focus on tutoring and assisting with preparation for standardized testing. Includes field work and reflection. Pass/Fail only.

**EDU 731. Foundations of Curriculum Development. (3 h)**

Philosophical, psychological, and social influences on the school curriculum. Examination of both theoretical and practical curriculum patterns for the modern school. Processes of curriculum development, including the leadership function of administration and research.

**EDU 733. Supervision of Instruction. (3 h)**

Analysis of various techniques of supervision: orientation of teachers, in-service education, classroom observation, individual follow-up conferences, ways to evaluate instruction, and methods for initiating changes.

**EDU 735. Assessment of Teaching and Learning. (3 h)**

This course focuses on the assessment of learning from a theoretical and practical perspective. It includes an understanding of formative and summative assessments, traditional and non-traditional assessments, standardized testing, and the interpretation and application of test data.

**EDU 745. Advanced Diverse Learners. (3 h)**

This course addresses advanced issues related to diversity in the classroom.

**EDU 747. Research and Trends in the Teaching of Foreign Languages. (3 h)**

Study of current trends and issues in foreign language education. Research topics include language and linguistics, culture, and technology.

**EDU 751. Adolescent Psychology. (3 h)**

Introduction to theories of adolescent psychology as related to teaching and counseling in various settings. Readings emphasize researchers' suggestions for parenting, teaching, and counseling adolescents between the ages of 13 and 19.

**EDU 758. Studies in Educational Leadership. (3 h)**

Examination of contemporary leadership theory and its various applications in education.

**EDU 764. Seminar in Curriculum and Instruction. (3 h)**

Exploration of special topics in the field of curriculum and instruction.

**EDU 781. Methodology and Research. (3 h)**

Advanced study of the methods and materials of a specific discipline (English, French, Spanish, social studies, mathematics, science) in the curriculum with special attention directed to the basic research in the discipline. Includes 20 hours field experience/project.

**EDU 783. Readings and Research in Education. (1-3 h)**

Independent study and research on topics relevant to the student's field of concentration which may include a special reading program in an area not covered by other courses or a special research project. Supervision by faculty members. Hours of credit to be determined prior to registration.

**EDU 784. Research in Writing. (3 h)**

Investigation of selected topics related to the writing process.

**EDU 785. The Teaching of Writing. (3 h)**

Examination of the theories and methods of instruction of writing.

**EDU 787. Teaching Advanced Placement. (2, 3 h)**

An investigation of the content of and the pedagogy appropriate to advanced placement courses in the various disciplines. Summer only.

**EDU 788. Teaching Foreign Languages in the Elementary Grades. (2 h)**

Intensive period of observation and instruction in an elementary school setting with a foreign language specialist. Methods for development of listening, speaking, reading, writing, and cultural awareness using content-based instruction and thematic units.

## English (ENG)

**ENG 601. Individual Authors. (3 h)**

Study of selected work from an important American or British author. May be repeated once for credit.

**ENG 602. Ideas in Literature. (3 h)**

Study of a significant literary theme in selected works. May be repeated when the course is taught by a different professor on a different topic.

**ENG 604. History of the English Language. (3 h)**

Survey of the development of English syntax, morphology, and phonology from Old English to the present, with attention to vocabulary growth.

**ENG 605. Old English Language and Literature. (3 h)**

Introduction to the Old English language and a study of the historical and cultural background of Old English literature, including Anglo-Saxon and Viking art, runes, and Scandinavian mythology. Readings from Beowulf and selected poems and prose.

**ENG 608. Beowulf. (3 h)**

This course offers an intensive study of the poem, with emphasis on language, translation skills and critical contexts.

**ENG 609. Modern English Grammar. (3 h)**

A linguistics approach to grammar study. Includes a critical exploration of issues such as grammatical change and variation, the origins and effects of grammar prescriptions/proscriptions, the place of grammar instruction in education, and the politics of language authority.



**ENG 610. The Medieval World. (3 h)**

Examines theological, philosophical and cultural assumptions of the Middle Ages through the reading of primary texts. Topics include Christian providential history, drama, devotional literature, the Franciscan controversy, domestic life and Arthurian romance.

**ENG 611. The Legend of Arthur. (3 h)**

The origin and development of the Arthurian legend in France and England with emphasis on the works of Chretien de Troyes and Sir Thomas Malory.

**ENG 612. Medieval Poetry. (3 h)**

The origin and development of poetic genres and lyric forms of medieval vernacular poetry.

**ENG 613. The Roots of Song. (3 h)**

Interdisciplinary investigation of poetry and song in the Middle Ages and early Renaissance. Study of the evolution of poetic and musical genres and styles, both sacred and secular. Students must complete a project or projects on the technical or theoretical aspects of early song.

**ENG 615. Chaucer. (3 h)**

Emphasis on *The Canterbury Tales* and *Troilus and Criseyde*, with some attention to minor poems. Consideration of literary, social, religious, and philosophical background.

**ENG 620. British Drama to 1642. (3 h)**

British drama from its beginnings to 1642, exclusive of Shakespeare. Representative cycle plays, moralities, Elizabethan and Jacobean tragedies, comedies, and tragicomedies.

**ENG 623. Shakespeare. (3 h)**

Thirteen representative plays illustrating Shakespeare's development as a poet and dramatist.

**ENG 625. 16th-Century British Literature. (3 h)**

Concentration on the poetry of Spenser, Sidney, Shakespeare, Wyatt, and Drayton, with particular attention to sonnets and *The Faerie Queene*.

**ENG 626. Studies in English Renaissance Literature. (3 h)**

Selected topics in Renaissance literature. Consideration of texts and their cultural background. May be repeated once for credit pending approval of instructor.

**ENG 627. Milton. (3 h)**

The poetry and selected prose of John Milton with emphasis on *Paradise Lost*.

**ENG 628. 17th-Century British Literature. (3 h)**

Poetry of Donne, Herbert, Vaughan, Marvel, Crashaw, prose of Bacon, Burton, Browne, Walton. Consideration of religious, political, and scientific backgrounds.

**ENG 630. Restoration and 18th-Century British Literature. (3 h)**

Representative poetry and prose, exclusive of the novel, drawn from Addison, Steele, Defoe, Swift, Pope, Johnson, and Boswell. Consideration of cultural backgrounds and significant literary trends.

**ENG 633. Jane Austen. (3 h)**

An intensive study of the works of the British novelist Jane Austen and her cultural contexts.

**ENG 635. Eighteenth-Century British Fiction. (3 h)**

Primarily the fiction of Defoe, Richardson, Fielding, Smollett, Sterne, and Austen.

**ENG 636. Restoration and Eighteenth-Century British Drama. (3 h)**

British drama from 1660 to 1780, including representative plays by Dryden, Etherege, Wycherley, Congreve, Goldsmith, and Sheridan. Kairoff.

**ENG 637. Studies in 18th-Century British Literature. (3 h)**

Selected topics in 18th-century literature. Consideration of texts and their cultural background.

**ENG 638. Studies in Gender and Literature. (3 h)**

Thematic and/or theoretical approaches to the study of gender in literature.

**ENG 639. Studies in Sexuality and Literature. (3 h)**

Thematic and/or theoretical approaches to sexuality within literary studies.

**ENG 640. Studies in Women and Literature. (3 h)**

Women writers in society. May be repeated when the course is taught by a different professor on a different topic.

**ENG 641. Literature and the Environment. (3 h)**

This course studies the relationship between environmental experience and literary representation.

**ENG 644. Studies in Poetry. (3 h)**

Selected topics in poetry. May be repeated when the course is taught by a different professor on a different topic.

**ENG 645. Studies in Fiction. (3 h)**

Selected topics in fiction. May be repeated when the course is taught by a different professor on a different topic.

**ENG 646. Studies in Theatre. (3 h)**

Selected topics in drama. May be repeated when the course is taught by a different professor on a different topic.

**ENG 647. Internship in the Major. (1.5 h)**

Internship that involves both hands-on experience and academic study. Students will partner with a literature faculty member to integrate work in the community and engagement with his or her academic plan of study.

**ENG 648. English Studies and the Professions. (1.5 h)**

A practicum course focused on career design and career planning, specific to career options in humanities fields. The course will broaden awareness of career opportunities available to English graduate students. Pass-fail only. Cannot be repeated.

**ENG 650. British Romantic Poets. (3 h)**

A review of the beginnings of Romanticism in British literature, followed by a study of Wordsworth, Coleridge, Byron, Keats, and Shelley; collateral reading in the prose of the period.

**ENG 651. Studies in Romanticism. (3 h)**

Selected topics in European and/or American Romanticism with a focus on comparative, interdisciplinary, and theoretical approaches to literature.

**ENG 653. Nineteenth-Century British Fiction. (3 h)**

Representative major works by Dickens, Eliot, Thackeray, Hardy, the Brontës, and others.

**ENG 654. Victorian Poetry. (3 h)**

A study of the Brownings, Tennyson, Hopkins, and Arnold or another Victorian poet.

**ENG 656. Literature of the Caribbean. (3 h)**

Readings include significant works by authors from the Caribbean and authors writing about the Caribbean. Critical, historical, and cultural approaches are emphasized. All texts are in English.

**ENG 657. Studies in Chicano/a Literature. (3 h)**

Writings by Americans of Mexican descent in relation to politics and history. Readings in literature, literary criticism, and sociocultural analysis.

**ENG 658. Postcolonial Literature. (3 h)**

Survey of representative examples of postcolonial literature from geographically diverse writers, emphasizing issues of politics, nationalism, gender, and class.

**ENG 659. Studies in Postcolonial Literature. (3 h)**

Examination of themes and issues in postcolonial literature, such as: globalization, postcolonialism and hybridity, feminism, nationalism, ethnic and religious conflict, the impact of the Cold War, and race and class.

**ENG 660. Studies in Victorian Literature. (3 h)**

Selected topics such as development of genres, major authors and texts, cultural influences. Reading in poetry, fiction, autobiography, and other prose.

**ENG 661. Literature and Science. (3 h)**

Literature of and about science. Topics vary and may include literature and medicine, the two-culture debate, poetry and science, nature in literature, and the body in literature.

**ENG 662. Irish Literature in the 20th-Century. (3 h)**

Study of modern Irish literature from the writers of the Irish Literary Renaissance to contemporary writers. Course consists of overviews of the period as well as specific considerations of genre and of individual writers.

**ENG 663. Studies in Modernism. (3 h)**

Selected issues in Modernism. Interdisciplinary, comparative, and theoretical approaches to works and authors.

**ENG 664. Studies in Literary Criticism. (3 h)**

Consideration of certain figures and schools of thought significant in the history of literary criticism.

**ENG 665. Twentieth-Century British Fiction. (3 h)**

A study of Conrad, Ford, Forster, Joyce, Lawrence, Woolf and later British writers, with attention to their social and intellectual backgrounds.

**ENG 666. James Joyce. (3 h)**

The major works by Joyce, with an emphasis on *Ulysses*.

**ENG 667. Twentieth-Century English Poetry. (3 h)**

A study of 20th-century poets of the English language, exclusive of the U.S. Poets will be read in relation to the literary and social history of the period.

**ENG 668. Studies in Irish Literature. (3 h)**

The development of Irish literature from the 18th-century through the early 20th-century in historical perspective, with attention to issues of linguistic and national identity.

**ENG 669. Modern Drama. (3 h)**

Main currents in modern drama from 19th-century realism and naturalism through symbolism and expressionism. After an introduction to European precursors, the course focuses on representative plays by Wilde, Shaw, Synge, Yeats, O'Neill, Eliot, Hellman, Wilder, Williams, Hansberry, and Miller.

**ENG 670. American Literature to 1820. (3 h)**

Origins and development of American literature and thought in representative writing of the Colonial, Revolutionary, and Federal periods.

**ENG 671. American Ethnic Literature. (3 h)**

Introduction to the field of American Ethnic literature, with special emphasis on post World War II formations of ethnic culture: Asian American, Native American, African American, Latino, and Jewish American. The course highlights issues, themes, and stylistic innovations particular to each ethnic group and examines currents in the still developing American culture.

**ENG 672. American Romanticism. (3 h)**

Studies of Romanticism in American literature. Focus varies by topic and genre, to include such writers as Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson.

**ENG 673. Literature and Film. (3 h)**

Selected topics in the relationship between literature and film, such as adaptations of literary works, the study of narrative, and the development of literary and cinematic genres.

**ENG 674. American Fiction before 1865. (3 h)**

Novels and short fiction by such writers as Brockden Brown, Cooper, Irving, Poe, Hawthorne, Melville, Stowe, and Davis.

**ENG 675. American Drama. (3 h)**

An historical overview of drama in America, covering such playwrights as Boucicault, O'Neill, Hellman, Wilder, Williams, Inge, Miller, Hansberry, Albee, Shepard, Norman, Mamet, and Wilson.

**ENG 676. American Poetry before 1900. (3 h)**

Readings and critical analysis of American poetry from its beginnings, including Bradstreet, Emerson, Longfellow, Melville, and Poe, with particular emphasis on Whitman and Dickinson.

**ENG 677. American Jewish Literature. (3 h)**

Survey of writings on Jewish topics or experiences by American Jewish writers. Explores cultural and generational conflicts, responses to social change, the impact of the Shoah (Holocaust) on American Jews, and the challenges of language and form posed by Jewish and non-Jewish artistic traditions.

**ENG 678. Literature of the American South. (3 h)**

Study of Southern literature from its beginnings to the present, with emphasis upon such major writers as Tate, Warren, Faulkner, O'Connor, Welty, and Styron.

**ENG 679. Literary Forms of the American Personal Narrative. (3 h)**

Reading and critical analysis of autobiographical texts in which the ideas, style, and point of view of the writer are examined to demonstrate how these works contribute to an understanding of pluralism in American culture. Representative authors include Douglass, Brent, Hurston, Wright, Kingston, Angelou, Wideman, Sarton, Hellman, and Dillard.

**ENG 680. American Fiction from 1865 to 1915. (3 h)**

Study of such writers as Twain, James, Howells, Crane, Dreiser, Wharton, and Cather.

**ENG 681. Studies in African American Literature. (3 h)**

Reading and critical analysis of selected fiction, poetry, drama, and other writings by American authors of African descent. May be repeated once for credit if topic varies.

**ENG 682. Modern American Fiction, 1915 to 1965. (3 h)**

Includes such writers as Cather, Lewis, Hemingway, Fitzgerald, Faulkner, Dos Passos, Wolfe, Baldwin, Ellison, Agee, O'Connor, Styron, Percy, and Pynchon.

**ENG 685. Twentieth-Century American Poetry. (3 h)**

Readings of modern American poetry in relation to the literary and social history of the period.

**ENG 686. Directed Reading. (1-3 h)**

A tutorial in an area of study not otherwise provided by the department; granted upon departmental approval of petition presented by a qualified student.

**ENG 687. African-American Fiction. (3 h)**

Selected topics in the development of fiction by American writers of African descent. May be repeated once for credit if topic varies.

**ENG 689. African-American Poetry. (3 h)**

Readings of works by American poets of African descent in theoretical, critical, and historical contexts.

**ENG 690. The Structure of English. (3 h)**

Introduction to the principles and techniques of modern linguistics applied to contemporary American English.

**ENG 691. Studies in Postmodernism. (3 h)**

Interdisciplinary, comparative, and theoretical approaches to works and authors.

**ENG 693. Multicultural American Drama. (3 h)**

Examines the dramatic works of playwrights from various racial and ethnic communities such as Asian American, Native American, and Latino. Includes consideration of issues, themes, style, and form.

**ENG 694. Contemporary Drama. (3 h)**

Considers experiments in form and substance in plays from *Godot* to the present. Readings cover such playwrights as Beckett, Osborne, Pinter, Stoppard, Churchill, Wertebaker, Albee, Shepard, Mamet, Wilson, Soyinka, and Fugard.

**ENG 695. Contemporary American Literature. (3 h)**

Study of post-World War II American poetry and fiction by such writers as Bellow, Gass, Barth, Pynchon, Morrison, Ashbery, Ammons, Bishop, and Rich.

**ENG 696. Contemporary British Fiction. (3 h)**

Study of the British novel and short story, with particular focus on the multicultural aspects of British life, including works by Rushdie, Amis, Winterson, and Ishiguro.

**ENG 700. Teaching Internship. (1.5 h)**

An internship for the observation and practice of undergraduate pedagogy, placing an MA student into a core literature, writing, or creative writing course taught by a permanent faculty member, typically in the first semester of the student's second year. Arranged by permission or invitation of the supervising faculty member. Must be taken as an overload in addition to the coursework for the degree. May be repeated for credit for a maximum of 3 hours.

**ENG 701. Individual Authors. (3 h)**

Study of selected works from an important American, English, or Global Anglophone author.

**ENG 702. Ideas in Literature. (3 h)**

Study of a significant literary theme in selected works. May be repeated for credit if topic varies.

**ENG 703. Introduction to Composition Studies. (3 h)**

This graduate seminar offers an introduction to the field of Composition Studies (also known as Composition-Rhetoric). Students examine the field's historical perspectives, research traditions, guiding theories and constructs, classroom practices, and approaches to writing assessment.

**ENG 704. Studies in Rhetorical Theory and Criticism. (3 h)**

In this graduate seminar, students explore major issues and perspectives in rhetorical theory, including histories of rhetoric, elements of rhetorical criticism, and methods of rhetorical analysis. May be repeated once.

**ENG 705. Special Topics in Writing Studies. (3 h)**

In this graduate seminar, students examine significant writing theories and practices focused on one area of study within the international field of Writing Studies. May be repeated once.

**ENG 707. Workshop in Prose. (3 h)**

This graduate workshop is meant to improve and consolidate prose-writing skills and expand artistic ambitions, preparing students for further study (an MFA or PhD program) or a career in writing, editing, or teaching. May be repeated once.

**ENG 708. Workshop in Poetry. (3 h)**

This graduate workshop is meant to improve and consolidate poetry-writing skills and expand artistic ambitions, preparing students for further study (an MFA or PhD program) or a career in writing, editing, or teaching. May be repeated once.

**ENG 709. Special Topics in Creative Writing. (3 h)**

This graduate workshop is meant to develop students' creative writing skills in one or more genres in the context of a particular topic, as well as to expand artistic ambitions and prepare students for further study (an MFA or PhD program) or a career in writing, editing, or teaching. May be repeated once.

**ENG 710. Early Medieval Narrative. (3 h)**

A variety of forms of early medieval narrative (history, saga, chronicle, poetry, hagiography), with a focus on issues of genre and narrative form, connections between story and history, and the text's relation to the culture that produced it. Emphasis is on interdisciplinary viewpoints (artistic, archaeological, geographic), and on contemporary narrative theory.

**ENG 711. Arthurian Legend. (3 h)**

Emphasis is on the origin and developments of the Arthurian legend in England and France, with primary focus on Malory's *Le Morte d'Arthur*. Attention to social and intellectual backgrounds.

**ENG 712. Studies in Medieval Literature: Romance and Identity. (3 h)**

A diverse corpus of medieval poetry, both lyric and narrative, is explored in an effort to trace the origin and evolution of the idea and meaning of "romance," a term signifying, for the medieval audience, narrative poetry in the vernacular, and, for our purposes, that uniquely new concept of ennobling love that emerged in the 12th century.

**ENG 715. Studies in Chaucer. (3 h)**

Emphasis on selected *Canterbury Tales*, *Troilus and Criseyde*, and the longer minor works, with attention to social, critical, and intellectual background. Lectures, reports, discussions, and a critical paper.

**ENG 720. Renaissance Drama. (3 h)**

Using an historical approach, this seminar examines the relationship between the theater as an institution and centers of authority during the Tudor and Stuart periods. The plays—tragedies, comedies, tragicomedies—are approached as the products of a dynamic exchange between individual authors and the larger political and social concerns of the period.

**ENG 721. Studies in Spenser. (3 h)**

Emphasis on *The Faerie Queene*; attention to the minor works; intellectual and critical background. Lectures, discussions, and class papers. Ettn.

**ENG 722. Studies in 16th-Century British Literature. (3 h)**

Introduction to critical and scholarly methodology for the study of the literature; particular emphasis on Spenser's *Faerie Queene* and Sidney's *Arcadia*.

**ENG 723. Studies in Shakespeare. (3 h)**

Representative text from all genres, examined in light of critical methodologies in the field of Shakespeare studies. Emphasis is on reading primary sources as well as on discussion of the impact that historical, cultural, and religious developments had on Shakespeare, the theater, and the thematics of his plays.

**ENG 725. Studies in 17th-Century British Literature. (3 h)**

Non-dramatic literature of the 17th century, exclusive of Milton. Emphasis on selected major writers. Lectures, discussions, and presentation of studies by members of the class.

**ENG 727. Studies in 17th-Century British Literature: Primarily Milton. (3 h)**

The work of John Milton, primarily *Paradise Lost*, within its cultural environment. Some attention to connections between Milton's writings and that of his contemporaries.

**ENG 729. Early Modern Literature. (3 h)**

Introduction to Early Modern literature, spanning a variety of genres, periods, and regions and including historical contexts, critical methodologies, and secondary criticism in Early Modern studies.

**ENG 733. 18th-Century British Fiction. (3 h)**

A study of two major British novelists of the 18th century. Lectures, reports, critical papers. Authors for study chosen from the following: Defoe, Richardson, Fielding, Smollet, and Austen.

**ENG 737. Studies in Restoration and 18th-Century British Literature. (3 h)**

Selected topics in Restoration and 18th-century literature. Consideration of texts and their cultural background.

**ENG 740. Studies in Gender and Literature. (3 h)**

An examination of selected writers and/or theoretical questions focusing on issues of gender.

**ENG 741. Studies in Sexuality and Literature. (3 h)**

Thematic and/or theoretical approaches to sexuality within literary studies.

**ENG 743. Nineteenth-Century British Fiction. (3 h)**

Study of one or more major British novelists of the 19th century. Lectures, reports, discussions, and a critical paper. Authors for study chosen from the following: Austen, Dickens, Thackeray, Eliot, and Hardy.

**ENG 745. British Poetry of the 19th and 20th Centuries. (3 h)**

Study of several British poets chosen from the major Romantics, Tennyson, Browning, Hardy, and Yeats.

**ENG 746. Studies in British Romanticism. (3 h)**

Examination of major writers, topics, and/or theoretical issues from the late 18th and early 19th centuries.

**ENG 757. American Poetry. (3 h)**

Studies of the poetry and poetic theory of three major American writers in the 19th and 20th centuries. Writers chosen from the following: Whitman, Dickinson, Frost, Eliot, Stevens, or Williams. Discussions, reports, and a critical paper.

**ENG 758. Studies in Modern Poetry. (3 h)**

Theoretical issues and themes in 20th-century poetry.

**ENG 759. Studies in Postcolonial Literature. (3 h)**

Examination of themes and issues in postcolonial literature and/or theory such as globalization, identity and hybridity, feminism, nationalism, ethnic and religious conflict, the impact of neo-imperialism and economic policy, and race and class.

**ENG 760. Studies in Victorian Literature. (3 h)**

Selected topics such as development of genres, major authors and texts, and cultural influences of Victorian Literature. Readings in poetry, fiction and autobiography, and other prose.

**ENG 763. Studies in Modernism. (3 h)**

This course will examine selected issues in Modernism, from interdisciplinary, comparative, and theoretical approaches.

**ENG 765. Literary Criticism. (3 h)**

Review of historically significant problems in literary criticism, followed by study of the principal schools of 20th-century critical thought. Lectures, reports, discussions, and a paper of criticism.

**ENG 766. Studies in 20th-Century British Literature. (3 h)**

Examination of major writers, topics, and/or theoretical issues in 20th-century British literature. In addition to fiction, the course focuses on drama, theory, prose readings, and poetry.

**ENG 767. Twentieth Century British Fiction. (3 h)**

Study of one or more of the major British novelists of the 20th century. Authors chosen from among the following: Conrad, Ford, Forster, Joyce, Lawrence, or Woolf.

**ENG 768. Irish Literature. (3 h)**

Study of major themes, theories, individual authors, or periods, which might include discussions of mythology, folklore, landscape, poetics, narrative strategies, gender, and politics.

**ENG 770. Studies in American Literature. (3 h)**

Introduction to studies in American literatures, spanning a variety of genres, periods, and regions (U.S., Black Atlantic, Caribbean, Central American, South American, and hemispheric literatures), including historical contexts, critical methodologies, and secondary criticism in the field.

**ENG 771. American Ethnic Literature. (3 h)**

Examination of how ethnic writers narrate cultural histories and respond to and represent the ambiguity of cultural location. Literary topics include slavery, exile, the Holocaust, immigration, assimilation, and versions of the American Dream.

**ENG 772. Studies in American Romanticism. (3 h)**

Writers of the mid-19th century, including Emerson, Thoreau, Hawthorne, and Melville.

**ENG 774. American Fiction Before 1865. (3 h)**

Study of novels and short fiction by such writers as Brockden Brown, Cooper, Irving, Poe, Hawthorne, Melville, Stowe, and Davis.

**ENG 776. American Poetry Before 1900. (3 h)**

Close reading and critical analysis of selected American poets, such as Bryant, Longfellow, Poe, Emerson, Whitman, and Dickinson.

**ENG 779. Autobiographical Voices: Race, Gender, Self-Portraiture. (3 h)**

Using an historical and critical approach, this seminar examines autobiography as an activity which combines history, literary art, and self-revelation. Lectures, reports, discussions, a critical journal, a personal narrative, and a critical paper. Authors for study chosen from the following: Douglass, Brent, Hurston, Wright, Angelou, Crews, Dillard, Moody, Malcolm X, Kingston, Wideman, or Sarton.

**ENG 780. Studies in American Fiction from 1865 to 1915. (3 h)**

Study of the principal fiction of one or more major American writers of the late 19th and early 20th centuries. Lectures, seminar reports, and a research paper. Authors for study chosen from the following: Twain, James, Howells, Adams, Crane, Dreiser, Wharton, or Cather.

**ENG 781. African-American Literature and the American Tradition. (3 h)**

Critical readings of selected works of major American writers of African descent within the contexts of the African-American and American literary and social traditions. Covers such genres as autobiography, fiction, drama, and poetry. Lectures, reports, discussions, and a critical paper.



**ENG 782. Studies in American Fiction from 1915 to 1965. (3 h)**

Study of the principal fiction of one or more major American writers of the 20th century. Writers are chosen from the following: Cather, Lewis, Hemingway, Fitzgerald, Faulkner, Dos Passos, Wolfe, Baldwin, Ellison, Agee, O'Connor, Percy, or Pynchon.

**ENG 783. Contemporary American Fiction. (3 h)**

Seminar devoted to the close study of some of the most important novels produced in the United States since World War II.

**ENG 784. Contemporary American Poetry. (3 h)**

Seminar devoted to the close study of some of the most important poems written in America since World War II.

**ENG 786. Directed Reading. (1-3 h)**

A tutorial in an area of study not otherwise provided by the department; granted upon departmental approval of petition presented by a qualified student. May be repeated for credit if topic varies.

**ENG 789. Linguistics in Literature. (3 h)**

Examination of theories of grammar and attitudes toward the English language reflected in the literature of selected periods.

**ENG 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**ENG 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## French (FRH)

**FRH 621. Introduction to Translation. (3 h)**

Introduces translation strategies through theory and practice. Emphasizes translation of a broad variety of texts, including different literary and journalistic modes. Attention is given to accuracy in vocabulary, structures, forms, and to cultural concerns.

**FRH 623. Advanced Grammar & Stylistics. (3 h)**

Review and application of grammatical structures for the refinement of writing techniques. Emphasizes the use of French in a variety of discourse types. Attention is given to accuracy and fluency of usage in the written language.

**FRH 629. French for Business Communication. (3 h)**

Introduces the use of French in everyday professional interactions. Emphasizes oral and written practices, reading, and French business culture, as well as the job search and cross-cultural awareness. Exclusively for second-language learners.

**FRH 630. French for Management. (3 h)**

Explores oral and written French communication and develops intercultural skills in areas such as human resources, entrepreneurship, and marketing through case studies and current events.

**FRH 643. Modern French. (3 h)**

Study of the features of contemporary French including colloquial French, contrasting grammar, vocabulary, and pronunciation with standard forms.

**FRH 645. Language and Society. (3 h)**

Introduces sociolinguistic issues relating to the French language and its role in societies around the world.

**FRH 660. Cinema and Society. (3 h)**

Study of French and Francophone cultures through cinema. Readings and films may include film as artifact, film theory, and film history.

**FRH 661. Special Topics in French and Francophone Film Studies. (3 h)**

In-depth study of particular aspects of French and/or francophone cinema. Topics may include film adaptations of literary works, cinematographic expressions of social or political issues, selected filmmakers, theories, genres, historical periods, or cinematographic trends. May be repeated for credit for a maximum of 6 hours when topics vary.

**FRH 663. Trends in French and Francophone Poetry. (3 h)**

Study of the development of the poetic genre with analysis and interpretation of works from each period.

**FRH 664. French and Francophone Prose Fiction. (3 h)**

Broad survey of prose fiction in French, with critical study of representative works from a variety of periods.

**FRH 665. French and Francophone Drama. (3 h)**

Study of the chief trends in French dramatic art, with reading and discussion of representative plays from selected periods: Baroque, Classicism, and Romanticism, among others.

**FRH 670. Seminar in French and Francophone Studies. (3 h)**

In-depth study of particular aspects of selected literary and cultural works from different genres and/or periods. Topics vary from semester to semester. May be repeated for credit for a maximum of 6 hours when topics vary.

**FRH 674. Topics in French and Francophone Culture. (3 h)**

Study of selected topics in French and/or francophone culture. Works will be drawn from different fields (sociology, politics, art, history, music, cinema) and may include journalistic texts, films, historical and other cultural documents. May be repeated for credit for a maximum of 6 hours when topics vary.

**FRH 675. Special Topics in French and Francophone Literature. (3 h)**

Selected themes and approaches to French and francophone literature transcending boundaries of time and genre. May be repeated for credit for a maximum of 6 hours when topics vary.

**FRH 681. French Individual Study. (1.5-3 h)**

May be repeated for credit. P-Permission of the department.

## Graduate (GRD)

**GRD 700. Independent Study. (1-9 h)**

This course allows an interested student to pursue a topic covered in another class in greater depth under the guidance of a faculty member. The faculty member will work with the student to clarify the expectations; usually the course requires a combination of extensive reading, tutorial sessions, and a written paper. May be repeated.

**GRD 701. Special Topics. (1-9 h)**

This course allows an interested student or students to pursue a topic covered in another class in greater depth under the guidance of a faculty member. The faculty member will work with the student or students to clarify the expectations; usually the course requires a combination of extensive reading, tutorial sessions, and a written paper. May be repeated for different topics.

**GRD 702. Internship. (1-9 h)**

The objective of this experiential course is to prepare graduate students to practice their biomedical science expertise within one of a variety of career settings. The course is appropriate for those seeking either a Master's or PhD in biomedical sciences, preparing the student for roles in pharmaceutical/biotech (research, safety, marketing), law and regulatory agencies, medical writing, science policy, and grants management, among others. Students should register for this course if their internship placement is located within the Wake Forest umbrella. Students with placement outside of the Wake Forest umbrella should register for GRAD 703. Credit hours may be adjusted based on the length of the internship. May be repeated. Satisfactory/Unsatisfactory.

**GRD 703. Internship. (1-9 h)**

The objective of this experiential course is to prepare graduate students to practice their biomedical science expertise within one of a variety of career settings. The course is appropriate for those seeking either a Master's or PhD in biomedical sciences, preparing the student for roles in pharmaceutical/biotech (research, safety, marketing), law and regulatory agencies, medical writing, science policy, and grants management, among others. Students should register for this course if their internship placement is located outside the Wake Forest umbrella. Students with placement inside of the Wake Forest umbrella should register for GRAD 702. Credit hours may be adjusted based on the length of the internship. May be repeated. Satisfactory/Unsatisfactory.

**GRD 704. Principles of Intellectual Property Development. (2 h)**

This course is specifically designed for late stage graduate students to supplement their scientific background with a greater understanding of intellectual property protection, commercialization, and start-up company formation. Numerous aspects of our knowledge-based economy will be covered including an overview of the diverse types of intellectual property protection available to protect inventions (with a focus on patents, ) the technology transfer process in an academic setting, a primer of company formation and organization, and an analysis of the different agreements (including Confidential Disclosure Agreements, Material Transfer Agreements and License Agreements) necessary to move a technology from the bench to the bedside.

**GRD 705. Commercializing Innovation. (3 h)**

This course will explore the processes that are involved from taking an interesting and innovative idea through successful commercial or organizational application - in going from why something is a promising innovation on to how to develop a potentially successful business. It will look at product and process innovation, as well as the increasingly important area of business model innovation. There will be strong emphasis on practical application, group work and learning from experience. Guest lecturers will be used to illuminate some of the key issues in the commercialization process. Typically offered in spring terms.

**GRD 706. Regulation and Reimbursement of Novel Drugs, Biologics, and Medical Devices. (3 h)**

This course is an overview of the key areas of strategic clinical development, Regulatory Affairs and the FDA-imposed regulations pertinent to the product lifecycle in the pharmaceutical, biologics, and medical device industries. The course also explores the basics of market access and reimbursement as a "second approval" prior to the product entering the market. The implications for available scientific and clinical evidence in light of market access issues will be discussed and linked back to the design of successful clinical development programs. Students will gain insight into the key elements of the regulatory process and market access in various health sector industries, governmental agencies and consultancies.

**GRD 707. Professional Responsibilities & Conduct I. (1 h)**

Students learn to identify general and discipline-specific professional norms and obligations for the responsible practice of science. Emphasizes development of professional decision-making skills. This course or equivalent is required for Reynolda campus Master's students who will be supported on federal grants. Pass/Fail.

**GRD 708. Communicating Science. (2 h)**

This course is meant to train students in the best practices of taking highly technically scientific content and translating into formats that can be more easily comprehended by non-scientists and laypersons. The course will rely heavily on student presentations, often of their own research, followed by constructive critique from other class members. Typically offered in the summer term.

**GRD 709. Scientific Outreach. (1 h)**

This course provides hands-on engagement with teaching and educational opportunities directed at the lay public or other, non-university groups. Planning outreach events and communicating scientific concepts to the lay public are essential skills for any scientist-in-training, especially those who may be involved in academic lecturing or public policy. The scope of such activities will derive from the scientific disciplines of the students involved, but will include activities involving the informal teaching of basic and translational science concepts in the biomedical sciences and other STEM-related disciplines. Examples of such engagement include K-12 school visits, involvement in public symposia related to science for lay audiences, or any similar activity performed under faculty guidance. May be repeated for credit not to exceed 6 hours each. Satisfactory/Unsatisfactory.

**GRD 710. Scientific Outreach. (1 h)**

This course provides hands-on engagement with teaching and educational opportunities directed at the lay public or other, non-university groups. Planning outreach events and communicating scientific concepts to the lay public are essential skills for any scientist-in-training, especially those who may be involved in academic lecturing or public policy. The scope of such activities will derive from the scientific disciplines of the students involved, but will include activities involving the informal teaching of basic and translational science concepts in the biomedical sciences and other STEM-related disciplines. Examples of such engagement include K-12 school visits, involvement in public symposia related to science for lay audiences, or any similar activity performed under faculty guidance. May be repeated for credit not to exceed 6 hours each. Satisfactory/Unsatisfactory.

**GRD 711. Introduction to College Teaching. (1 h)**

Prepares graduate teaching assistants for teaching roles. Coursework includes a 1-2 day orientation introducing students to the role and responsibility of being a teaching assistant, departmental orientation to teaching in the discipline, a series of educational workshops conducted by the Teaching and Learning Center, and classroom observation. Satisfactory/Unsatisfactory.

**GRD 712. Clinical Integrity and Professionalism. (2 h)**

This course offers foundational ethics and integrity training to Bowman Gray graduate students focused in pre-clinical studies. This course will utilize a combination of didactic presentations and small group, problem-based learning experiences to teach students methodology for addressing future ethical concerns in clinical and research practice. The course will provide an overview of the historical context and theoretical frameworks of biomedical ethics. Emphasis will be placed on the use of case studies to discuss topics including but not limited to: the doctor-patient relationship, professionalism, the principles of biomedical ethics, informed consent, privacy and confidentiality, medical research, social factors in healthcare, and ethical issues at the beginning and end of life. This course satisfies graduation requirements for ethics training for Bowman Gray students. Satisfactory/Unsatisfactory.

**GRD 713. Foundations of Scientific Integrity and Professionalism. (1 h)**

A short-course designed to offer foundational ethics and integrity training to incoming Bowman Gray graduate students. Key concepts will include introduction to key professional norms in science, including, but not limited to, responsible conduct of research, new professional expectations, as well as student life. An introduction to topics, that will be further explored using case-studies in GRAD 714, will include: plagiarism, animal & human subject research, record keeping, data management, grant writing, the student and advisor relationship, laboratory dynamics, and managing conflicts of interest. Typically offered immediately following fall orientation. Satisfactory/Unsatisfactory.

**GRD 714. Scientific Integrity and Professionalism. (1 h)**

A small-group, problem-based learning formatted course designed to teach discipline-specific and broad, professional norms and obligations for the ethical practice of science, primarily for first-year graduate students on the Bowman Gray campus. The content will present ethical dilemmas and promote professional behavior on, but not limited to, the responsible conduct of research and the current regulatory climate with emphasis on the underlying principles that shape these concepts. Topics will include plagiarism, animal & human subject research, record keeping, data management, grant writing, the student and advisor relationship, laboratory dynamics, and managing conflicts of interest. Typically offered weekly at 2-hour discussion sections during the spring term. This course satisfies graduation requirements for ethics training for Bowman Gray students. Satisfactory/Unsatisfactory.

**GRD 715. Career Planning in Biomedical Sciences. (1 h)**

A weekly seminar course, primarily for first-year graduate students on the Bowman Gray campus, in which invited alumni panelists share details on career options in the biomedical sciences, typically grouped by industry, highlighting a wide range of career paths. Speakers will share details from their own experiences in preparing for their chosen career paths, and may include: undergraduate college teaching, pharmaceutical research, law careers, medical writing, science policy, and grants management, among other careers. In addition to the panel discussions, students will have the opportunity to complete self-assessment exercises to help narrow their career focus, will begin to discuss best practices in resume, curriculum vitae, cover letter writing, and interviewing skills. Recommended for all students on the Bowman Gray campus. Typically offered in fall terms.

**GRD 716. Seminars in Professional Development. (1 h)**

A weekly seminar course, primarily for first-year graduate students on the Bowman Gray campus, in which invited speakers give presentations organized around offering students best practices in professional behaviors on topics, including: animal and human subjects research, record keeping, authorship, grant writing, preparing talks and posters, and managing conflicts of interest. Required for PhD students on the Bowman Gray campus; recommended for MS students on the Bowman Gray campus. Typically offered in spring terms.

**GRD 717. Career Planning for Graduate Students. (1 h)**

This course is designed to provide graduate students with experience in all three components of the career planning process: 1) self-assessment of work related values, interests, skills; 2) exploration and research of career options 3) development of job search materials including resumes, cover letters, and other relevant materials. Recommended for all students in the Reynolda Campus programs preferably in their first year. This will be offered in online format over half a semester to allow for self-guided investment in their own career plans. Satisfactory/Unsatisfactory.

**GRD 720. Topics in College-Level Teaching. (1-3 h)**

Students participate in the preparation and delivery of one or more lectures, homework assignments, and examinations, and facilitate small group learning sessions. Students attend at least two professional development workshops on a variety of aspects of the educational process. P-Successful completion of the first year of coursework in a biomedical graduate training program and POI. Satisfactory/Unsatisfactory.

**GRD 722. Teaching Skills and Strategies Seminar. (2 h)**

Designed to provide students with formal training and development in teaching strategies and teaching scholarship. A variety of theories and pedagogies are reviewed and discussed. Students receive some practical experience in developing and delivering instructional materials and assessment tools. Meets weekly for two hours throughout the spring semester.

**GRD 724. Biosafety in Research Laboratories. (3 h)**

This one-term course provides an overview of the types of biohazards that may be encountered while conducting scientific research, with emphasis on laboratories, and effective methods to minimize the risks associated with those hazards. P-At least one microbiology course and laboratory experience.

**GRD 725. Speaking with Confidence. (3 h)**

Introduction to logic and rhetoric as well as grammar, comprehension, idioms, pronunciation, and vocabulary. Focuses on increasing self-confidence to improve speaking abilities as well as future employment opportunities.

**GRD 726. Written English for the Professional Graduate. (3 h)**

Field-based seminar compares the barriers to market participation experienced by independent entrepreneurs cross-culturally. Free trade policies are contrasted with fair trade practices to determine why so many independent producers have trouble succeeding in a globalizing world.

## Health and Exercise Science (HES)

**HES 650. Human Physiology. (3 h)**

A lecture course that presents the basic principles and concepts of the function of selected systems of the human body, with emphasis on the muscular, cardiovascular, pulmonary, and nervous systems. Berry, Brubaker.

**HES 651. Nutrition in Health & Disease. (3 h)**

A lecture/lab course that presents the principles of proper nutrition including an understanding of the basic foodstuffs and nutrients as well as the influence of genetics, eating behavior, and activity patterns on performance, energy balance, and weight control. Labs focus on intervention in obesity and coronary heart disease through diet analysis, methods of diet prescription, and behavior modification. Miller.

**HES 652. Human Gross Anatomy. (4 h)**

A lecture/lab course on the structure and function of the human body. Labs are devoted to the dissection and study of the human musculoskeletal, neuromuscular, and vascular systems. Marsh, Messier.

**HES 653. Physiology of Exercise. (3 h)**

Lecture course that presents the concepts and applications of the physiological response of the human body to physical activity. The acute and chronic responses of the muscular and cardiorespiratory systems to exercise are examined. Other topics include exercise and coronary disease, strength and endurance training, somatotype and body composition, gender-related differences, and environmental influences. P-HES 650 or POI. Miller, Berry.

**HES 660. Epidemiology. (3 h)**

Introduction to basic determinants of the incidence of chronic disease in the population, and development of an understanding of individual, community, and environmental approaches to promoting healthful lifestyles in youth, adults, and elderly populations. Issues are analyzed by formal statistical modeling. Mihalko.

**HES 670. Biomechanics of Human Movement. (3 h)**

Study of the mechanical principles which influence human movement, sport technique, and equipment design. Messier.

**HES 675. Advanced Exercise Physiology. (3 h)**

Lecture course on the study of physiological and biochemical adaptations of the human body to exercise, with special emphasis on substrate metabolism, ventilation and respiration, oxygen transport, and muscle physiology. Berry.

**HES 682. Independent Study. (1-3 h)**

Literature reviews and/or laboratory research performed on an individual basis under the supervision of a faculty member. Staff.

**HES 715. Experimental Design. (3 h)**

Study of the various types of research relevant to health and exercise science. While attention is given to topics such as statistical treatment of data, the primary emphasis involves discussion concerning threats to internal and external validity for experimental and quasi-experimental designs. In conjunction with a sound methodological approach, practical experiences are provided in the preparation and presentation of thesis proposals. Katula.

**HES 721. Data Analysis and Interpretation. (3 h)**

The application of basic statistical techniques in the analysis and interpretation of data in scientific research. Topics include descriptive statistics, simple linear and multiple correlation/regression analysis, t-tests, analysis of variance and covariance, and non-parametric statistics. Berry.

**HES 733. Health Psychology. (3 h)**

Seminar on current topics in health psychology with a focus on wellness programs and rehabilitative medicine. Katula.

**HES 761. Cardiopulmonary Disease Management. (3 h)**

A lecture/lab class that examines the physiological, pathologic, and pharmacologic considerations of managing patients with cardiovascular and pulmonary disease. Special emphasis on learning diagnostic procedures, interventions, and therapies, particularly models for cardiac and pulmonary rehabilitation. Brubaker.

**HES 763. Advanced Biomechanics. (3 h)**

An in-depth study of the mechanical principles that influence human movement. Topics include the study of kinetics, kinematics, cinematography, sport shoe design, and skeletal biomechanics. P-POI. Messier.

**HES 765. Graded Exercise Testing and Exercise Prescription. (3 h)**

The study of the rationale for the use of graded exercise testing in the evaluation of functional work capacity and prescription of exercise. Lectures include the analysis of different modes of evaluation: treadmill, bicycle ergometer, arm ergometer, and field testing, with the application of the results in the evaluation of normal and cardiac patients and prescription of exercise for special populations. Lab experiences include the use of electrocardiographs, ergometers, and metabolic analyzers in the assessment of functional capacity. Brubaker.

**HES 780. Advanced Topics in Exercise and Sport Science. (3 h)**

This course is divided into two or more content areas to allow an in-depth treatment of selected topics that are not a regular part of required coursework. Topics are chosen from the following areas: anatomy, biomechanics, computer analysis, multivariate statistics, and physiology of exercise. Seminar and/or lab approach. Staff.

**HES 782. Independent Study in Health and Exercise Science. (1-3 h)**

Literature and/or laboratory research performed on an individual basis under the supervision of a faculty member. May be repeated for credit. Staff.

**HES 783. Seminar in Health and Exercise Science. (1 h)**

Seminar class designed to bring graduate students and faculty together on a regular basis to discuss research proposals, research design and studies, results of research, and current topics in health and exercise science. Talks by invited or visiting speakers are included as seminar sessions. Graduate students receive reading and work assignments related to the material presented in the seminar. May be repeated for credit. Katula.

**HES 784. Seminar in Health and Exercise Science. (1 h)**

Seminar class designed to bring graduate students and faculty together on a regular basis to discuss research proposals, research design and studies, results of research, and current topics in health and exercise science. Talks by invited or visiting speakers are included as seminar sessions. Graduate students receive reading and work assignments related to the material presented in the seminar. May be repeated for credit. Katula.

**HES 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**HES 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.



## Hindi-Urdu (HNU)

### HNU 611. Elementary Hindi-Urdu I. (3 h)

Introduction to modern Hindi-Urdu. Designed for students with no knowledge of the language. Focus is on developing reading, writing, and conversation skills for practical contexts. Instruction in the Devanagari and Nastaliq scripts and an exploration of the cultures of India and Pakistan. Fall only.

### HNU 612. Elementary Hindi-Urdu II. (3 h)

Continued instruction in modern Hindi-Urdu. Students with previous background may place into this course with the instructor's permission. Focus is on developing reading, writing, and conversation skills for practical contexts. Instruction in the Devanagari and Nastaliq scripts and an exploration of the cultures of India and Pakistan. P-HNU 611.

### HNU 653. Intermediate Hindi-Urdu I. (3 h)

Introduction to the Devanagari writing system used in Hindi, as well as other South Asian languages, including Nepali and Sanskrit. Includes an overview of the Hindi-Urdu sound system and language. Students with prior proficiency in spoken Hindi or Urdu may complete this course in preparation for entering Intermediate Hindi-Urdu. P-HNU 612.

### HNU 701. Intermediate Hindi-Urdu II. (3 h)

Continued intermediate instruction in spoken and written Hindi-Urdu. Students with previous background may place into this course with the instructor's permission. Focus is on building oral and written communication skills in a range of contexts. Exploration of the cultures of India and Pakistan through discussions of authentic materials. Instruction in Devanagari and Nastaliq scripts. P-HNU 653 or POI.

### HNU 730. Advanced Hindi-Urdu I. (1-3 h)

Third year of modern Hindi-Urdu. Focuses on interpreting authentic texts, films, and media, as well as developing accuracy and fluency in oral and written communication. Instruction in Devanagari and Nastaliq scripts. P-HNU 701 or POI.

### HNU 731. Advanced Hindi-Urdu II. (1-3 h)

A continuation of HNU 730. P-HNU 730 or POI.

## History (HST)

### HST 605. Medieval and Early Modern Iberia. (3 h)

Examines the variety of Christian, Muslim, and Jewish cultures that flourished on the Iberian peninsula between the years 700 and 1700. Themes include religious diversity and the imposition of orthodoxy, the formation of nation-states and empires, geographic exploration and discovery, and the economics of empire in the early modern period.

### HST 606. Science, Magic, and Alchemy in Europe, 1400-1700. (3 h)

Examines scientists and magicians in medieval Europe, who developed theoretical models and practical approaches to understand and to manipulate the natural world. Looks at alchemists, who transformed matter to understand it as well as to make things for practical purposes: metals, gems, medicines, and the philosopher's stone.

### HST 607. Italian Renaissance. (3 h)

Examination of the economic, political, intellectual, artistic, and social developments in the Italian world from 1350-1550.

### HST 608. World of Alexander the Great. (3 h)

An examination of Alexander the Great's conquests and the fusion of Greek culture with those of the Near East, Central Asia, and India. Special emphasis placed on the creation of new political institutions and social customs, modes of addressing philosophical and religious issues, as well as the achievements and limitations of Hellenistic Civilization. Lerner.

### HST 609. European International Relations since World War I. (3 h)

Surveys European international relations in the 20th century beyond treaties and alliances to examine the economic, social, and demographic factors that shaped formal arrangements between states. Covers the impact of new forms of international cooperation, pooled sovereignty, and nongovernmental organizations on European diplomacy and internal relations.

### HST 610. 20th Century Eastern Europe. (3 h)

Examination of the history of 20th century Eastern Europe, including the creation of nation-states, World War II, and the nature of Communist regimes established in the postwar period. Course includes a discussion of the collapse of the Eastern Bloc and the challenges of European integration.

### HST 612. Jews, Greeks, and Romans. (3 h)

Largely from a Jewish context, the course explores the political, religious, social and philosophical values shaped by the collision between Jews, Greeks, and Romans, from the Hellenistic Period to the Middle Ages.

### HST 613. The History of European Jewry from the Middle Ages to the Present. (3 h)

Examines the Jewish historical experience in Europe from the medieval period to the Holocaust and its aftermath. Includes a consideration of social, cultural, economic and political history, and places the particular experience of Jews within the context of changes occurring in Europe from the medieval to the modern period.

### HST 614. European Economic and Social History, 1700-1990. (3 h)

Changes in Europe's economic structures and how they affected Europeans' lives. Emphasizes how economic forces interacted with social and institutional factors.

### HST 615. Greek History. (3 h)

The development of ancient Greek civilization from the Bronze Age to the end of the Classical Period stressing social institutions, individual character, and freedom of social choice within the framework of cultural, political, and intellectual history. Lerner.

### HST 616. Rome: Republic & Empire. (3 h)

Survey of Roman history and civilization from its beginning to about 500 C.E., with emphasis on the conquest of the Mediterranean world, the evolution of the Republican state, the growth of autocracy, the administration of the empire, and the interaction between Romans and non-Romans. Lerner.

### HST 617. The French Revolution and Napoleonic Empire. (3 h)

The revolution and wars that constitute one of the pivotal points in modern history. Williams.

### HST 618. Weimar Germany. (3 h)

Art, literature, music, and film of Weimar Germany, 1919-1933, in historical context. German or history credit determined at registration.

### HST 619. Poland and the Baltic Region. (3 h)

Introduction to the history of Poland and the eastern Baltic littoral since 1760, covering the territory that later became Estonia, Latvia, Lithuania, and Poland; emergence of independence after World War I; the Soviet experience; and re-establishment of independence during the break-up of the Soviet Union.

**HST 620. Write and Record! Diaries and Memoirs of the Nazi Holocaust. (3 h)**

Examines a wide range of diaries and memoirs to illuminate the historical period of Nazism, seeking to understand daily life under Nazi rule, the brutality of the perpetrators, and the many responses of Jews forced to live in such circumstances. From Anne Frank's account of hiding in an Amsterdam secret annex to Art Spiegelman's graphic novel of his parent's experience in Auschwitz, the diaries and memoirs of Holocaust victims provide an invaluable resource for historians.

**HST 621. Zionism, Palestine, and Israel in Historical Perspective. (3 h)**

Investigates both the European causes of Zionism and the Middle Eastern consequences of the establishment of the State of Israel. Through our discussion, students will be introduced to many of the scholarly debates over the history, practices, and consequences of Zionism, the State of Israel, and the Israel-Palestinian conflict.

**HST 622. Migrants and Refugees in Modern History. (3 h)**

Explores forced migrations and the development of the concepts of refuge from the 16th to 20th centuries, drawing on cases from around the world. Considers how states, empires, and non-governmental organizations have handled migrants and refugees, as well as the lived experiences of displaced individuals.

**HST 624. Fashion in the Eighteenth Century. (3 h)**

Examines the relationship between consumer culture and democratic politics in the eighteenth-century, focusing on Britain, North America, France, and Haiti. Considers laws regulating dress; the relationship between democracy, political resistance, and costume; the construction of political allegiance through clothes and symbols; and the ways fashion mediated ideas about empire, race, and gender.

**HST 625. English Kings, Queens, and Spectacle. (3 h)**

Examines how English royal authority was created, legitimized, performed, and challenged between the reigns of Henry VIII and George III through ritual, image, and text. Topics include: gender and power; court culture; the press and political revolution; popular politics and propaganda; graphic satire; and the commercialization of politics.

**HST 627. Profit and Power in Britain. (3 h)**

Examines economic ideas and British society between 1688 and 1914. Topics include connections between consumption and identity; the relationship of morals to markets; the role of gender and the household; knowledge, technology, and the industrial revolution; and the place of free trade in the political imagination.

**HST 628. History of the English Common Law. (3 h)**

Study of the origins and development of the English common law and its legacy to modern legal processes and principles.

**HST 631. The United States in Age of Empire, 1877-1919. (3 h)**

Explores the late 19th and early 20th centuries when the United States joined in the global scramble for empire. Examines the domestic and international causes of American imperial expansion; the modes of rule that the U.S. exercised in its formal and informal possessions; and the political and intellectual debates at home and abroad about America's expansion as a world power.

**HST 632. The United States and the Global Cold War. (3 h)**

Considers United States efforts to secure its perceived interests through "nation building" and economic development in Africa, Latin America, the Middle East, and much of Asia during the Cold War and after. Emphasizes the ideological and cultural dimensions of American intervention.

**HST 633. European Diplomacy, 1848-1914. (3 h)**

The diplomacy of the great powers, with some attention given to the role of publicity in international affairs. Topics include the unification of Italy and of Germany, the Bismarckian system, and the coming of World War I. Staff.

**HST 634. Mytics, Monarchs, and Masses in South Asian Islam. (3 h)**

An introduction to Islam through South Asian social, political, cultural, and intellectual history.

**HST 635. Hindus and Muslims in India, Pakistan, and Beyond. (3 h)**

Examines the shared yet different, intertwined yet separate histories of the Hindus and Muslims of modern India, Pakistan, Bangladesh, and Sri Lanka primarily over the last two centuries. Explores the checkered existence of the two communities in order to understand diversity and questions of coexistence and conflict.

**HST 636. Gender in African History. (3 h)**

Examines the close relationship between understandings of gender and power in African societies, with particular focus on the last several hundred years. After addressing the sources and methods scholars have used to address these topics, the course examines conceptions of gender and power in pre-colonial African societies, the impact of the colonial period on men and women, the gendered nature of nationalism and independence, and the importance of gender and power to many of Africa's post-colonial challenges.

**HST 637. Women and Gender in Early America. (3 h)**

History of women and gender roles from 1600 through the Civil War, including the social constructions of femininity and masculinity and their political, economic, and cultural significance.

**HST 638. Sexuality, Race and Class in the U.S. since 1850. (3 h)**

The history of gender relations from the late nineteenth century to the present. Analyzes the varying definitions of femininity and masculinity, the changing notions of sexuality, and the continuity and diversity of gender roles, with special attention to race, class, and ethnicity.

**HST 639. Sickness and Health in American History. (3 h)**

Analysis of major trends in health, sickness, and disease within the broad context of social, political, and economic developments. Examines indigenous healing; colonial medicine; emergence of hospitals and asylums; public health; medical ethics; race, class and gender issues; and natural versus high-tech approaches to health care in the 20th century.

**HST 640. Social and Cultural Change in Urban Africa. (3 h)**

While popular imagination suggests that the African past is largely a rural one, many of the continent's most explosive social and cultural transformations have taken place in its cities. This course examines how urban residents have worked to creatively shape some of sub-Saharan Africa's major transformations. Major topics include the social and cultural fabric of pre-colonial African cities, the impact of colonialism on African towns, cities as sites of revolution and independence, and the contemporary conditions and challenges facing urban residents.

**HST 641. Africans in the Atlantic World, 1750-1815. (3 h)**

Explores Africans' experience in the Atlantic world (Africa, Europe, and the Americas) during the era of slave trade by examining their encounters with Indians and Europeans and their adjustment to slave traders in West Africa.

**HST 643. The Silk Roads. (3 h)**

Explores the global exchanges across land and sea from the Bronze Age to the Early Modern Era, and their impact on the states and stateless societies connected by the Silk Road from China and Japan to the Mediterranean and the British Isles.

**HST 644. Early Modernity in China. (3 h)**

This course explores historic transformations in Chinese economy, society, thought and culture from 1500 to 1800. These developments are placed within their local, global and comparative context. Students read a wide variety of Chinese primary sources in English translation, including philosophical treatises, literary works, diaries, and memoirs, some of which were written by Jesuit missionaries from Catholic Europe.

**HST 645. Early Modern Global Encounters: China and the World, 1400-1800. (3 h)**

This course studies the impact of China's encounters with the wider early modern world by exploring the following questions: how did the arrival of New World silver and crops, European firearms, Catholicism, and Renaissance learning in China help transform Chinese economy, modes of warfare and empire-building, thought, and culture, and how did the global circulation of Chinese commodities, aesthetic, philosophies, and healing arts in turn shape the early modern experiences in Europe and elsewhere? All required readings are in English.

**HST 647. Rise of Asian Economic Power. (3 h)**

An exploration of how Japan, South Korea, and China became dominant in world economies. Focus on business practices, foreign trade, government policy, and consumer and labor markets in the process of high-speed economic growth. Concludes with examination of recent challenges of national debt, international competition, and aging societies.

**HST 648. Samurai and Geisha: Fact, Film, and Fiction. (3 h)**

Focuses on two well-known groups in Japanese history, the samurai (warriors) and geisha (entertainers). By analyzing historical studies and primary sources, as well as works of fiction and films about samurai and geisha, the course considers how Japanese and Western historians, novelists, and filmmakers have portrayed the two groups and by implication Japan and its history in the modern period.

**HST 650. World Economic History: Globalization, Wealth and Poverty, 1500-Present. (3 h)**

Explores the growth of globalization and its role in the creation of wealth and poverty in both developed and underdeveloped nations. Focus on trade, industrialization, and agricultural and technological advances in global contexts.

**HST 651. The American Revolution. (3 h)**

Examines the transformation that unfolded during the struggles for sovereignty in North America between 1765 and 1800. Considers the political upheavals that converted some British colonists into insurgents and explores the unlikely unification of disparate provinces into a confederated republic.

**HST 652. Ten Years of Madness: The Chinese Cultural Revolution, 1966 to 1976. (3 h)**

A history of the Chinese Cultural Revolution from 1966 to 1976. Examines the origins, consequences, and collective memories of the catastrophic political events and the social and cultural transformations that took place in China during the last decade of Mao's leadership.

**HST 653. War & Society in Early America. (3 h)**

Examines the evolution of warfare among the indigenous and colonial societies of North America between 1500 and 1800 and considers the roles of economics, class, gender, race, religion, and ideology in cultures of violence.

**HST 654. Revolutionary and Early National America, 1763-1820. (3 h)**

A history of the formative generation of the United States. Considers the dramatic transformations of the constitutional, economic, and racial orders, as well as new performances in politics, national identity, gender, and culture.

**HST 655. History of Nature Conservation in Latin America. (3 h)**

Explores human dimensions of nature conservation in Latin America in a global perspective. It engages the historical rise of ideas about wildness and the social consequences of environmental protection, including the different implications for rural and urban areas, for resident peoples, for particular species, and for international relations. Special attention is given to the ways different cultures and societies in Central and South America and the Caribbean conserved natural resources (including forests, fields, waterways, and animals) and how conservation and ideas about conservation changed over time. Taught only in conjunction with field experience in Peru or other sites in Latin America. (CD)

**HST 656. Jacksonian America, 1815-1850. (3 h)**

The U.S. in the age of Jackson, Clay, Calhoun, and Webster.

**HST 658. The United States from Reconstruction to World War I. (3 h)**

Examines the impact of state and federal court cases upon the evolution of race and gender relations in the U.S. from 1789 to the present. Each case is placed within the political, economic and social historical context for the given time periods. Race includes Native Americans, African Americans, Asian Americans, and Latino Americans. This class will analyze government intervention, inaction, and creative interpretation.

**HST 659. Prostitutes, Machos, and Travestis: Sex and Gender in Latin-American History. (3 h)**

Explores gender and sexuality across 20th century Latin America and the Caribbean. Applies new theoretical developments in gender, masculinity, and LGBT studies to the region's history of race, revolution, labor, dictatorship, and social movements. Cases include the Mexican, Cuban, and Nicaraguan Revolutions and the Dominican and Argentine dictatorships.

**HST 660. Jewish Migrations to the Americas. (3 h)**

Compares Jewish migrations to the U.S., Latin America, and the Caribbean from the colonial period to the present, focusing on the peak mobility of the 1880s-1920s. Topics include changing conceptions of identity (national, racial, ethnic, religious), class, gender, assimilation, institutions, and relations both among Jews and between Jews and other groups.

**HST 662. American Constitutional History. (3 h)**

Origins of the Constitution, the controversies involving the nature of the Union, and constitutional readjustments to meet the new American industrialism.

**HST 665. Modern Native American History. (3 h)**

Considers broad historical issues and debates about native American identity, experiences with and memories of colonialism, cultural preservation and dynamism, and political sovereignty from 1830 to the present. Focuses on individual accounts, tribal case studies, and popular representations of Native people.

**HST 666. Historic Preservation and Conservation. (3 h)**

Explores the history of the preservation and conservation movements organized to save historic buildings and landscapes in the U.S. and other nations. Examines the laws, international charters, national, statewide, and local agencies, practices, collaborations, and emerging challenges of historic preservation and conservation.

**HST 667. Public History. (3 h)**

Introduces students to the major issues involved in the practice, interpretation, and display of history for nonacademic audiences in public settings. Central themes include controversial historical interpretations, the role of history in popular culture, issues and aims in exhibiting history, and the politics of historical memory. Explores some of the many ways people create, convey, and contest history, major themes in community and local history, and the problems and possibilities of working as historians in public settings.

**HST 668. US Environmental History. (3 h)**

Focuses on human actors and actions while highlighting how the material, or natural, world impacted Americans and shaped the nation. Investigates U.S. politics, society, and culture through the lens of the environment while exploring how American defined, represented, and used their natural environment over time.

**HST 669. Modern Military History. (3 h)**

Making war in the modern era, with special attention to the social context of military activity. Hughes.

**HST 670. Topics in North Carolina History. (3 h)**

A general chronological survey of North Carolina with emphasis on selected topics. May be repeated for credit if topic varies.

**HST 671. Transgender History, Identity, and Politics in the U.S.. (3 h)**

This course explores the experiences of and responses to transgender, gender non-conforming, and intersex (TGI) people in nineteenth- and twentieth-century America. We will examine how scientific/medical authorities, legal authorities, and everyday people have understood and responded to various kinds of gender non-conformity.

**HST 672. Introduction to African History. (3 h)**

Explores how public history projects (oral histories, museums, archives, documentaries) document gay, lesbian, and queer communities in the U.S. Discusses how historical and contemporary LGBTQ stories have been collected and examines the various queer identities that emerge through this process.

**HST 674. Protest and Rebellion in Latin America. (3 h)**

Study of the history of protest movements and rebellions in Latin America from primitive and agrarian revolts to mass working class and socialist organizations.

**HST 675. Black Lives. (3 h)**

Explores both the lived experience and the historical reality of African Americans. Black lives are profoundly shaped by their group experience, influenced in no small part by the role of racism. The biographical approach individuates historical figures struggling to fashion identity. Topics include character development, intimacy, gender roles, public and private personas, self-deceptions or defenses, and personal perceptions and biases. The craft of writing biography is taught throughout the semester.

**HST 676. Civil Rights and Black Consciousness Movements. (3 h)**

A social and religious history of the African-American struggle for citizenship rights and freedom from World War II to the present. Parent.

**HST 678. Race, Memory, and Identity. (3 h)**

Explores the collective memory and identity of American-Indian and African-American communities and their response to historical trauma in their cultural imagination, spirituality, and political and social activism. Also listed as REL 648.

**HST 680. America at Work. (3 h)**

Examines the American entrepreneurial spirit within the broader context of industrial, social, and economic change from the colonial period to the present and explores the social and cultural meanings attached to work and workers, owners and innovators, businesses and technologies, management and leadership.

**HST 681. Religious Utopias and the American Experience. (3 h)**

Religious groups of many different origins have found in North America an open space for creating settlements that would embody their ideals. This course surveys a range of such 18th- and 19th-century communities, including Moravians, Rappites, Shakers, and the Oneida and Amana colonies.

**HST 682. Religion in the Development of Higher Education. (3 h)**

Examines the role of religious groups in the founding of American colleges and universities, and explores how their role has changed across history up through contemporary trends and issues. Major themes include the heritage of religion in European higher education; institutions of higher education founded by specific American religious groups; religion in the liberal arts curriculum; religious activities in student life; the relationship of colleges and universities with religious sponsors and constituents, focusing on controversies such as science and religion; the impact of universities on liberal art colleges; and the trends toward growth and "secularization" in the last 50 years.

**HST 684. Global Outlaws in History since 1500. (3 h)**

Examines the motivations, ideologies, goals, and behavior of those who have been deemed "outlaws" to international society since 1500, including pirates, terrorists, smugglers, war criminals, and violators of copyright. Analyzes the role of power in creating the global regimes that define and target such activities.

**HST 685. History of Film: Bollywood and the Making of Modern India. (3 h)**

This course juxtaposes historical films made by the world's largest film industry based out of Bombay/Mumbai with the textual primary sources and secondary historical works and seeks to understand films as both interpretations and sources of history. It also explores specific themes such as nation, gender, caste, and community characteristics that are critical to understanding modern India.

**HST 687. The Last Great Muslim Empires. (3 h)**

Examines, in a comparative way, central themes in the history of the Ottoman, Mughal, and Safavid Empires in the early modern period (1400-1800). Considers the ways in which Muslim rulers fostered political legitimacy, ruled over non-Muslim and heterodox subject populations, and recruited persons of diverse religious and ethnic background into state service.

**HST 688. Nation, Faith and Gender in the Middle East. (3 h)**

Traces the development of nationalism and its interaction with religious, transnational, and gender identities in the Middle East in the nineteenth and twentieth centuries. Topics include Zionism, Arabism, Turkish nationalism and Islamic revivalism.

**HST 689. The British Empire in the Middle East. (3 h)**

Covering the period from the late eighteenth to late twentieth centuries, this course considers British involvement in the Middle East, exploring the political, economic, social, and cultural facets of imperial power, decolonization and post-colonial international relations.

**HST 690. Research Seminar. (3 h)**

Offered by members of the faculty on topics of their choice. A paper is required.



**HST 691. Making History. (3 h)**

Seminar explores how historians make history through analysis, synthesis, and interpretation. Open to all students.

**HST 692. Individual Research. (3 h)**

Writing of a major research paper. May be taken in lieu of HST 690. P-POI.

**HST 693. American Foundations I. (3 h)**

Interdisciplinary study of American art, history, literature, and music. Using its collection of American art as the basis for study, Reynolda House Museum of American Art, in cooperation with Wake Forest University, accepts a limited number of students to study with professors from various disciplines through lectures, discussions, and concerts. Includes a study tour to New York City. (Taught in summer; students enroll for both courses. Students may enroll in either 693 or 763) Staff.

**HST 697. Historical Writing Tutorial. (1.5 h)**

Individual supervision of historical writing to improve a project initiated in HST 690 or HST 692. P-POI.

**HST 698. Individual Study. (3 h)**

Project for a qualified student in an area of study not otherwise available in the department; subject to approval. Work must be equivalent to an upper-level course.

**HST 699. Directed Reading. (1-3 h)**

Concentrated reading in an area of study not otherwise available. May be repeated for credit if topic varies. P-POI.

**HST 763. American Foundations I. (3 h)**

Interdisciplinary study of American art, history, literature, and music. Using its collection of American art as the basis for study, Reynolda House Museum of American Art, in cooperation with Wake Forest University, accepts a limited number of students to study with professors from various disciplines through lectures, discussions, and concerts. Includes a study tour to New York City. (Taught in summer; students enroll for both courses. Students may enroll in either 693 or 763) Staff.

**HST 765. Management of Cultural Organizations. (3 h)**

The structure and management of not-for-profit institutions, with emphasis on museums, historical societies and preservation organizations, libraries, archives, and research institutions.

**HST 771. Internship. (1-3 h)**

A project involving supervised work in a historical organization or scholarly effort; permitted only upon approval by the graduate committee of a petition presented by a qualified student. Staff.

**HST 798. Individual Study. (3 h)**

A project in an area of study not otherwise available in the department; permitted upon approval by the graduate committee of a petition presented by a qualified student. Staff.

## Liberal Arts Studies (LBS)

**LBS 700. Prophecy & Protest: The Prophetic Voice in American Public Discourse. (3 h)**

This course addresses how prophecy is a communicative act, and how prophetic speech has influenced American public discourse. Prophetic speech forms from the Hebrew Bible, traced through to American prophetic traditions such as those of the Quakers, Puritans, & Native Americans, and the use of American dissent rhetoric will be discussed. Readings will include primary texts from the Bible and American public discourse as well as important critical discussions of prophetism as a social and rhetorical phenomenon.

**LBS 702. Black Light: The Novels of Toni Morrison and Gloria Naylor. (3 h)****LBS 703. The Artists: American Silent Cinema. (3 h)****LBS 704. Globalization in Contemporary World Literature. (3 h)**

This course explores globalism in contemporary poetry, narrative fiction, and films from the Caribbean, South Asia, South Africa, and multi-ethnic Britain. Students will focus on how literature reflects social processes associated with globalization, become familiar with recent postcolonial literature in English, and be introduced to debates over globalization. Students will also acquire skills in literary interpretation.

**LBS 705. Black Religion & Radical Thought: An Intellectual & Cultural History. (3 h)**

This course charts an intellectual history from antebellum America through the Civil Rights Movement. We assess several classic and contemporary texts on radical black political thought en route to an investigation of the connections between black religious thinking and political activism. We also study the complex religious voices within the American freedom struggle—whether traditional African, Muslim, or Judæo-Christian. We will trace religion's role in the various forms and phases of the resistance through the nearly 400 years of the African American pilgrimage to secure social transformation.

**LBS 706. Reading Illness Narratives:. (3 h)**

This Course will examine fiction, memoirs, poems, plays, films, medical journal articles, and feminist theory that represent the experience of living with (and sometimes dying of) a serious illness. From their perspectives as a psychosocial oncologist and a literary and gender studies scholar, the professors will seek to illuminate how contemporary writers depict life-threatening illness, what people living with chronic disease choose to document, and what literary and visual techniques they use. We will also consider what these artists teach others about living close to death and how gender affects the themes and strategies of illness narratives. Emphasis will be placed on how the quality and skill of empathy appears in assigned texts and how it impacts patients, caregivers, readers, and viewers.

**LBS 707. Ideas&Pract Contem Pol Protest. (3 h)**

The notion that contemporary political protests lack coherent ideas and visions has become sufficiently commonplace as to warrant critical investigation. Focusing on several recent cases from both the national and international scene, our seminar will explore the following questions: What are intellectual origins of and political visions being articulated by those individuals and groups active in recent waves of protest activity? What old and new understandings of some of the central concepts of politics—such as identity, power, sovereignty, territory, government, the state, democracy, the public sphere, movement, protest, and representation—emerge from these actions and our analysis of them? .

**LBS 708. Bodies, Commodities, & Global Environments. (3 h)**

This course investigates human practices that bring health, commodities, and environments together on multiple spatial scales from the personal to the global. By exploring both historical and contemporaneous case studies, students will analyze how people understand and engage the natural world through specific cultural practices. The course looks into both material connections between bodies, commodities, and environments, and conceptualizations of human relationships with non-human nature. It examines biology, capitalism, mass media, environmental knowledge, and changes to the physical world. Students will evaluate commonly deployed concepts, develop a new lexicon of spatial connections, and make meaningful comparisons between locales and cultures that span the globe.

**LBS 709. Bollywood: Culture & Identity in Modern India. (3 h)****LBS 710. Herman Melville & His World. (3 h)**

This course is an introduction to certain classics of world literature and to American culture in the nineteenth century. We will study the literary, biographical, historical, and societal contexts out of which Melville's important works grew, including the texts that inspired "Moby Dick," such as Homer's *Odyssey*, selections from the Bible, Plato's dialogues, Shakespeare, Coleridge's *Rime of the Ancient Mariner*, and Emerson's essays. We will also consider the major events in Melville's life; nineteenth-century debates about American identity; and the features of the U.S. literary marketplace.

**LBS 711. Social Media and You: The Benefits and Burdens. (3 h)**

The course will describe the development of Computer Mediated Communication from its early days, tracing the important points of inflexion, and then focus on the way in which the current systems and devices allows for interactions through digital media using narbs, pointing towards the theoretial underpinning of the idea of narbs and its application.

**LBS 712. Afghanistan, Pakistan, Iraq Wars and US Foreign Policy. (3 h)**

This course broadly addresses the phenomena of US involvement in two wars - the Afghan War (2001-) and the Iraq Ware (2003-2011), approaching this topic from a historical and policy perspective. Owing to the on-going nature of the conflicts readings and emphasis may change as the term progresses. Readings will be drawn from books, policy reports, government documents, and journalistic sources.

**LBS 713. Race, Myth, and the American Imagination. (3 h)**

This course is an examination race, myth, and the American imagination. Students will interrogate how race has functioned in mythical ways, across space and time, in American history. From the ante-bellum period to the present, biblical narratives, literary texts, popular entertainment, including, journalism, television, and cinema, have shaped racial thinking in the United States. Such thinking has been internal and external to the American experience. Students will attend to the local and global import of racialized mythology. Because racial mythology is gendered, specific attention will be given to racialized myths about African- American women and men. Such a focus illuminates how racial mythology has been applied to the moral character of African- American communities. At the end of this course, students will have a heightened appreciation for the study of myth and its relation to race and the American imagination.

**LBS 715. Rumor & Urban Legends. (3 h)**

The purpose of theis course is to allow students to explore and discuss academic litreature on rumor, urban legends, gossip and myths. Our society prides itself on its rationalist perspective, but the reality is that people find and construct knowledge in ways that are idiosyncratic, but personally logical. These four related communication pheonomena may serv constructive social functions even if those are not immediately obvious. The power of rumor and urban legends to caputre the human imagination and influences the workings of society is profound and facinating. The readings will draw on important studies in sociology, psychology, communication and folklore.

**LBS 720. Special Topics: Language and Literature. (3 h)**

Special Topics in Liberal Studies related to Language and Literature. Course emphasis will vary with instructor. May be repeated for credit if topic differs.

**LBS 721. Special Topics: Media, Arts, and Rhetoric. (3 h)**

Special Topics in Liberal Studies related to studies in media, art, and rhetoric. Course emphasis will vary with instructor. May be repeated for credit if topic differs.

**LBS 722. Special Topics: Politics and International Relations. (3 h)**

Special topics in Liberal Studies related to politics and international relations. Course emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

**LBS 723. Special Topics: History, Societies, and Culture. (3 h)**

Special topics in Liberal Studies related to studies in history, societies, and various cultures. Emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

**LBS 724. Special Topics: Philosohpy and Religion. (3 h)**

Special Topics in Liberal Studies related to studies in philosophy and religion. Emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

**LBS 725. Special Topics: Popular Culture. (3 h)**

Special Topics in Liberal Studies related to studies in popular culture. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

**LBS 726. Special Topics: Urban Arts and Architectural Design. (3 h)**

Special Topics in Liberal Studies related to urban arts and architectural design studies. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

**LBS 727. Special Topics: Science, Health, and Culture. (3 h)**

Special Topics in Liberal Studies related to the sciences, health and culture. Course emphasis will vary with instructor. Course may be repeated for credit if the topic differs.

**LBS 728. Special Topics: Fine Arts, Aesthetics, and Creativity. (3 h)**

Special Topics in Liberal Studies related to the study of Fine Art and the areas of asethetics and creativity. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

**LBS 729. Special Topics: Psychology, Humanism, and Business. (3 h)**

Special Topics in Liberal Studies related to the areas of psychology, humanism, and business. Course emphasis will vary with instructor. Course may be repeated for credit if topic differs.

**LBS 786. Directed Study. (1-3 h)**

Working with a faculty advisor, the student completes a special reading project in area not covered in regular courses or a special research project not related to the master's thesis. A student who wishes to enroll must submit the Directed Study Form, signed by the advisor, to the program director. May be repeated once for credit with the permission of the program director.

**LBS 790. Capstone Project. (3 h)**

Capstone project options include: 1) research paper describing and explaining tentative hypotheses based on quantitative and/or qualitative research; 2) creative work with accompanying interpretive text; 3) internship with non-profit or for-profit organization with on site supervision; 4) portfolio of M.A. work, including a retrospective paper on major learnings from student's course of study as well as two academic papers from M.A. courses taken.

**LBS 791. Thesis Research. (3 h)**

LBS 791 Thesis Research II (3.h) Libertal Studies thesis research now spans two terms and is awarded a total of 6 credit hours (LBS 791 & LBS 792)

**LBS 792. Thesis Research II. (3 h)**

LBS 792 (3h) Thesis Research II Liberal Studies thesis research now spans two terms and is awarded a total of 6 credit hours (LBS 791 & LBS 792)

**LBS 824. Commemoratives of Mid Passage. (3 h)**

This course examines the historical memory of the slave trade which forcibly removed more than 10 million Africans from their homes. The Middle Passage has been memorialized in films, novels, poetry, the plastic arts, exhibits, and historical monuments, especially the slave castles along the Western African coast. Major themes explored are the sensory and experiential expressions, cultural diversity, internal population dynamics, gendered relations of power, and sexual differences. The social reproduction of cultural mores with the removal of "saltwater" Africans to the Americas and the absorption of new sources of slaves in Africa will also be examined.

**LBS 832. India Calling. (3 h)****LBS 853. State, Econ & Intl Competitive. (3 h)**

LBS 853. State, Economy and International Competitiveness (3h). The course explores a range of important case studies of national economic performance, including the strengths and weaknesses of leading examples of welfare capitalism, liberal capitalism, and capitalisms in which the state plays an active developmental role. We will examine the viability of welfare capitalism against the growing penchant for liberal capitalist solutions to contemporary problems of economic growth, international competitiveness and unemployment. We will also explore the impact of labor, capital, culture and the state, including an examination of the main theories of economic growth currently informing public policy, and the future of the American model of capitalism.

## Linguistics (LIN)

**LIN 610. Sociolinguistics & Dialectology. (3 h)**

Study of variation in language: effects of regional background, social class, ethnic group, gender, and setting; social attitudes toward language; outcomes of linguistic conflicts in the community; evolution of research methods for investigating language differences and the diffusion of change. P-POI.

**LIN 640. Special Topics:. (3 h)**

Inter-cultural Communication. In-depth examination of the role of intercultural communication in the shaping of the world order today. Through a historical and theoretical survey, as well as self-awareness tools, students will acquire insights and experience in the analysis and design of intercultural communication strategies with a global mindset at personal, corporate, national and international mass-media levels.

**LIN 680. Language Use & Technology. (3 h)**

Introduction to the fundamental concepts of creating and accessing large linguistic corpora (electronic collections of "real world" text) for linguistic inquiry. Course surveys a variety of cross-discipline efforts that employ corpus data for research and explores current applications.

**LIN 683. Language Engineering Localization and Terminology. (3 h)**

Introduction to the process of making a product linguistically and culturally appropriate to the target locale, and to computer-assisted terminology management. Surveys applications in translation technology. Taught in English. P-POI.

## Mathematics (MTH)

**MTH 605. Introduction to Linear Algebra and Differential Equations. (3 h)**

Specific topics covered include: vector algebra, solving linear systems of equations, rank, vector spaces, determinants, eigenvalues, linear transformations, first order differential equations, second order linear ordinary differential equations, and power series solutions to differential equations. May not be used toward any graduate degree offered by the department.

**MTH 606. Advanced Mathematics for the Physical Sciences. (3 h)**

Advanced topics in linear algebra, special functions, integral transforms, and partial differential equations. May not be used toward any graduate degree offered by the department. P-MTH 605.

**MTH 611. Introductory Real Analysis I. (3 h)**

Limits and continuity in metric spaces, sequences and series, differentiation and Riemann-Stieltjes integration, uniform convergence, power series and Fourier series, differentiation of vector functions, implicit and inverse function theorems.

**MTH 617. Complex Analysis I. (3 h)**

Analytic functions, Cauchy's theorem and its consequences, power series, and residue calculus.

**MTH 624. Linear Algebra II. (3 h)**

A thorough treatment of vector spaces and linear transformations over an arbitrary field, canonical forms, inner product spaces, and linear groups.

**MTH 626. Numerical Linear Algebra. (3 h)**

An introduction to numerical methods for solving matrix and related problems in science and engineering using a high-level matrix-oriented language such as MATLAB. Topics include systems of linear equations, least squares methods, and eigenvalue computations. Special emphasis is given to applications.

**MTH 631. Geometry. (3 h)**

An introduction to axiomatic geometry including a comparison of Euclidean and non-Euclidean geometries.

**MTH 634. Differential Geometry. (3 h)**

Introduction to the theory of curves and surfaces in two and three dimensional space including such topics as curvature, geodesics, and minimal surfaces.

**MTH 645. Elementary Number Theory. (3 h)**

Course topics include properties of integers, congruences, and prime numbers, with additional topics chosen from arithmetic functions, primitive roots, quadratic residues, Pythagorean triples, and sums of squares.

**MTH 646. Modern Number Theory. (3 h)**

Course topics include a selection of number-theory topics of recent interest. Some examples include elliptic curves, partitions, modular forms, the Riemann zeta function, and algebraic number theory.

**MTH 647. Graph Theory. (3 h)**

Paths, circuits, trees, planar graphs, spanning trees, graph coloring, perfect graphs, Ramsey theory, directed graphs, enumeration of graphs and graph theoretic algorithms.

**MTH 648. Combinatorial Analysis I. (3 h)**

Enumeration techniques, generating functions, recurrence formulas, the principle of inclusion and exclusion, Polya theory, graph theory, combinatorial algorithms, partially ordered sets, designs, Ramsey theory, symmetric functions, and Schur functions.

**MTH 651. Introduction to Mathematical Modeling. (3 h)**

Introduction to the mathematical modeling, analysis and simulation of continuous processes using MATLAB, Mathematica or Maple. Topics include dimensional analysis, stability analysis, bifurcation theory, one-dimensional flows, phase plane analysis, index theory, limit cycles, chaotic dynamics, hyperbolic conservation laws and traveling waves.

**MTH 652. Partial Differential Equations. (3 h)**

A detailed study of partial differential equations, including the heat, wave, and Laplace equations, using methods such as separation of variables, characteristics, Green's functions, and the maximum principle.

**MTH 654. Discrete Dynamical Systems. (3 h)**

Introduction to the theory of discrete dynamical systems as applied to disciplines such as biology and economics. Includes methods for finding explicit solutions, equilibrium and stability analysis, phase plane analysis, analysis of Markov chains and bifurcation theory.

**MTH 655. Introduction to Numerical Methods. (3 h)**

An introduction to numerical computations on modern computer architectures; floating point arithmetic and round-off error including programming in a scientific/engineering language such as MATLAB, C, or Fortran. Topics include algorithms and computer techniques for the solution of problems such as roots of functions, approximations, integration, systems of linear equations and least squares methods. Also listed as CSC 655.

**MTH 657. Probability. (3 h)**

Distributions of discrete and continuous random variables, sampling distributions. Covers much of the material on the syllabus for the first actuarial exam. This course is cross-listed as STA 610.

**MTH 658. Mathematical Statistics. (3 h)**

This course will cover derivation of point estimators, hypothesis testing, and confidence intervals using both maximum likelihood and Bayesian approaches. P - MTH 657 or POI.

**MTH 681. Individual Study. (1, 2 h)**

A course of independent study directed by a faculty adviser. By prearrangement. May be repeated for credit.

**MTH 682. Reading in Mathematics. (1-3 h)**

Reading in mathematical topics to provide a foundational basis for more advanced study in a particular area. May not be used to satisfy any requirement in the MS degree with thesis. No more than three hours may be applied to the requirements for the MS degree without thesis. May be repeated for credit for a total of 3 hours.

**MTH 683. Advanced Topics in Mathematics. (1-3 h)**

Topics in mathematics that are not considered in regular courses. Content varies.

**MTH 691. Research Exploration in Mathematics. (1-3 h)**

Students will participate in introductory research projects while developing skills for success. May not be used towards any degree offered by the department. Pass/Fail only. POI only.

**MTH 711. Real Analysis. (3 h)**

An introduction to analysis on metric spaces and to calculus on Banach spaces with applications.

**MTH 712. Real Analysis. (3 h)**

Measure and integration theory, elementary functional analysis, selected advanced topics in analysis.

**MTH 715. Seminar in Analysis. (1 h)****MTH 716. Seminar in Analysis. (1 h)****MTH 717. Optimization in Banach Spaces. (3 h)**

Banach and Hilbert spaces, best approximations, linear operators and adjoints, Frechet derivatives and nonlinear optimization, fixed points and iterative methods. Applications to control theory, mathematical programming, and numerical analysis.

**MTH 718. Topics in Analysis. (3 h)**

Selected topics from functional analysis or analytic function theory.

**MTH 721. Abstract Algebra. (3 h)**

Groups, rings, fields, extensions, Euclidean domains, polynomials, vector spaces, Galois theory.

**MTH 722. Abstract Algebra. (3 h)**

Groups, rings, fields, extensions, Euclidean domains, polynomials, vector spaces, Galois theory.

**MTH 724. Seminar on Theory of Matrices. (1 h)****MTH 725. Seminar in Algebra. (1 h)****MTH 726. Seminar in Algebra. (1 h)****MTH 728. Topics in Algebra. (3 h)**

Topics vary and may include algebraic coding theory, algebraic number theory, matrix theory, representation theory, non-commutative ring theory.

**MTH 731. Topology. (3 h)**

Point-set topology including topological spaces, continuity, connectedness, compactness, and metric spaces. Additional topics in topology may include classification of surface, algebraic topology, and knot theory.

**MTH 732. Topics in Topology and Geometry. (3 h)**

Topics vary and may include knot theory, algebraic topology, differential topology, manifolds, and Riemannian geometry. May be repeated for credit. P - 731 or POI.

**MTH 733. Topics in Topology and Geometry. (3 h)**

Topics vary and may include knot theory, non-Euclidean geometry, combinatorial topology, differential topology, minimal surfaces and algebraic topology. Howard.

**MTH 735. Seminar on Topology. (1 h)****MTH 736. Seminar on Topology. (1 h)****MTH 737. Seminar on Geometry. (1 h)****MTH 738. Seminar on Geometry. (1 h)****MTH 744. Topics in Number Theory. (3 h)**

Topics vary and are chosen from the areas of analytic, algebraic, and elementary number theory. Topics may include Farey fractions, the theory of partitions, Waring's problem, prime number theorem, and Dirichlet's problem.

**MTH 745. Seminar on Number Theory. (1 h)****MTH 746. Seminar on Number Theory. (1 h)****MTH 747. Topics in Discrete Mathematics. (3 h)**

Topics vary and may include enumerative combinatorics, graph theory, algebraic combinatorics, combinatorial optimization, coding theory, experimental designs, Ramsey theory, Polya theory, representational theory, set theory and mathematical logic.

**MTH 748. Seminar on Combinatorial Analysis. (1 h)****MTH 749. Seminar on Combinatorial Analysis. (1 h)****MTH 750. Dynamical Systems. (3 h)**

Introduction to modern theory of dynamical systems. Linear and nonlinear autonomous differential equations, invariant sets, closed orbits, Poincare maps, structural stability, center manifolds, normal forms, local bifurcations of equilibria, linear and non-linear maps, hyperbolic sets, attractors, symbolic representation, fractal dimensions. P - MTH 611.

**MTH 752. Topics in Applied Mathematics. (3 h)**

Topics vary and may include computational methods in differential equations, optimization methods, approximation techniques, eigenvalue problems. May be repeated for credit.



**MTH 753. Nonlinear Optimization. (3 h)**

The problem of finding global minimums of functions is addressed in the context of problems in which many local minima exist. Numerical techniques are emphasized, including gradient descent and quasi-Newton methods. Current literature is examined and a comparison made of various techniques for both unconstrained and constrained optimization problems. Credit not allowed for both MTH 753 and CSC 753. P - MTH 655 or CSC 655.

**MTH 754. Numerical Methods for Partial Differential Equations. (3 h)**

Numerical techniques for solving partial differential equations (including elliptic, parabolic, and hyperbolic) are studied along with applications to science and engineering. Theoretical foundations are described and emphasis is placed on algorithm design and implementation using either C, FORTRAN, or MATLAB. Credit not allowed for both MTH 754 and CSC 754. P-MTH 655 or CSC 655.

**MTH 757. Stochastic Processes and Applications. (3 h)**

This course includes the axiomatic foundations of probability theory and an introduction to stochastic processes. Applications may include Markov chains, Markov Chain Monte Carlo with Metropolis-Hastings, Gibb sampling, Brownian motion, and related topics, with an emphasis on modern developments. This course is cross-listed as STA 710. P-MTH 657 or STA 610 and MTH 611 or POI.

**MTH 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**MTH 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Philosophy (PHI)

**PHI 631. Plato. (3 h)**

Detailed analysis of selected dialogues, covering Plato's most important contributions to moral and political philosophy, theory of knowledge, metaphysics, and theology.

**PHI 632. Aristotle. (3 h)**

Study of the major texts, with emphasis on metaphysics, ethics, and theory of knowledge. P-POI.

**PHI 641. Kant. (3 h)**

Study of Kant's principal contributions to metaphysics and the theory of knowledge.

**PHI 642. Studies in Modern Philosophy. (3 h)**

Treatment of selected figures and/or themes in seventeenth and eighteenth century European philosophy. P-POI.

**PHI 652. 19th Century European Philosophy: Hegel, Kierkegaard, and Nietzsche. (3 h)**

Is there a way to think about the natural world that also makes sense of human life and history? Is anything gained, or lost, by thinking holistically about the world as a whole? Is a life dedicated to thinking about the world (and living accordingly) a way of avoiding an authentic human life? What does it mean to live authentically? Does nihilism provide the answer or is it a form of avoidance?.

**PHI 653. Heidegger. (3 h)****PHI 654. Wittgenstein. (3 h)**

The work of Ludwig Wittgenstein on several central philosophical problems studied and compared with that of Frege, James, and Russell. Topics include the picture theory of meaning, truth, skepticism, private languages, thinking, feeling, the mystical, and the ethical. P-POI.

**PHI 660. Ethics. (3 h)**

Systematic examination of central ethical theories in the Western philosophical tradition. Such theories include Kantian deontology, utilitarianism, Aristotelian virtue ethics, and divine command theory.

**PHI 661. Topics in Ethics. (3 h)**

P-POI.

**PHI 662. Social & Political Philosophy. (3 h)**

Systematic examination of the work of selected contemporary and traditional philosophers on topics such as the state, the family, distributive justice, property, liberty, and the common good.

**PHI 670. Philosophy & Christianity. (3 h)**

Examination of the philosophical foundations of Christian thought and belief. Christian concepts of God and life everlasting, trinity, incarnation, atonement, prayer, sin, evil and obligation.

**PHI 671. Aesthetics and the Philosophy of Art. (3 h)**

Covers such questions as: What is beauty? What is taste? What is art? Must art be beautiful? Can immoral art be good art? Readings may cover historical figures such as Plato or Kant, or may focus on contemporary writers.

**PHI 672. Philosophy of Religion. (3 h)**

What is religion? Are the gods dead? Is God dead? Is religious belief a symptom of an underlying human weakness or biological process, or could it be a response to the sacred? Must believers rely on something less than knowledge? Are philosophical proofs the way to knowledge of God? What sort of problem is the "problem of evil" and what is its significance? How are religious beliefs like and unlike metaphysical, moral, and modern scientific beliefs?.

**PHI 673. Philosophy of Science. (3 h)**

Systematic and critical examination of major views concerning the methods of scientific inquiry, and the bases, goals, and implication of the scientific conclusions which result from such inquiry. P-POI.

**PHI 674. Philosophy of Mind. (3 h)**

Selection from the following topics: the mind-body problem; personal identity; the unity of consciousness; minds and machines; the nature of experience; action, intention, and the will.

**PHI 675. Philosophy of Language. (3 h)**

Study of such philosophical issues about language as truth and meaning, reference and description, proper names, indexicals, modality, tense, the semantical paradoxes, and the differences between languages and other sorts of sign-systems. P-POI.

**PHI 681. Topics in Epistemology. (3 h)**

The sources, scope and structure of human knowledge. Topics include: skepticism; perception, memory and reason; the definition of knowledge; the nature of justification; theories of truth. P-POI.

**PHI 682. Public Philosophy. (3 h)**

This course examines the role of philosophers and the contributions of philosophy to examine and address substantive matters of public importance or concern. P-POI.

**PHI 685. Seminar. (2-3 h)**

Offered by members of the faculty on specialized topics of their choice. With permission, may be repeated for credit. P-POI.

## Physics (PHY)

**PHY 601. Physics Seminar. (0.5 h)**

Discussion of contemporary research, usually with visiting scientists. S/U only.

**PHY 607. Biophysics. (3 h)**

Introduction to the structure, dynamic behavior, and function of DNA and proteins, and a survey of membrane biophysics. The physical principles of structure determination by X-ray, NMR, and optical methods are emphasized.

**PHY 610. Extragalactic Astronomy and Cosmology. (3 h)**

Topics covered include galactic structure, models for galaxies and galaxy formation, the large-scale structure of the universe, the Big Bang model of the universe, physical processes such as nucleosynthesis in the early universe, and observational cosmology.

**PHY 620. Physics of Macromolecules. (3 h)**

The physics of large biologically important molecules, especially proteins and nucleic acids. Topics covered include the physical basis of biomolecular structure, the energetics and statistical mechanics of biomolecular dynamics, and the electrostatics and solvation of biomolecules. Designed for students with biochemistry, chemistry, or physics backgrounds.

**PHY 623. Computational Biophysics Laboratory. (1 h)**

Application of techniques in molecular modeling, including energy minimization, molecular dynamics simulation, and conformational analysis. C-PHY 620 or POI.

**PHY 625. Biophysical Methods Lab. (1 h)**

Experiments using various biophysical techniques such as electron paramagnetic resonance, atomic force microscopy, stopped-flow absorption spectroscopy, X-ray diffraction, and gel electrophoresis. C-PHY 607.

**PHY 635. Computational Physics. (3 h)**

An introduction to finding numerical solutions to scientific problems. Topics include understanding computational errors, differentiation, integration interpolation, root finding, random numbers, linear systems, Fourier methods, and the solution of ODEs and PDEs. There is no computer programming prerequisite. Credit will not be given for both PHY 635 and CSC/MST 655.

**PHY 637. Analytical Mechanics. (1.5 h)**

The Lagrangian and Hamiltonian formulations of mechanics with applications. Taught in the first half of the fall semester.

**PHY 639. Electricity and Magnetism. (1.5 h)**

Electrostatics, magnetostatics, dielectric and magnetic materials, Maxwell's equations and applications to radiation, relativistic formulation. The first half course is taught in the second half of the fall semester, following PHY 637. The other course is taught in the spring semester. These should be taken in sequence.

**PHY 640. Electricity and Magnetism. (3 h)**

Electrostatics, magnetostatics, dielectric and magnetic materials, Maxwell's equations and applications to radiation, relativistic formulation. PHY 640 is taught in the spring semester after PHY 639. These should be taken in sequence. P-PHY 639.

**PHY 641. Thermodynamics and Statistical Mechanics. (3 h)**

Introduction to classical and statistical thermodynamics and distribution functions.

**PHY 643. Quantum Physics. (3 h)**

Basic quantum theory and applications including the time-independent Schrodinger equation, formalism and Dirac notation, the hydrogen atom, spin, identical particles, and approximation models.

**PHY 644. Quantum Physics. (3 h)**

Basic quantum theory and applications including the time-independent Schrodinger equation, formalism and Dirac notation, the hydrogen atom, spin, identical particles, and approximation methods.

**PHY 645. Introduction to Quantum Computing. (3 h)**

Introduction to the physics of quantum information sciences and quantum computing.

**PHY 652. Physical Optics and Optical Design. (4 h)**

Interaction of light with materials; diffraction and coherent optics; ray trace methods of optical design. C- PHY 652L.

**PHY 652L. Physical Optics Lab. (0 h)****PHY 654. Introduction to Solid State Physics. (3 h)**

Survey of the structure, composition, physical properties, and technological applications of condensed matter. P-PHY 643.

**PHY 655. Exotic Materials. (1.5 h)**

This course explores materials systems that express exotic properties derived from some aspect of dimensionality or topology. Thermal, electrical, optical and magnetic properties of these quantum materials will be addressed with emphasis on applications in quantum information sciences. From superconducting SSH polymers, to topological insulators, simple models are used throughout the course to develop insight into the physics of low-dimensional structures.

**PHY 656. Electronic Imaging Sciences. (1.5 h)**

This course introduces the theory and application of the electron imaging systems: transmission electron microscopy (TEM) and scanning electron microscopy (SEM). It focuses on basic materials science though some biological materials will be covered. It is taught as a series of lectures followed by laboratories.

**PHY 657. Scanning Probes. (1.5 h)**

This course examines the theory and application of scanning tunneling microscopy and atomic force microscopy (STM/AFM). It introduces how each type of imaging works, how to model spectroscopic data, and how to use each microscope. Students will image using the STM and AFM as well as take and reduce spectroscopy data using models built in Maple or Mathematica.

**PHY 658. Kinetics of Materials. (1.5 h)**

This course offers a study of driving forces for atomic and ionic motion within solids leading to a range of materials properties from work hardening to phase transformations and formation. Atomic-level models for diffusion will be introduced as well as techniques and examples of the solution to the diffusion equation. It complements the traditional thermodynamics course.

**PHY 661. Biophysics Seminar. (1 h)**

Seminal and current publications in biophysics are studied. Each week a member of the class makes an oral presentation on a chosen publication and leads the ensuing discussion. Students may also be required to make a second oral presentation relevant to their own research. Does not fulfill course requirements for Master's or PhD degrees. May be repeated for credit. S/U only.

**PHY 663. Condensed Matter Seminar. (1 h)**

Seminal and current publications in condensed matter physics are studied. Each week a member of the class makes an oral presentation on a chosen publication and leads the ensuing discussion. Does not fulfill course requirements for Master's or PhD degrees. May be repeated for credit. S/U only.

**PHY 685. Bioinformatics. (3 h)**

Introduction to computational approaches essential to modern biological inquiry. Approaches may include large biological dataset analyses, sequence similarity and motif searches, and analysis of high-throughput genomic technologies. Emphasizes interdisciplinary interaction and communication. Also listed as CSC 685 and BIO 685.

**PHY 691. Special Topics in Physics. (1-4 h)**

Courses in selected topics in physics. May be repeated if course content differs.

**PHY 692. Special Topics in Physics. (1-4 h)**

Courses in selected topics in physics. May be repeated if course content differs.

**PHY 711. Classical Mechanics and Mathematical Methods. (3 h)**

A study of variational principles and Lagrange's equations, the rigid body equations of motion, the Hamilton equations of motion and canonical transformations, Hamilton-Jacobi theory, and applications to continuous systems and fields.

**PHY 712. Electromagnetism. (3 h)**

A study of electric and magnetic fields in vacuum and within media and their sources. Analytical and numerical methods for solving Maxwell's equations are also an important part of the course.

**PHY 715. Nonlinear Optics and Quantum Electronics. (1-4 h)**

Nonlinear phenomena in laser spectroscopy, the quantum nature of optical processes in matter, and topics in laser physics. Lab—three hours.

**PHY 731. Elementary Particle Physics. (3 h)**

Fundamentals of contemporary elementary particle physics.

**PHY 741. Quantum Mechanics. (3 h)**

Study of the foundations of quantum theory, Hilbert space, operators, Schrodinger's equation and its solutions, symmetries, spin, multiple particles, approximation methods, scattering, the Dirac equation, and quantization of the electromagnetic field and its interaction with atoms.

**PHY 742. Quantum Mechanics. (3 h)**

Study of the foundations of quantum theory, Hilbert space, operators, Schrodinger's equation and its solutions, symmetries, spin, multiple particles, approximation methods, scattering, the Dirac equation, and quantization of the electromagnetic field and its interaction with atoms.

**PHY 744. Introduction to Quantum Field Theory. (3 h)**

Introduction to relativistic quantum field theory, including canonical quantization, path integral techniques, perturbation theory, and renormalization.

**PHY 745. Group Theory. (3 h)**

Group theory and its applications to the quantum mechanics of atoms, molecules, and solids.

**PHY 752. Solid State Physics. (3 h)**

Introductory course including the structure of perfect crystalline solids, their thermal, electronic, and magnetic properties. Crystal symmetries, the free electron and band theory of metals, optical and transport properties, and semiconductors. Consequences of electronic interactions.

**PHY 754. Surface Science. (3 h)**

Experimental and theoretical methods for the study of surfaces and interfaces. Lab-1.5 hours.

**PHY 765. Gravitational and Particle Theory Seminar. (1 h)**

Topics in general relativity, particle physics, and astrophysics are studied. Each week a faculty member or member of the class makes an oral presentation on a chosen topic and leads the ensuing discussion. Does not fulfill minimum course requirements for Master's and PhD degrees. May be repeated for credit. S/U only.

**PHY 770. Statistical Mechanics. (3 h)**

Introduction to probability theory and to the physics of systems containing large numbers of particles from the classical as well as the quantum point of view.

**PHY 771. Radiological Physics. (3 h)**

The nature and fundamental concepts of ionizing radiation including: ionizing radiation, radiation quantities, attenuation and stopping power, charged particle and radiation equilibria radioactive decay, photon interactions, charged and uncharged particle interactions, x-ray production and quality, dosimetry concepts, ionization cavity theory, and calibration of ionizing radiation beams. Also listed as BMES 771 and MPHY 771.

**PHY 773. Radiation Therapy Physics. (3 h)**

The physics of radiation treatment including: radiation producing equipment, character of photon and electron radiation beams, radiation dose functions, computerized radiation treatment planning, brachytherapy, special radiation treatment procedures, quality assurance, and radiation shielding for high energy facilities. Also listed as BMES 773 and MPHY 773.

**PHY 774. Physics of Medical Imaging. (3 h)**

The physical principles, mathematical algorithms and devices used in diagnostic medical imaging, covering the following imaging modalities: x-ray digital imaging, digital image receptors, computerized tomography and reconstruction algorithms, ultrasound imaging, magnetic resonance imaging and nuclear medicine imaging. Also listed as BMES 774 and MPHY 774.

**PHY 776. Medical Health Physics. (3 h)**

Physical and biological aspects for the use of ionizing radiation in medical environments, biological consequences of human radiation exposure, principles of ionizing radiation protection, operational dosimetry, radiation exposure recommendations and regulations, physical principles of radiation shielding design, personnel monitoring, medical health physics instrumentation, and waste disposal. Also listed as BMES 776 and MPHY 776.

**PHY 780. Theory of General Relativity. (3 h)**

Study of the covariant formulation of physical laws in mechanics and electromagnetism.

**PHY 785. Topics in Theoretical Physics. (1-3 h)**

Selected topics of current interest in theoretical physics not included in other courses. May be repeated for credit.

**PHY 787. Advanced Topics in Physics. (1-3 h)**

Lectures on advanced topics in physics that depend on the subspecialty of the instructor. Topics range from medical physics to special topics in biophysics, condensed matter physics, or quantum optics. May be repeated for credit.

**PHY 789. Survival Skills for Scientists. (1 h)**

Students will learn skills that are essential to a successful career in the sciences. The following topics will be covered: Mentoring; How to Read, Write, and Review a Research Paper; Grant & Fellowship Basics; Choosing a Career Path & Creating a Winning Job Application; and Networking & Giving Effective Talks.

**PHY 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**PHY 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**PHY 795. Physics for Education Research. (3 h)**

Fulfills the requirement for a graduate course in physics for students in the Masters in Education program seeking certification to teach physics.

**PHY 891. Dissertation Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**PHY 892. Dissertation Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Politics&International Affairs (POL)

**POL 611. Political Parties Voters and Elections. (3 h)**

Examination of party competition, party organizations, the electorate and electoral activities of parties, and the responsibilities of parties for governing.

**POL 617. Politics of the Mass Media. (3 h)**

Exploration of the relationship between the political system and the mass media. Two broad concerns are the regulation of the mass media and the impact of media on political processes and events.

**POL 618. Congress and Policymaking. (3 h)**

Examination of the composition, authority structures, external influences, and procedures of Congress with emphasis on their implications for policymaking in the United States.

**POL 620. The American Presidency. (3 h)**

Explores the interaction of the presidential office and the individual contemporary presidents in an evolving political context.

**POL 629. Women, Gender, and Politics. (3 h)**

Examines classical and contemporary studies of how gender structures politics, including the political participation of women and other gendered social groups, as well as current policy issues.

**POL 632. Politics in Russia and Eastern Europe. (3 h)**

Analysis of the political, economic, and social patterns of the region emphasizing the internal dynamics and divergent outcomes of the regime transitions after the fall of communism in Central and Eastern Europe and the former Soviet Union.

**POL 636. Government and Politics in Latin America. (3 h)**

Comparative analysis of the institutions and processes of politics in the Latin American region.

**POL 646. Politics and Policies in South Asia. (3 h)**

Survey of major issues relevant to politics and policy in India, Pakistan, Bangladesh, and Sri Lanka.

**POL 647. Islam and Politics. (3 h)**

Explores the interrelationship of Islam and politics in the contemporary world. Deals with Islam as a political ideology which shapes the structure of political institutions and behavior. Looks at Islam in practice by examining the interaction between Islam and the political systems of Iran, Pakistan, Saudi Arabia, and others.

**POL 650. Afghanistan, Pakistan, Iraq and U.S. Policy since 2001. (3 h)**

Broadly addresses the phenomena of U.S. involvement in two ongoing conflicts – the Afghanistan war and the Iraq war. Focuses on the respective domestic and international politics and policies of the four main actors relevant to the conflicts: U.S., Afghanistan, Pakistan, and Iraq.

**POL 653. International Political Economy. (3 h)**

Analyzes major issues in the global political economy including theoretical approaches to understanding the tension between politics and economics, monetary and trade policy, North-South relations, environmentalism, human rights, and democratization.

**POL 654. American Foreign Policy Contemporary Problems. (3 h)**

Analyzes the historical and theoretical perspectives shaping U.S. engagement with the world past and present. Applies the understanding to current problems in U.S. foreign Policy.

**POL 659. Palestine&Arab-Israeli Conflict. (3 h)**

Explores the nature and scope of the conflict with particular emphasis on the time period post-1967 and the respective policies of the three most significant actors in the conflict: the U.S., Israel and Palestine.

**POL 663. U.S. Foreign Policy Mid East. (3 h)**

Critical analysis of U.S. foreign policy with respect to the Middle East since the second World War. Utilizes a case study method of instruction.

**POL 672. Democratic Theory. (3 h)**

Examines the historical and theoretical underpinnings of democracy and some of the critiques of those foundations. Focuses on understanding some of the major and competing traditions of democracy theory and how key democratic concepts are reconceptualized within these various traditions.

**POL 673. Marx, Marxism, and Post-Marxism. (3 h)**

Examines Marx's early humanistic writings, his later philosophy, the vicissitudes of 20th century Marxism and attempts to reorient Marx's theory in light of developments in contemporary political thought and practice.

**POL 677. Feminist Political Thought. (3 h)**

Introduces feminist thought and its implications for the study and practice of political theory. Topics include feminist critiques of the Western political tradition and schools of feminist political theory.

**POL 678. Politics and Identity. (3 h)**

Investigates the ways in which concepts of identity have informed political norms, structure, and practices; the myriad forms identity takes (particularly gender, sexual orientation, class, race, religion, and ethnicity) drawing on examples from across the globe, and theoretical approaches proposed for engaging differences.

**POL 687. Individual Study. (2, 3 h)**

Intensive research leading to the completion of an analytical paper conducted under the direction of a faculty member. Students initiate the project and secure the permission of an appropriate instructor. May be repeated for a maximum of 6 hours, only three of which may count toward the major. P-POI.

**POL 688. Directed Reading. (2, 3 h)**

Concentrated reading in an area of study not otherwise available. Students are responsible for initiating the project and securing the permission of an appropriate instructor. P-POI.

**POL 689. Internship in Politics. (2, 3 h)**

Field work in a public or private setting with related readings and an analytical paper under the direction of a faculty member. Students are responsible for initiating the project and securing the permission of an appropriate instructor. Normally one course in an appropriate subfield is taken prior to the internship. P-POI.

## Psychology (PSY)

**PSY 620. Physiological Psychology. (3 h)**

Neurophysiological and neuroanatomical explanations of behavior.



**PSY 622. Psychopharmacology. (3 h)**

Survey of the influences of a wide range of psychoactive drugs, both legal and illegal, on human physiology, cognition, and behavior.

**PSY 623. Animal Behavior. (3 h)**

Survey of lab and field research on animal behavior.

**PSY 626. Learning Theory and Research. (3 h)**

Theory and current research in learning, with emphasis on applications of learning principles for behavior modification and comparisons across species.

**PSY 629. Perception. (3 h)**

Survey of theory and research findings on various sensory systems (vision, hearing, touch, taste).

**PSY 631. Research in Cognitive Psychology. (3 h)**

In-depth examination of research in a selected area of cognitive psychology such as memory, attention, or executive function. Research projects required.

**PSY 633. Motivation of Behavior. (3 h)**

Survey of basic motivational concepts and related evidence.

**PSY 638. Emotion. (3 h)**

Survey of theory, methods, and research in the area of emotion. Developmental, cultural, social-psychological, physiological, personality, and clinical perspectives on emotions are given.

**PSY 641. Research in Developmental Psychology. (3 h)**

Methodological issues and selected research in child development. Research projects required.

**PSY 646. Stereotyping and Prejudice. (3 h)**

Research and theory on social and cognitive processes that underlie prejudice and discrimination.

**PSY 648. Clinical Neuropsychology. (3 h)**

Surveys connections between abnormal neurological processes and clinical abnormalities. This implies already having an understanding of normal brain function and anatomy.

**PSY 651. Personality Research. (3 h)**

The application of a variety of research procedures to the study of human personality. Research projects required.

**PSY 655. Research in Social Psychology. (3 h)**

Methodological issues and selected research in the study of the human as a social animal. Field research projects required.

**PSY 657. Cross-Cultural Psychology. (3 h)**

Examination of differences in psychological processes (e.g., attitudes, perception, mental health, organizational behavior) associated with cultural variation.

**PSY 659. Psychology of Gender. (3 h)**

Exploration of the psychological similarities and differences between human males and females, including consideration of social, cognitive, motivational, biological, and developmental determinants of behavior.

**PSY 662. Psychological Testing. (3 h)**

Theory and application of psychological assessment procedures in the areas of intelligence, aptitude, vocational interest, and personality.

**PSY 663. Survey of Clinical Psychology. (3 h)**

Overview in the field of clinical and other selected areas of applied psychology.

**PSY 664. Prejudice, Discrimination, Racism, and Heterosexism. (3 h)**

Comparison of cross-cultural similarities and differences in the initiation, maintenance, and treatment of prejudice, discrimination, and racism, with an emphasis on past and current trends in the U.S.

**PSY 667. Parent-Child Relationships. (3 h)**

Surveys characteristics of parent-child relationships and issues of parenting as related to a variety of factors, including developmental changes of parent and child, family structure, and sociocultural context.

**PSY 674. Judgment and Decision Making. (3 h)**

Theoretical and empirical examination of how people make decisions and judgments about their lives and the world, and how these processes can be improved.

**PSY 692. Contemporary Problems in Psychology. (1.5 h)**

Seminar treatment of current theory and research in specific areas within psychology. The course is one-half semester.

**PSY 701. Current Topics in Psychology. (1.5 h)**

Seminar courses in selected topics in psychology.

**PSY 702. Current Topics in Psychology. (1.5 h)**

Seminar courses in selected topics in psychology.

**PSY 703. Current Topics in Psychology. (3 h)**

Seminar course in selected topics in psychology.

**PSY 715. Research Design and Analysis in Psychology. (3 h)**

Intensive study of the design of experiments and the analysis of research data in psychology. Covers conventional methods, including univariate and multivariate analysis of variance, multiple regression, and factor analysis. Requires previous or concurrent coursework in basic statistics. Written permission of instructor required. Furr, Stone.

**PSY 716. Research Design and Analysis in Psychology. (3 h)**

Intensive study of the design of experiments and the analysis of research data in psychology. Covers conventional methods, including univariate and multivariate analysis of variance, multiple regression, and factor analysis. Requires previous or concurrent coursework in basic statistics. Written permission of instructor required. Furr, Stone.

**PSY 720. Biological Psychology. (3 h)**

Study of the biological basis of behavior and mental processes, with emphasis on current developments in neuroscience, and human applications of this information. Laboratory work in neuroanatomy and psychophysiology. Blumenthal.

**PSY 728. Human Cognition. (3 h)**

Current theory and research on functional characteristics and neural correlates of cognitive processes in such areas as memory, attention, and language. Dagenbach.

**PSY 738. Learning and Motivation. (3 h)**

Basic learning principles and concepts and related motivational concepts.

**PSY 742. Seminar in Developmental Psychology. (3 h)**

Critical examination of the major findings, principles, and theories of development, with attention to both human and lower-animal research. Best, Buchanan.

**PSY 752. Seminar in Social Psychology. (3 h)**

Content and methodology of social psychology examined through a critical and comparative analysis of contemporary theory and literature. Petrocelli.

**PSY 757. Seminar in Personality Psychology. (3 h)**

Evaluation of contemporary solutions to important problems in personality psychology, with special attention to historical context and anticipated future directions. Fleeson, Furr, Jayawickreme.

**PSY 770. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 771. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 772. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 773. Psychology Practicum. (1-3 h)**

Work experience in an applied psychology setting (such as clinical or industrial) under a qualified supervisor. Staff.

**PSY 782. Readings and Research in Psychology. (1-3 h)**

This listing allows the graduate student, working under the supervision of a faculty member, to pursue and receive credit for 1) a special reading project in an area not covered by regular courses or 2) a special research project not related to the master's thesis. Supervising faculty member and hours credit for which enrolled determined by graduate committee prior to registration.

**PSY 785. Directed Thesis Research I. (3 h)**

First-year students undertake a substantial research project under the direction of their adviser. Staff.

**PSY 786. Directed Thesis Research. (3 h)****PSY 791. Thesis Research I. (1-9 h)**

Staff.

**PSY 792. Thesis Research II. (1-9 h)**

Staff.

## Religion (REL)

**REL 600. Approaches to the Study of Religion. (3 h)**

A phenomenological study of different ways of defining religion, including views of representative philosophers, psychologists, sociologists, anthropologists, theologians, and historians of religion.

**REL 604. Myth, Ritual, and Symbolism. (3 h)**

Explores how people envision and manipulate the supernatural in cross-cultural perspective. Emphasizes functional aspects of religious beliefs and practices.

**REL 605. Ethnography of Religion. (3 h)**

Study of theory and method in ethnography of religion where students closely read ethnographies from a variety of cultures and discuss the practical, methodological, and ethical issues related to ethnography. Course culminates with students researching and writing their own ethnographies.

**REL 606. Ritual Studies. (3 h)**

An introduction to the various methods and theories employed in the field of ritual studies, while examining comparative rituals and ritualized practices from around the world.

**REL 607. Magic, Science, and Religion. (3 h)**

Explores concepts of magic, science, and religion that emerged in Western thought and culture from late antiquity through the European Enlightenment and analyzes connections between religious traditions and Western, Modern Science.

**REL 608. Sacred Scripture in the Tradition of Abraham. (3 h)**

Comparative study of sacred texts in Judaism, Christianity, and Islam with particular attention to the issues of authority, function, and interpretations.

**REL 610. The Prophetic Literature. (3 h)**

Examination of the development and theological contents of the literary products of Israel's prophetic movement.

**REL 612. The Critical Study of the Pentateuch. (3 h)**

Study of the five traditional books of Moses (the Torah) and various lines of analysis that modern Biblical critics have used to interpret their composition and role in the development of Israelite theological thought.

**REL 613. Near Eastern Archeology. (3 h)**

Survey of archaeological work in the Near East with attention to the ways in which interest in the Bible has shaped research questions, interpretation of materials, and museum exhibits.

**REL 615. Field Research in Biblical Archeology. (3 h)**

Study of the religion and culture of the ancient Near East through the excavation and interpretation of ancient sites.

**REL 616. Field Research in Biblical Archeology. (3 h)**

Study of the religion and culture of the ancient Near East through the excavation and interpretation of ancient sites.

**REL 617. The Wisdom Literature. (3 h)**

Examination of the development, literary characteristics, and theological contents of the works of ancient Israel's sages.

**REL 618. Feminist and Contemporary Interpretations of the Bible. (3 h)**

Study of feminist and contemporary approaches to the Bible in light of the history of interpretation and a range of contemporary concerns and interpretive contexts.

**REL 620. The Search for Jesus. (3 h)**

Introduction to the issues, assumptions, evidence, and debate that shapes the continuing quest for the historical Jesus.

**REL 623. Jesus Traditions. (3 h)**

Examines ancient Christian and other religious representations of Jesus in historical, social, cultural and theological context.

**REL 624. Early Christian Literature. (3 h)**

Examination of various literature and perspectives of the first three centuries of the Christian movement.

**REL 628. Jewish-Christian Relations and the New Testament. (3 h)**

Study of Jewish-Christian relations and selected writings of the New Testament in the historical, social, religious and political contexts of ancient Judaism and emerging Christianity. Focus varies with instructor.

**REL 629. Chinese Medicine. (3 h)**

An interdisciplinary exploration and analysis of Chinese medicine, its fundamental theories, and its range of health-oriented and religious applications.

**REL 630. Pope, Jefferson & Imam: A Study In Comparative Ethics. (3 h)**

Comparative study of the moral values and socio-ethical positions in the major religious traditions of the world, with focus on their various methods of reasoning and sources of authority.

**REL 631. Religion and Law. (3 h)**

A study of religion and law as distinct yet interdependent spheres that influence cultural negotiations about authority, power, identity, and the regulation of society. Geographic and tradition-specific focus may vary with instructor.

**REL 632. Religion and Public Engagement. (3 h)**

This seminar introduces students to dynamics at work at the interface between religious communities and the public sphere. It will explore, through a wide range of readings, guest lectures, and films, the potential for social change—constructive and destructive—within and between communities in locally, regionally, nationally and globally.

**REL 635. Christian Ethics and the Problem of War. (3 h)**

Examination of the causes and characteristics of war, various Christian responses to it, and approaches to peacemaking, with attention to selected contemporary issues.

**REL 636. Religious Traditions and Human Rights. (3 h)**

Study of the relationships and tensions between religious traditions and human rights, with illustrations from historical and contemporary issues and movements.

**REL 638. Religion Ethics and Politics. (3 h)**

Examination of ethical issues in religion and politics using materials from a variety of sources and historical periods.

**REL 639. Religion, Power and Society in Modern Africa. (3 h)**

Interdisciplinary study of the growth transformations of Africa's major religious traditions (Christianity, Islam, and the indigenous religions) and of their relations with secular social changes.

**REL 640. Holy Chow: Food and Religion. (3 h)**

Explores the roles food and eating play in religious behavior and the ways in which religious practices and experiences impact our eating habits and food choices.

**REL 641. Religion and Ecology. (3 h)**

Cross-cultural examination of the relationships among human beings, their diverse cultures, habitats, and religions, including social and political understandings of the environment.

**REL 642. Religious Intolerance in U.S.. (3 h)**

Study of the various manifestations of religious intolerance in the U.S. from the colonial period until the present.

**REL 643. Religion, Culture, and the Body. (3 h)**

A cross-cultural, multi-disciplinary exploration of the body as a malleable locus of contested ideals that informs personal, social, and religious identity formation.

**REL 644. Religion, Poverty, and Social Entrepreneurship. (3 h)**

Interdisciplinary study of major themes in religion, poverty, reduction, and social entrepreneurship. Focus and community emphasis may vary with instructor.

**REL 645. The African American Religious Experience. (3 h)**

Exploration of the religious dimensions of African-American life from its African antecedents to contemporary figures and movements.

**REL 647. Religion, Gender, & Sexuality. (3 h)**

This course explores how "religion" regulates gender and sexuality by examining religious texts, media, and political rhetoric through feminist, queer, and postcolonial theory. Through an analysis of historical and contemporary debates and issues concerning gender and sexuality, this course considers how political, social, and religious institutions understand and deploy religious belief and discourse to legislate, repress, and pathologize certain criminal, deviant, immoral, or sinful.

**REL 648. Race, Memory, and Identity. (3 h)**

Explores the collective memory and identity of American-Indian and African-American communities and their response to historical trauma in their cultural imagination, spirituality, and political and social activism.

**REL 649. Asian Meditation Practices. (3 h)**

Introduces and examines theoretical and practical aspects of various forms of Eastern meditation (concentration, mindfulness, Zen, visualization, and moving energy work) from both practitioner and modern scientific perspectives.

**REL 651. Sociology of Religion. (3 h)**

Introduces the sociological analysis of religion, including religious beliefs and experiences, the cultural context of religion, varieties of religious organization, religious change and social change.

**REL 655. Jewish Identities: Religion, Race, and Rights. (3 h)**

Examines how evolving definitions of race, religion, and Jewishness have correlated and conflicted in varied and sometimes surprising ways and how these shifts have been tied to legal rights and social privileges.

**REL 656. Faces of Modern Judaism. (3 h)**

Examines contemporary expressions of Judaism and its historical roots.

**REL 657. Jews in the United States. (3 h)**

Focusing on the 19th-21st centuries, this course examines Jewish American histories, experiences, and identities, as well as their impact on American society as a whole.

**REL 659. Hinduism in America. (3 h)**

Study of the meanings, values, and practices associated with the religions of Hinduism in dialogue with the dominant culture of America.

**REL 660. Hindus, Muslims, and Sikhs in North America. (3 h)**

This course examines the racialization of Hinduism, Islam, Sikhism in North America. Through an analysis of historical documents, immigration laws, mainstream and social media, popular culture, and academic texts, this class explores how these religions are racialized in Canada and the US. Using a postcolonial and intersectional approach, we will examine how race, religion, gender, sexuality, and class interact to stigmatize or empower certain individuals and/or groups.

**REL 661. Topics in Buddhism. (3 h)**

Variable topics in buddhist history, thought, and/or practice. May be repeated for credit if topic varies.

**REL 662. Topics in Islam. (3 h)**

Examination of the origins and development of Islam, the world's second largest religious tradition. Attention is given to the formation of Islamic faith and practice as well as contemporary manifestations of Islam in Asia, Africa, and North America. May be repeated for credit if topic varies.

**REL 663. Religions of Japan. (3 h)**

Study of the central religious traditions of Japan from pre-history to the present, including Shinto, Buddhism, Zen Buddhism, Christianity, and Confucianism.

**REL 665. History of Religion in America. (3 h)**

Study of American religions from colonial times until the present.

**REL 667. Contemplative Traditions In Christianity. (3 h)**

Study of Christian mysticism and contemplation (spirit possession, visions, dreams, and meditation) and their relation to contemporary issues.

**REL 668. The Protestant and Catholic Reformations. (3 h)**

Study of the origin and development of Reformation theology and ecclesiology.

**REL 669. Radical Christian Movements. (3 h)**

Study of selected radical movements in the Christian tradition and their relation to contemporary issues.

**REL 672. History of Christian Thought. (1.5, 3 h)**

Study of recurring patterns in Christian thought across time and cultures and some of the implications of those patterns in representative ancient and modern figures.

**REL 672B. History of Christian Thought Medieval and Reformation Thought. (1.5 h)**

Study of the history of Christian thought, beginning with its Hebraic and Greek backgrounds and tracing its rise and development to modern times. The course may be divided into halves for 1.5 credits each: a) Patristic Thought and b) Medieval and Reformation Thought.

**REL 673. Special Topics in African-American Religious Traditions. (3 h)**

Variable topics in African-American religious traditions. May be repeated for credit if topic varies.

**REL 674. Black Messiahs and Uncle Toms. (3 h)**

Examines the cultural and religious history of black leadership in the United States.

**REL 675. Race, Myth, and the American Imagination. (3 h)**

A study of myth and mythology in relation to the racial imaginary in America.

**REL 676. Race, Religion, and Film. (3 h)**

Examines past and contemporary filmmakers who couple religious themes with racial concerns.

**REL 678. Latin American Liberation Theology. (3 h)**

Historical, contextual, and theoretical survey of diverse forms of Latin American theologies of liberation.

**REL 679. Muslim Youth. (3 h)**

Explores the lived experiences of young Muslims around the world through the intersecting lenses of religion, power and protest.

**REL 681. Zen Buddhism. (3 h)**

An examination of the origins and development of Zen Buddhism from China (Ch'an) to Japan and contemporary America. Particular attention is given to Zen doctrine and practice in the context of the broader Buddhist tradition.

**REL 682. Religion and Culture in China. (3 h)**

A thematic study of Chinese religious traditions and culture focusing on history, ritual, scripture, and popular practice. Topics include cosmology, ancestor veneration, shamanism, divination, and the role of women. Ford.

**REL 683. The Qur'an & the Prophet. (3 h)**

Examines the history, content, and main approaches to the sacred book of Islam. Explores the influence and interaction between the holy word and its transmitter the Prophet Muhammad.

**REL 684. Islam and Law: Varieties in Interpretation and Expression. (3 h)**

Explores main tenets of the Islamic law (Shari'ah) and how this law has been applied in past and present Islamic societies. Looks at legal issues through the lens of gender, ethics, non-muslim minorities, rights, and duties.

**REL 685. Topics in South Asian Religions. (3 h)**

Variable topics in the religions of South Asia. May be repeated for credit if topic varies.

**REL 686. Indian Epics. (3 h)**

Examines one or both Indian epics, the Mahabharata and Ramayana, while paying attention to either epic's religious, social, and political contexts, performance, and development in Indian history.

**REL 687. Priests, Warriors and Ascetics in Ancient India. (3 h)**

Introduces students to the history, culture and religious traditions of ancient India by examining the overlapping practices, beliefs, ideologies, and gender representations of priests, warriors, kings, and ascetics.

**REL 688. South Asian Women: Religion, Culture and Politics. (3 h)**

This course examines the intersection of religion, race, and gender of South Asian women from a feminist and postcolonial perspective. This course is cross-listed as WGS 688.

**REL 689. Islam in the West: Changes and Challenges. (3 h)**

Explores issues of identity, ethnicity and religion within various Muslim communities living in western countries. A central goal is to understand how these communities negotiate the new environment and the challenges they face.

**REL 690. Spec Topics in Religion. (1.5-3 h)**

Religion topics of special interest. May be repeated for credit.

**REL 691. Topics in East Asian Religions. (3 h)**

Variable topics in the religions of China, Korea, and Japan. May be repeated if topic varies.

**REL 692. Topics in First Peoples' Traditions. (3 h)**

Variable topics in the religions of American Indian and Canadian First Nations. May be repeated for credit if topic varies.

**REL 693. Topics in Religions of Africa. (3 h)**

Variable topics in the religions of Africa or African diaspora. May be repeated for credit if topic varies.

**REL 695. Exploring Interfaith Practice and Leadership. (3 h)**

This online course on interfaith leadership invites students to consider how they might engage most effectively with people from a variety of religious backgrounds.

**REL 696. Interreligious Encounters and Engagements. (3 h)**

Surveys the history of dialogue activities among various religious communities and introduces the methods and theories of interreligious dialogues. Part of this class is interaction with local interfaith projects.

**REL 700. Theory and Method in the Study of Religion. (3 h)**

Explores the history of and methodological resources for the study of religion. Focus may vary according to the instructor, but the emphasis is on the ways religion has been defined, studied and interpreted over the last several centuries.

**REL 701. Directed Reading. (1-3 h)**

May be repeated for credit if topic varies.

**REL 702. Directed Reading. (1-3 h)**

May be repeated for credit if topic varies.

**REL 703. Postmodern Perspective on Power, Symbolism and Performance. (3 h)**

A critical examination of postmodern theories on the relationship between religion and culture.

**REL 704. Conceptions of the Ultimate. (3 h)**

A comparative study of religious conceptions of the ultimate (divine, sacred) within Eastern and Western traditions through a range of methodological lenses including phenomenological, philosophical, theological, and sociological.

**REL 705. Research in Religion. (3 h)**

Tools and methodologies applicable to research in religion. Fulfills the three hours in research methods that the religion department requires of first-year MA students.

**REL 708. Religion Language & Symbol. (3 h)**

An examination of the distinct use of language in religious discourse, with attention to theoretical understandings of human language, the variety of philosophical efforts to define the validity of religious language, and the role of metaphor and analogy in religious communication.



**REL 709. Field Program in Religion and Public Engagement. (1-3 h)**

Integrated study of major themes in religion and public engagement carried out in partnership with one or more communities off campus. Focus varies with instructor. On request.

**REL 716. Old Testament Theology. (3 h)**

Major motifs of revelation in the Old Testament; analysis of recent attempts to write Old Testament theology.

**REL 718. Old Testament Exegesis. (3 h)**

Detailed analysis and exegesis of selected portions of the Hebrew Bible. P-POI.

**REL 719. Old Testament Exegesis. (3 h)**

Detailed analysis and exegesis of selected portions of the Hebrew Bible. P-POI.

**REL 720. The History of Biblical Interpretation. (3 h)**

A detailed study of the history of biblical interpretation and hermeneutics.

**REL 721. New Testament Theology. (3 h)**

Delineation of an approach to New Testament theology as a whole, a consideration of the hermeneutical problem, and an examination of two or three themes in New Testament theology.

**REL 723. New Testament Exegesis. (3 h)**

Examination of selected portions of the Greek New Testament, with attention to the tools necessary for exegesis. P-POI.

**REL 724. New Testament Exegesis. (3 h)**

Examination of selected portions of the Greek New Testament, with attention to the tools necessary for exegesis. P-POI.

**REL 726. Seminar in Early Christianity Studies. (3 h)**

Intensive study of selected topics and texts in early Christianity studies.

**REL 737. Figures and Traditions in Religious Ethics. (3 h)**

Seminar course that examines the basic ethical works and theories of central figures in Western and non-Western traditions. Students engage in close readings of important texts in religious thought and morality and produce essays reflecting on the themes addressed by the authors.

**REL 738. Seminar in Christian Social Ethics. (3 h)**

Critical study of classic texts and figures in the history of Christian ethics and social thought.

**REL 740. Seminar in the Sociology of Religion. (3 h)**

Examination of selected classical and contemporary texts illustrative of the theories, methods, and purposes of the sociological study of religion.

**REL 751. Theory and Practice of Pastoral Counseling. (3 h)**

Study of counseling methodologies, psychotherapeutic techniques, personal development, and human behavior in terms of the implications for pastoral counseling.

**REL 755. Clinical Pastoral Education. (3 h)**

Clinical experience in pastoral care, including work in crisis situations, seminars, interdisciplinary clinical group sessions, formal pastoral counseling, urban ministry assignments, and participation in group therapy. (Both semesters must be completed.)

**REL 756. Clinical Pastoral Education. (3 h)**

Clinical experience in pastoral care, including work in crisis situations, seminars, interdisciplinary clinical group sessions, formal pastoral counseling, urban ministry assignments, and participation in group therapy. (Both semesters must be completed.)

**REL 761. Seminar in Eastern Religion. (3 h)**

Directed study in the selected areas of the religious traditions of the East.

**REL 762. Literature of Ancient Judaism. (3 h)**

Examination of the rabbinic writings (Mishnah, Tosefta, Talmud, Midrashim, Targumim, and the Liturgy), the Dead Sea Scrolls, The Old Testament Apocrypha and Pseudepigrapha, and the literature of Hellenistic Judaism (e.g., Philo and Josephus).

**REL 763. Hellenistic Religions. (3 h)**

Considerations of available source materials, questions of method, and bibliography related to such Hellenistic religions as the Mysterics, Hellenistic Judaism, and Gnosticism.

**REL 766. Seminar in Christian History. (3 h)**

Directed study of selected areas in the history of Christianity, including Baptist history.

**REL 768. The Protestant and Catholic Reformations. (3 h)**

Study of the origin and development of Reformation theology and ecclesiology.

**REL 771. Religions in America. (3 h)**

A study of religious traditions, events, and individuals shaping religious life in America. Attention is given to native religious, colonization, denominations, awakenings, religious liberty, the western movement, and the rise of the "American Self." The development of pluralism and the impact of immigration, civil rights, and "new religions" are also studied.

**REL 775. Seminar in the History of Christian Thought. (3 h)**

Intensive study of a selected period or movement in Christian theological history, with special reference to seminal persons and writings.

**REL 780. Seminar in Theology & Lit. (3 h)**

Intensive study of a single theologian in relation to a literary figure with a similar religious outlook, the aim being to investigate how literature and theology mutually invigorate and call each other into question. Representative pairings: Niebuhr/Auden, Barth/O'Connor, Tillich/Updike, Newman/Eliot, Kierkegaard/Percy. May be repeated for credit if the writers studied are different.

**REL 781. Special Topics in Religion. (3 h)**

An intensive, in-depth study of a selected issue in the study of religion. Focus varies with instructor. May be repeated if topic varies.

**REL 791. Thesis Research I. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

**REL 792. Thesis Research II. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory.

## Spanish (SPA)

**SPA 622. Spanish Pronunciation and Dialect Variation. (3 h)**

Description of, and practice with, the sounds, rhythm, and intonation of Spanish and the differences from English, with special attention to social and regional diversity. Strongly recommended for improving pronunciation. This course meets a N.C. requirement for teacher certification.

**SPA 623. Advanced Grammar & Composition. (3 h)**

Advanced-level review of Spanish morphology and syntax applied to the refinement of writing techniques.

**SPA 630. The Debate about Woman in Late Medieval Spain. (3 h)**

Explores romantic love in the Iberian Peninsula in the 14th and 15th centuries focusing on the debate about woman as an index of social changes happening at the moment.

**SPA 631. Medieval Spain A Cultural and Literary Perspective. (3 h)**

Examination of the literary, social, and cultural themes, such as: Quests and Discoveries, Pilgrimage and the Act of Reading, Images of Islam, the Judaic Tradition in Spanish Literature, and Spiritual Life and Ideal.

**SPA 632. Golden Age of Spain. (3 h)**

Close analysis of literary texts, such as *Lazarillo de Tormes*, and study of the history of art, politics, and economics of the sixteenth and seventeenth centuries, with emphasis on themes such as the writer and society, humanism, the picaresque, Catholic mysticism, and power and politics.

**SPA 633. Don Quijote: The Birth of the Novel. (3 h)**

Study of *Don Quijote*, the first modern novel, and several exemplary novels, and contemporary theoretical approaches to them. Considers related art, music, and film. Includes discussion of themes such as the development of prose fiction, the novel as a self-conscious genre, women and society, religion and humanism, nationalism, and imperialism.

**SPA 634. Voices of Modern Spain. (3 h)**

Study of the multifaceted cultural identity of contemporary Spain through different literary genres, art, and film.

**SPA 635. Love, Death, and Poetry. (3 h)**

Study of the representation of universal themes in Spanish poetry from different historical periods.

**SPA 638. Love, Death, and Poetry. (3 h)****SPA 641. European-American Encounters, 1492 to the Present. (3 h)**

Study of the 500-year tradition of representations of encounter between Spain and the Americas, with special attention to the ways the topic is used to define and redefine individual and collective identities.

Primary texts include narratives, plays, engravings, murals, films, and advertisements.

**SPA 642. From Colonial to Postcolonial Voices. (3 h)**

Study of a variety of texts from the 18th and 19th centuries dealing with political emancipation, nation-building, and continental identity.

**SPA 647. Contemporary Theatre in Spain and Spanish America. (3 h)**

Study of contemporary Peninsular and Spanish-American theatre within its political, social, cultural, and aesthetic context.

**SPA 648. Contemporary Women Novelists and their Female Characters. (3 h)**

Study of representative novels by women writers from Spain and Latin America, with emphasis on the representation of the female protagonist within her cultural context.

**SPA 655. Romantic Nationalism, Avant-garde Nihilism, and the Deconstruction of Utopia. (3 h)**

Study of Latin-American poetry, including symbolist, surrealist, and conversational poetry, "happenings," and artistic manifestoes. Politics, nation-building, liberation theology, and love are common themes.

**SPA 656. Transgressing Borders: Identity in the Literature of Latin American and U.S. Latino Cultures. (3 h)**

A socio-historical study of theories on culture, sexual politics, and race in relation to literary texts, lyrics of popular music, and art of Latin America and the diaspora.

**SPA 657. Spanish-American Short Story. (3 h)**

Intensive study of the 20th-century Spanish-American short story with emphasis on major trends and representative authors, such as Quiroga, Rulfo, Borges, Cortázar, Donoso, García, Márquez.

**SPA 658. Spanish-American Novel. (3 h)**

Study of the novel in Spanish America from its beginning through the contemporary period.

**SPA 659. Spanish-American Theatre: From Page to Stage. (3 h)**

Study of the transition of a dramatic work from text to performance and the role of Spanish-American theatre as a vehicle for cultural values and sociopolitical issues. Includes rehearsals for the public staging of selected one-act plays. Proficiency in Spanish and willingness to act on stage are required.

**SPA 660. Colonial Spanish America. (3 h)**

Explores the early Spanish-American colonial period alongside contemporary intellectuals' attempt to return to and recover the historical past. Readings include 15th- and 16th-century codices, post-conquest indigenous writings, Iberian chronicles and letters, as well as 20th-century documents.

**SPA 661. Fiction Literatures of the Mexican Revolution. (3 h)**

Explores 20th-century Mexican cultural production as it relates to the Mexican Revolution (1910-1920). Readings include novels, short stories, popular poetry, and historiographic texts. Attention to Mexican muralism and cinema, and special emphasis on relationships between literature, history, and contemporary politics.

**SPA 670. Film Adaptations of Literary Works. (3 h)**

The development of Spanish from an early Romance dialect to a world language. Study of ongoing changes in the language's sounds, grammar, and vocabulary system, with a focus on the effects of cultural history and relationships with other languages.

**SPA 671. Contrastive Spanish/English Grammar and Stylistics. (3 h)**

Advanced study of structure and style in a variety of Spanish texts, with an in depth approach to idiomatic expressions and some back/cross translation exercises.

**SPA 679. Special Topics in Hispanic Linguistics. (3 h)**

Investigation of key areas in Spanish languages research, such as dialectology, history, language acquisition, and usage.

**SPA 681. Spanish Translation. (3 h)**

Introduces translation strategies through practice, with emphasis on Spanish into English. Focuses on translating in domains such as social science, computing economics, the entertainment industry, banking, and journalism.

**SPA 682. Spanish/English Interpreting. (1.5, 3 h)**

Introduction to strategies of interpreting from Spanish into English, primarily. Intensive lab practice course to develop basic skills in consecutive/escort/simultaneous interpreting. Some voice-over talent training is also included.

**SPA 683. Medical and Scientific Translation. (3 h)**

In this elective course, students will develop and refine a practical translation skill set within the scientific and medical domains. In addition, students will gain familiarity with textual conventions that govern source and target texts within these domains and deepen their understanding of both Spanish and English as language for special purposes. Apart from translation proper, students will also be able to analyze texts for register, style, tone and content to determine the most appropriate process to achieve the highest quality translation. Finally, students' research skills will improve through the examination of available resources and the creation of domain-specific resources.

**SPA 684. Internships for Spanish Translation Localization and Spanish Interpreting. (2-4 h)**

Under faculty supervision, a student undertakes a translation/interpretation project at a translation bureau or translation department of a company/public organization. A community service-oriented internship is preferred for interpreting.

**SPA 687. Intro to Spanish for Business. (3 h)**

Introduction to Spanish vocabulary and discourse in business. Emphasizes oral and written practices, reading, and Hispanic business culture as well as a comprehensive analysis of different business topics and areas. Two mid-term essays and final essays are required.

## Statistics (STA)

**STA 610. Probability. (3 h)**

Distributions of discrete and continuous random variables, sampling distributions. Covers much of the material on the syllabus for the first actuarial exam. This course is cross-listed as MTH 657.

**STA 611. Statistical Inference. (3 h)**

Derivation of point estimators, hypothesis testing, and confidence intervals, using both frequentist and Bayesian approaches. P-STA 610 or MTH 657 or POI.

**STA 612. Linear Models. (3 h)**

Theory of estimation and testing in linear models. Topics include least squares and the normal equations, the Gauss-Markov Theorem, testing general linear hypothesis, model selection, and applications. P-STA 610 or MTH 657, or POI.

**STA 652. Networks: Models and Analysis. (3 h)**

A course in fundamental network theory concepts, including measures of network structure, community detection, clustering, and network modelling and inference. Topics also draw from recent advances in the analysis of networks and network data, as well as applications in economics, sociology, biology, computer science, and other areas.

**STA 662. Multivariate Statistics. (3 h)**

Multivariate and generalized linear methods for classification, visualization, discrimination, and analysis.

**STA 663. Introduction to Statistical Learning. (3 h)**

An introduction to supervised learning. Topics may include lasso and ridge regression, splines, generalized additive models, random forests, and support vector machines. Requires prior experience with R programming.

**STA 664. Computational and Nonparametric Statistics. (3 h)**

Computationally intensive methods to fit statistical models to data. Topics include simulation, Monte Carlo integration and Markov Chain Monte Carlo, sub-sampling, and nonparametric estimation and regression. P-MTH 657 or POI.

**STA 665. Applied Bayesian Statistics. (3 h)**

An introduction to Bayesian statistics and computational methods for performing Bayesian data analysis. Topics may include conjugate distributions, objective prior distributions, Bayesian inference, hierarchical models, and Markov chain Monte Carlo methods. P - STA 610 and a previous course in regression.

**STA 668. Time Series and Forecasting. (3 h)**

Methods and models for time series processes and autocorrelated data. Topics include model diagnostics, ARMA models, spectral methods, computational considerations, and forecasting error. P-STA 610 or MTH 657, or POI.

**STA 679. Advanced Topics in Statistics. (1-3 h)**

Topics in statistics not considered in regular courses or which continue study begun in regular courses. Content varies.

**STA 682. Readings in Statistics. (1-3 h)**

Reading in statistical topics to provide a foundational basis for more advanced study in a particular area. May not be used to satisfy any requirement in the MA degree with thesis. No more than three hours may be applied to the requirements for the MA degree without thesis. May be repeated for credit for a total of 3 hours.

**STA 683. Individual Study. (1-3 h)**

A course of independent study directed by a faculty adviser. By prearrangement.

**STA 710. Stochastic Processes and Applications. (3 h)**

This course includes the axiomatic foundations of probability theory and an introduction to stochastic processes. Applications may include Markov chains, Markov Chain Monte Carlo with Metropolis-Hastings, Gibbs sampling, Brownian motion, and related topics, with an emphasis on modern developments. This course is cross-listed as MTH 757. P-STA 610 or MTH 657 and MTH 611 or POI.

**STA 711. Advanced Statistical Inference. (3 h)**

Advanced mathematical treatment of point estimators, hypothesis testings, and confidence intervals, using both frequentist and Bayesian approaches. P-STA 610 or MTH 657, or POI.

**STA 712. Generalized Linear Models. (3 h)**

Extensions of the classical linear model to cover models for binary and count data, ordinal and nominal categorical data, and time-to-event data, along with numerical maximization techniques needed to fit such models. Additional topics may include longitudinal data, the Expectation-Maximization algorithm, non-linear models, or related topics. P-STA 612 or POI.

**STA 720. Bayesian Analysis. (3 h)**

Fundamental concepts, theory, and computational methods for Bayesian inference. Topics may include decision theory, evaluating Bayesian estimators, Bayesian testing and credible intervals, Markov chain Monte Carlo methods, and hierarchical models. P-STA 610 or MTH 657, or POI.

**STA 779. Topics in Statistics. (3 h)**

Topics vary by instructor. May be repeated for credit.

**STA 791. Thesis Research. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory. P-POI.

**STA 792. Thesis Research. (1-9 h)**

May be repeated for credit. Satisfactory/Unsatisfactory. P-POI.

## Sustainability (SUS)

**SUS 600. Communications Workshop. (1 h)**

Effective, persuasive communication requires clarity, engaging language, sound reasoning, and an informed appreciation of audience. To that end, this workshop seeks to equip students as change agents that can effectively articulate a vision for ways to invest in and contribute to creating a sustainable future. Specifically, the Communication Skills Workshop teaches you how to apply such concepts to forms of written (e.g., memos) and oral (e.g., PowerPoint presentations) communication typically found in business and non-profit organizational settings. The workshop includes numerous interactive lessons that focus on the essentials of dynamic and economical writing, argument and evidentiary analysis, engaging and well-researched oral presentations, and audience adaptation.

**SUS 601. Professional & Leadership Skills. (1 h)**

This workshop will support students in understanding and developing the skills required to be thought leaders in the sustainability field. Learning will focus on leadership skills required to create meaningful change in various organizational settings. Topics include influencing others, collaborating in teams, managing conflict and working across cultures. To enhance self-awareness we will employ self-assessments and the creation of a program-long development plan.

**SUS 602. Scientific Literacy. (1 h)**

In this course we will focus on the nature of scientific inquiry, and explore how it is pursued, reported, and applied. In particular, we will focus on the intersection of climate science and the scientific study of attitudes/beliefs about climate science. We will also explore the projected impacts on and policy responses from the state of North Carolina.

**SUS 603. Natural Capital Valuation and Ecosystem Services. (1 h)**

This workshop introduces the concept of Ecosystem Services and Natural Capital Valuation in theory and practice. It focuses broadly on the concept of natural capital and the process of valuing ecosystem services, and more closely on how the process is working at multiple scales in policy, markets and projects. Ecosystem services is a new and rapidly growing field that crosses science, policy and management. Practitioners have varied expertise; from spatial modelers, research scientist, and economists, to policy makers and social scientists. We will cover some of the historical development and current state of the ecosystem services markets specifically for carbon and water. Critical spatial tools of GIS and spatial modeling of ecosystem services are also introduced.

**SUS 625. Environmental Decision-Making. (3 h)**

The complex nature of the environment makes the choices made about environmental issues difficult and incomplete. The course offers a simple but comprehensive understanding of the important interplay between science, economics, and values that must be considered, when making informed environmental decisions. A selection of case studies from around the world are highlighted but emphasis will be given to case studies from the United States.

**SUS 630. Global Coastal Management. (3 h)**

Major issues impacting coastal zones of the world are explored. Management and governance themes used in shaping coastal behavior are emphasized from both an integrative and multi-disciplinary perspective. In particular, the following three issues are examined: the threat to coastal environments from a rapidly growing human population and pollution; the destruction of critical resources and vital ecosystems through unsustainable economic activities; and the difficult challenges governments face in crafting effective coastal management initiatives. The course takes a global perspective, but some emphasis will be given to coastal zones of the United States.

**SUS 691. Special Topics. (1-3 h)**

Examination of topics not covered in the regular curriculum.

**SUS 694. Internship. (1-4 h)**

Internships are available for a student who has completed one year of graduate study and desires experience working in the private sector or a nonprofit or government agency. Internships typically take place during the summer months and last for three months, although the timing and duration may be adjusted to satisfy each student's needs and the type of internship available. Credit hours are adjusted based on the length of the internship. The student receives a written evaluation from the host organization mentor and is required to submit a written report of his/her work. May be repeated for up to 4 credits.

**SUS 695. Individual Study. (1-3 h)**

Opportunity to pursue a topic covered in a regular course in greater depth or topics relevant to the student's field of concentration. Usually involves extensive reading and tutorial sessions with a faculty supervisor. Written papers may be required. May be repeated for up to 6 credits.

**SUS 701. Global Human Systems. (3 h)**

Sustainability is a human term with context specific connotations—in other words deployments of the term in the public sphere often tell us more about the perceptions and values of those utilizing the term than they do about what is central to achieving sustainability. In this course we will interrogate the ways in which uses of this human term intersect with earth systems and politics. Students will gain a basic understanding of earth systems science, gather historical data related to human impacts on earth systems, and study human values as they relate to the other-than-human entities with which they share their habitats. Fundamentally, the goal of this course is to go beyond the traditional disciplinary divides (natural science, social sciences, and humanities), to begin to sketch the outlines of each of these areas while highlighting important convergences and differences.

**SUS 702. Sustainable Organizational Mgt. (3 h)**

Are organizations part of the problem or part of the solution – or both? What practices will produce desirable organizational outcomes and improve the environment? This course will provide information to address these questions. It will include an overview of the presence and impact of sustainable practices in private and public sector organizations. The course information and experiences will equip participants with the ability to think critically about the trade-offs inherent in the relationship between certain organizational decisions and sustainability best practices.

**SUS 703. Natural Science for Sustainability. (3 h)**

Students will explore qualitative and quantitative chemical and physical aspects of sustainability for waste, water, air, and energy. The course provides an in-depth scientific understanding of the most important nonrenewable and renewable energy sources. Students will study the world's present and future energy needs, focus on energy production, consumption, and environmental impact, and explore ways in which these principles relate to sustainability. The sustainability and environmental trade off of different energy systems will be studied.

**SUS 704. Environmental Law & Policy. (3 h)**

To understand how we can move toward sustainability domestically and abroad, we must understand how and why law and policy are developed, challenged, and changed. This course will look at the historical development of environmentalism and the movements that provided the impetus for modern environmental legal regimes, as well as case studies illustrating contemporary environmental issues. We will cover common law and statutory remedies for private citizens, principles of federalism and separation of powers, agency rulemaking, the role of the judiciary in environmental law and policy, and international environmental law. Each case study in this course will emphasize one of the major U.S. environmental statutes, so that upon completion of the course you will not only have a foundation in law and policy processes but also a familiarity with the most significant U.S. statutory schemes.



**SUS 705. Applied Sustainability 1. (2 h)**

This course will introduce you to the practice of building sustainable systems in today's world. In it you should improve your ability to understand design principles for sustainability, assess sustainability actions of organizations at all levels, use different frameworks to track and assess sustainability, and apply your skill sin effectively managing change. The objective of this course is for us to learn how to advance sustainability today, see what might be done in the future, and identify opportunities that exist for each of us. We will use a variety of learning experiences, including site visits, group presentations and in class presentations by outside leaders.

**SUS 706. Applied Sustainability: Creativity and Impact. (2 h)**

Applied Sustainability is crafted to experience sustainability in action through Human Centered Design. Human Centered Design is a philosophy, a set of abilities, a set of mindsets, and a set of practices that proves invaluable in addressing the sustainability issues of our time. This way of working is a making based approach to problem solving and solution development. You will apply and practice the mindsets and abilities of design in different scenarios and different scales to address sustainability problems, and develop and build on new to the world ideas. This class is project oriented and team based. This course as a journey culminates with a client/community based sustainability practicum. Overall, this class emphasizes new ways of approaching work and life.

**SUS 710. Sustainable Urban Planning and the Built Environment. (3 h)**

This course will explore the tenets of sustainable construction and high performance building practices and prepare students for the U.S. Green Building Council's LEED Green Associate Exam. LEED, or Leadership in Energy & Environmental Design, is a certification program that recognizes best-in-class building strategies practices. Sustainable architecture and construction seeks to minimize the negative environmental impact of buidlings by efficiency and moderation in the use of materials, energy, and development space. This course widens the conversation to include how buildings and other community planning impacts urban environments. The focus of this planning is to satisfy construction and design goals with sustainable outcomes.

**SUS 715. Environmental Sustainability in a Global Context. (2 h)**

Students will develop practical problem-solving skills that address the challenges of climate change in an international context. This experiential learning course employs a variety of interdisciplinary approaches to explore concepts related to climate change adaptation. Students will interact with practitioners and stakeholders in various economic and political sectors to develop a group client-based project that supports real policy and management decisions on sustainable practices. Students will have the opportunity to travel internationally to visit affected areas and meet with government officials, researchers, conservationists, and economic planners. This course offers students a firsthand opportunity to conduct field research, hone interviewing practices, draft policy reports, and engage clients.

**SUS 720. Sustainability Practices & Policy in a National Context. (1 h)**

This seminar is designed specifically for graduate students in sustainability, students who are early and mid-career professionals looking to transition into careers in sustainability or environmental protection through business, government, NGOs, policy institutes or non-profits. Students will hear from and meet with a range of experts in climate change and sustainability, learn about the work they do and get a clear understanding of the challenges they face (practically and politically) and the impact they can have. This seminar will model possible career paths and provide networking opportunities.

**SUS 791. Thesis Research. (1-4 h)**

Research directed toward fulfilling the capstone requirement. May be repeated for up to a total of 4 credits.

## Translation and Interpreting Studies (TIS)

**TIS 684. Internship. (1-3 h)**

The internship requires 60 hours of shadowing, observing, gathering data and interpreting/translation work in a professional interpreting, translation, educational or healthcare setting, depending on the student's chosen track.

**TIS 731. Applied Interpreting Studies. (3 h)**

This course explores connections between research and practical issues in studies of interpreting (simultaneous, consecutive, bilateral and other modalities). It focuses on the interdisciplinary of the interpreting field and, based on case studies, examines the interface between interpreting as a profession, research in interpreting studies and the teaching of interpreting. It includes a research project.

**TIS 732. Methodology of Teaching Interpreting. (3 h)**

his course discusses syllabus design and lesson planning for teachers of interpreting in a field-specific context. It focuses on the development of interpreting skills, including use of recent technological advancements. It explores classroom management options and strategies for providing feedback to students. It also covers internship design methods, including an on-site observation of various interpreting settings.

**TIS 733. Applied Translation Studies. (3 h)**

This course examines the theory and practice of translation from a variety of linguistic and cultural angles. It introduces key concepts such as relevance, equivalence, skopos, back-translation, and explores critical approaches, depending on the translated text types.

**TIS 734. U.S. Heritage Speakers. (3 h)**

This course provides a comprehensive introduction to the fields of heritage languages, bilingualism, and bilingual education from a cross-disciplinary perspective. It covers a wide variety of topics, including individual and societal conceptions of heritage and dominant languages, general bilingual educational issues, bilingualism and multilingualism as they relate to identity, political and ideological issues, Spanish in the U.S. among many others.

**TIS 735. Discourse Organization and Interpreting. (3 h)**

This course will explore the links between social situations, interlocutors, and the functional aspects of communicative events. The course will focus on several important methodological approaches that have been developed to do discourse analysis in as much as they highlight important features of translation and interpreting. We will review the varied traditions around meaning-making, including sociolinguistics, conversation analysis, critical discourse analysis, and discursive psychology. Readings will tie in traditional topics in discourse analysis with specific issues in translation and interpreting. This course will link theory to practice. One session per week will be devoted to practical, hands-on activities using real world data in various formats: written transcripts, aural speeches, or vidoes.

**TIS 736. Organizational Behavior and Interpreting. (3 h)**

This course is designed to apply organizational behavior theories into the interpreting field in order to bring about a better understanding of how individual interpreters or interpreter teams actually behave in large-scale project/organizational setting. Particular emphases are placed on interpreter's roles and on how to evaluate interpreter's performance, motivate interpreters, and maintain a high level of interpreting services. This course prepares students to enter managerial positions in translation/interpreting companies or organizations.

**TIS 737. Remote Interpreting. (3 h)**

Through discussion-oriented sessions, simulations and testing, and talks given by guest speakers, this language-neutral course examines the origins and evolution of remote interpreting, including over-the-phone interpreting, video-mediated interpreting and remote simultaneous interpreting in community and conference settings. Students will explore issues in professionalism and ethics as well as future trends in remote interpreting.

**TIS 738. Editing and Revising for Translators. (3 h)**

This course covers various aspects of the editing of translated English text, from copy editing to more substantive forms. Rules of grammar, orthography and principles of composition are reviewed in the context of specialized discourses. Focus is placed on practical issues and editing tasks commonly faced by translators.

**TIS 742. Spanish Specialized Translation. (3 h)**

Develops and refines a practical translation skill set within specialized domains, for example, technology, law, international relations, media. Students gain familiarity with textual conventions that govern source and target texts in specialized contexts and deepen their understanding of both Spanish and English as language for specific purposes.

**TIS 743. Spanish-English Dialogue Interpreting. (3 h)**

In this course students will develop advanced interpreting skills through bidirectional short consecutive translations in some major domains, including business, education, social care, and law. The course focuses on practicing active listening, delivery techniques, glossary preparation, public speaking skills, interpreter's professionalism and ethics in dialogue interpreting.

**TIS 750. Contrastive Chinese-Eng Gramm. (3 h)**

Advanced study of structures and vocabulary. Exploration of general principles behind 'atom-like' rules and the main lexical dichotomies, and how implications for meaning help in choosing the best option. Discussion of structures that are usually taught as idiomatic but are more compositional than previously thought: subject-predicate vs. topic-comment, verb-particle, verb-complement, serial verb construction, relative clause construction, reduplication, imperative, negation, adposition, etc.

**TIS 751. Chinese-English Translation. (3 h)**

Development of advanced translating skills through the practice of bidirectional translation with a strong emphasis on Chinese into English translating. Some back translation exercises will be offered as part of this course.

**TIS 752. Chinese-English Specialized Translation. (3 h)**

Develops and refines a practical translation skill set within the specialized domains such as medicine, science, business, etc. In addition, students will gain familiarity with textual conventions that govern source and target texts within these domains and deepen their understanding of both Chinese and English as language for special purposes. Apart from translation proper, students will also be able to analyze texts for register, style, tone and content to determine the most appropriate process to achieve the highest quality translation. Finally, students' research skills will improve through the examination of available resources and the creation of domain-specific resources.

**TIS 753. Chinese-English Dialogue Interpreting. (3 h)**

In this course students will develop advanced interpreting skills through bidirectional consecutive translations in some major domains, including business, education, social care, healthcare and law. The course focuses on practicing active listening, delivery techniques, glossary preparation, public speaking skills, interpreter's professionalism and ethics in dialogue interpreting.

**TIS 755. Chinese-English Interpreting. (3 h)**

Chinese-English Interpreting develops strategies for community, conference, escort and other types of interpreting. Current employment opportunities in the field of interpreting will be also briefly presented. In class work will focus on learning and practicing interpreting techniques. Individual, at home, preparation - besides the assigned readings and interpreting exercises - will also include a strong terminology enhancement.

**TIS 760. U.S. Landscapes: Systems, Culture and Norms. (3 h)**

This course is designed for international students to increase their knowledge of US socio-political structures and Anglo-American cultural identity through the study of U.S. history, politics and popular traditions.

**TIS 770. Multimedia Translation. (3 h)**

This language-neutral course examines concepts, characteristics, tools and software of multimedia translation, a distinctive and booming sector in the arena of translation and localization. Students will explore translation challenges encountered and creative techniques adopted in translating films, TV shows, documentaries, anime, etc.

**TIS 785. Applied Research Project. (3 h)**

The applied research project will establish a rigorous connection between the practical experience in the workplace and the more theoretical experience in research and in the classroom. The applied research project will be divided in two components: during the fall semester (3 credit hours) students will learn about general research methodology and receive individual guidance to choose between the research project options. During the spring semester (3 credit hours) students will complete the research project under supervision of a project director.

**TIS 786. Special Topics. (1-3 h)**

Examination of topics not covered in the regular curriculum. May be repeated for credit.

**TIS 789. Independent Study. (1-3 h)**

Examination of topics not covered in the regular curriculum. May be repeated for credit.

## Women's, Gender, and Sexuality Studies (WGS)

### **WGS 600. The WGS Field Guide to Museums. (1.5, 3 h)**

This hands-on course consists of gender/sexuality-focused lectures, readings, workshops, digital storytelling, and guided visits of university and art galleries, museums, historical societies and homes, community centers, and other local institutions that have relevant artwork or archive materials, whether print or digital. Provides opportunities to develop expertise in interpretation of collections through a gender lens while considering the role of public education and creative thinking in community settings.

### **WGS 601. Feminist Political Thought. (3 h)**

Introduces feminist thought and its implications for the study and practice of political theory. Topics include feminist critiques of the Western political tradition and schools of feminist political theory.

### **WGS 602. Studies in Gender and Literature. (3 h)**

Addresses ways in which gender and literary practices intersect in various cultures and historical periods. Attention will be paid to the role of literature in formulating, subverting, or resisting gender norms. May be repeated for credit if topic differs.

### **WGS 603. Gender and Sexuality in Literary Adaptations. (1.5, 3 h)**

Focuses on understanding the relationship between written literature (novel, play, short story, poem) and its adaptation to another genre or medium (film, painting, video game, song, etc.) through the lens of gender and sexuality. It can also involve adapting the same literary work in the same genre or medium for different purposes, i.e. to work with a cast of differing gender or race, in a smaller or larger venue (or on the road), for a different demographic or ethnic group, or in a different geographical/historical setting. This course studies how adaptations enable us to rework literature and rethink attitudes about issues of gender, ethnicity, class, history, and identity.

### **WGS 604. Transgender History, Identity, and Politics. (3 h)**

Explores the experiences of and responses to transgender, gender non-conforming, and intersex (TGI) people in nineteenth- and twentieth-century America. We will examine how scientific/medical authorities, legal authorities, and everyday people have understood and responded to various finds of gender non-conformity.

### **WGS 606. Queer Public Histories. (3 h)**

This course explores how public history projects (oral histories, museums, archives, documentaries) document gay, lesbian, and queer communities in the U.S. Discusses how historical and contemporary LGBTQ stories have been collected and examines the various queer identities that merge through this process.

### **WGS 609. Gender, Humanities, and the Environment. (3 h)**

Provides a framework for understanding how the Humanities can contribute to civic conversations about environmental change, examining in particular the role of women environmentalist and eco-feminist in constructing global environmental narratives.

### **WGS 610. Gender, Power, and Violence. (3 h)**

A research-centered study of various issues related to violence, power, and gender in American society. Emphasizes sociological analysis of competing theoretical explanations of violence with respect to race, class, gender, religion, and sexual orientation.

### **WGS 617. Introduction to Sexuality Studies. (3 h)**

Provides an interdisciplinary grounding in the foundations of queer culture and studies, with a critical interrogation of sex, gender, sexuality, pleasure, and embodiment in popular culture, literature, health, science, and politics.

### **WGS 618. Film Lab in Women's, Gender, and Sexuality Studies. (1.5 h)**

Viewing, dissecting, and analyzing films. Fosters the skills to create complex cinematic analyses and explore feminist theoretical issues related to spectatorship.

### **WGS 619. Women Playwrights. (3 h)**

Examination of selected plays and/or performance texts by women. Focus varies, for example, looking at works by contemporary American women or early women dramatists such as Hrosvitha, Sor Juana, and Aphra Behn.

### **WGS 621. Introduction to Women's, Gender, and Sexuality Studies. (3 h)**

An interdisciplinary course that integrates materials from the humanities and the sciences, taught by WGS faculty representing at least two fields. Topics include critical methods and practical solutions, history and theory of women's gender, and sexuality studies, women in culture and society, and cross-cultural issues of gender, ethnicity, social class, disability, and sexual orientation.

### **WGS 622. Introduction to Women's and Gender, and Sexuality Studies. (3 h)**

An interdisciplinary course that integrates materials from the humanities and the sciences, taught by WGS faculty representing the least two fields. Topics include critical methods and practical solutions, history and theory of women's gender, and sexuality studies, women in culture and society, and cross-cultural issues of gender, ethnicity, social class, disability, and sexual orientation.

### **WGS 623. Feminist, Womanist, and Mujerista Theologies: Constructive Perspectives on Christian Thought. (3 h)**

Discourse featuring womanist and feminist theologies as "lived" and "living" religious orientations that shape ethical worldviews, earth communal landscapes, and experiences of spiritual life.

### **WGS 624. Queer Theologies. (1.5-3 h)**

This seminar-style reading course surveys classic and new works in queer theology. Queer theology transgresses dominant constructions of gender identity and sexuality; and as such, it can be seen as an expression of the Christian gospel that subverts human understandings of life, community, and the divine. The course explores biblical and Christian theological perspectives on sexuality, social constructions of sexuality, and issues such as power, marriage equality, and sexual ethics.

### **WGS 625. Feminist Leadership Project. (1.5 h)**

Explores the principles of feminist leadership to deepen self-awareness about personal leadership skills and gain tools for creating feminist social change. This highly interactive class welcomes students who are new to feminist thought/activism as well as those seeking to deepen their engagement with feminism. Satisfactory/Unsatisfactory.

### **WGS 626. Telling Women's Lives: Writing about Entrepreneurs, Activists, and Thought Leaders. (3 h)**

This course will use an interdisciplinary approach to address fundamental issues of female leadership by examining recent developments in long- and short-form narratives about women (biography, essays, profiles) and employing journalistic tools to interview and write profiles of women entrepreneurs, activists, and thought leaders.

**WGS 627. The Feminist Book Society. (1.5 h)**

A reading course designed to introduce students to classic and contemporary feminist texts. Emphasis on close reading, discussion, and writing. May be repeated for credit if texts differ.

**WGS 629. Politics of Gender and Sexuality: Cross-Cultural Perspectives. (3 h)**

Examines cultural constructions of gender and sexuality from a cross-cultural perspective and the relationship between feminism and cultural rights activism through time. Emphasizes how varied forms of feminisms are constituted within diverse social, cultural, and economic systems. Students consider how feminists are negotiating positions at the intersection of cultural and human rights.

**WGS 630. Gender and the Politics of Health. (3 h)**

This course examines the intersections of gender, medicine, health, and illness, with a focus on the U.S. context. Topics include: reproduction, mental illness, breast cancer, heart disease, and HIV/AIDS, among others. We explore the following questions: How have women and men interacted differently with the field of medicine, as healers, patients, and subjects of medical research? How do social and cultural norms about gender influence the definition of illness categories? What role does medicine play in defining and enforcing the boundaries of what is considered socially acceptable in terms of gender? How does gender as social role affect health outcomes?

**WGS 632. Men, Masculinity, and Power. (3 h)**

Introduces the burgeoning interdisciplinary field of masculinity studies. Students will explore the social, historical, and cultural constructions of masculinity and male roles (as fathers, sexual and romantic partners, and workers) and how these constructions differ according to race, class, sexuality, etc. In addition, the course will examine how norms about masculinity simultaneously empower men as a group and many individual men, while also disadvantaging any individual men and regulating the behavior of all men. Students will explore possibilities for challenging hegemonic forms of masculinity and for creating new types of masculinity.

**WGS 633. Sexual Politics in the United States. (3 h)**

This course explores the politics of sexuality in the United States. Drawing on feminist scholarship, queer theory, and lesbian, gay and transgender studies, we will explore different historical and theoretical approaches to thinking about issues of power and sexuality. We will discuss sexual identities and cultures, state regulation of sexuality, sexual commerce, and cultural representations of sexuality, among other topics. Throughout we will examine how other social categories such as race, class, gender, and disability intersect with the politics of sexuality.

**WGS 640. Feminist Philosophy. (3 h)**

Examines feminist approaches to philosophical theorizing. Topics may include feminist critiques of the scope and methods of mainstream philosophy, feminist approaches to ethics, epistemology and philosophy of language, and feminist conceptions of the self, sexuality, and moral agency.

**WGS 645. Girls Gone Wild: A Century of Misbehavior. (3 h)**

This course analyzes what made girls and women "bad" and "wild" in the twentieth-century United States, and how such judgments changed over time. This class engages closely with novels, short stories, movies, comics, podcasts, and an opera with an eye to what behaviors were considered appropriate, and how they interrelated with sexual attraction, with economics, and with love. We examine the relationship between being configured as a sexual object (a recipient of desire) and a sexual subject (a possessor of desire) and come to a critical understanding of how the "proper" and "improper" forms of both were constantly in flux. We ask how race, ethnicity, and queerness interacted with hegemonic concepts of beauty and desire, and whether "masculinity" and "femininity" are necessarily attached to men and women. We read theories of sex and gender, examine concepts of projection and male hegemony, and ask how men as well as women are shaped by rules of appropriate behavior.

**WGS 646. Visual Narratives: Image, Sequence, Story. (3 h)**

This class investigates the relationship of image, sequence, and story in typography, comics, woodcut novels, and photographic books, and films, as well as fiction and poetry with unusual visual elements, and then asks how these various elements offer different visual and textual expressions of sexuality. Students will conduct formalist analyses and further investigate visual narrative through creative exercises with the goal of developing an aesthetic sensibility and a technical vocabulary that enable them to discuss visual narrative with precision. Please note that some visual narrative will include graphic scenes of sexuality.

**WGS 647. Joan Didion/Edmund White: Personal/History. (3 h)**

This course examines Didion and White, two of the most important American writers of the past fifty years. Both are known for their journalism as well as their fiction, and their interest in U.S. cultural and political history, especially in terms of gender and sexuality, permeates their novels. This course analyzes three works by each author, developing themes from motherhood, sexuality, imperialism, rebellion and AIDS.

**WGS 649. Invert, Pervert, Bull Dagger, Queen: U.S. Queer Fiction in the 20th Century. (3 h)**

This class explores the history of lesbians, gay men, bisexuals, the transgendered, and other queers through fiction by and about them written over the last century in the United States. We also consider biography, artifacts of popular culture, comics, drama, and film. Topics include the relationship between homosexual desire and queerness in a broad sense; LGBTQ children; biological and psychological understandings of sexual orientation; and how social construction informs sexual identity and desire.

**WGS 650. Biocultural Perspectives on Women and Aging. (3 h)**

Examines biological, socio-psychological, and cultural issues affecting older women.

**WGS 651. Race and Ethnic Diversity in America. (3 h)**

Different race and ethnic experiences are examined through an institutional approach that examines religion, work, gender, schooling, marriage patterns, and culture from a cross-cultural perspective. Grand theoretical schemes like the "melting pot" are critiqued for their relevance in an age of new cultural expectations among the many American ethnic groups.

**WGS 658. Mothers and Daughters Literature and Theory. (3 h)**

Examines literature and feminist theories on motherhood and the mother-daughter relationship. A cross-cultural perspective is taken.



**WGS 659. Fathers and Daughters. (3 h)****WGS 662. Feminism and Theatre. (3 h)**

Introduces the student to the intersection of theater and feminism and experience its interdisciplinary lineage and academic interventions. Students will learn and apply feminist theory which looks beyond the conventional theater for a continuum of performance that includes play, ritual, sports, everyday life and social roles, as well as performance art, global and intercultural performance. Engaging with various feminist theoretical approaches from radical and liberal feminism to intersectional and transnational feminism, students will be encouraged to critically examine race, class, gender, sexuality, ethnicity, and nationality expressed on and offstage. Through readings, discussions, lectures, research and creative assignments, indoor and outdoor classroom activities, and campus events, students will explore historical and socio-political factors entangled with representation, identification, and spectatorship, and strengthen their capacity to exercise feminist practice in theater and performance.

**WGS 663. Gender and Sexuality in Contemporary Korea. (3 h)**

This course will examine gender and sexuality in Korean TV, film, K-pop, protests, and everyday performances, focusing on diverse socio-political issues within and beyond the Korean Peninsula. Topics include: the evaluation of feminism, #metoo movement, LGBTQ cultures, sex work, aging, plastic surgery industry, postcolonial and post-Korean war conflicts, and transpacific affinities.

**WGS 664. Women of Color, Feminism, and the Politics of Resistance in the US. (3 h)**

Examines historical and contemporary issues and current events affecting the lives of African American, Asian American, Latina, and Native American women. Exploring major theoretical and practical viewpoints in women's studies scholarship, the course will reveal the importance of intersectionality between race, gender, sexuality, class, and/or ethnicity in the everyday lives of multicultural women. Through arts-based civic engagement projects and activities, this course will also encourage students to formulate their own language of resistance against multiple forms of oppression.

**WGS 665. Transnational Asia and Asian American Feminism. (3 h)**

This course will analyze historical, socio-political, and cultural events as well as contemporary issues structuring the lives of Asian American women and queer community. Students will learn intersectional and transnational feminist approaches to examine race, class, gender, sexuality, ethnicity, nationality, and kinship in Asian American art and activism.

**WGS 671. Making Sense of the News through a Feminist Lens. (1-3 h)**

Inquiry into news literacy from a feminist perspective, with the intention to identify gender bias and consider questions of empowerment, exclusion, consumerism, and how to navigate the digital landscape to distinguish verified, reliable news from propaganda.

**WGS 677. Special Topics. (1.5-3 h)**

Includes such a wide range of women's, gender, and sexuality studies topics as gender issues in the 21st century, critical approaches to gender issues, and the emergence of feminist thought. May be repeated for credit if topic differs.

**WGS 680. Sexuality, Law, and Power. (3 h)**

Explores a wide variety of issues related to sexual identity and orientation by looking at the ways in which law can constrict development as well as a catalyst for change. Examines how religion and popular morality shape the law, and are shaped by it.

**WGS 681. Gender and the Law. (3 h)**

This course will examine how the law affects women's lives in a number of contexts. The class will consider a number of different areas, including but not limited to employment, education, family responsibilities, violence against women, and other issues affecting women's bodies, including pornography and prostitution. The class will also review a number of feminist legal theories and issues relating to the intersection of gender with race and class.

**WGS 683. Race, Gender and the Courts. (3 h)**

This course examines the impact of state and federal court cases upon the evolution of race and gender relations in the U.S. from 1789 to the present. Each case is placed within the political, economic and social historical context for the given time periods. Race includes Native Americans, African Americans, Asian Americans, and Latino Americans. This class will analyze government intervention, inaction, and creative interpretation.

**WGS 688. South Asian Women: Religion, Culture, and Politics. (3 h)**

Using a feminist and post-colonial perspective, and taking into account the histories, experiences, and lives of South Asian women this course, examines the intersection of religion, race, and gender from both a theoretical and a practical point of view. It focuses on issues of representation and identity formation, recognizing how categories such as "South Asian" and "women" become tools for a simultaneous understanding of both culture and gender, creating a place for both oppression and empowerment.

**WGS 696. Independent Study. (1-3 h)**

Independent projects in women's gender, and sexuality studies, which either continue study begun in regular courses or develop new areas of interest. By prearrangement. May be repeated for credit.

**WGS 697. Public Engagement in Women's, Gender, and Sexuality Studies. (1.5, 3 h)**

This class provides an opportunity for students to engage in work and research that is shared with the broader public, either on campus or in a local community. A maximum of 3 hours may apply to the major or minor.

**WGS 698. Theory and Practice of Women, Gender, and Sexuality Studies. (3 h)**

Examines the major themes and terminology in Women, Gender, and Sexuality Studies, with focus on its diverse and multicultural expressions through time. Themes to be explored include schools of feminisms, interlocking systems of oppression and the connection between theory and practice.

**WGS 699. Research Seminar in Women, Gender, and Sexuality Studies. (3 h)**

A capstone, research-centered course in which students complete a significant research or creative project of their choosing situated within the field of Women's, Gender, and Sexuality Studies.

## Writing (WRI)

**WRI 606. Special Topics in Rhetoric and Writing. (1.5, 3 h)**

Study of significant rhetorical or writing theories and practices focused on one area of study. May be repeated once for credit.

**WRI 640. Practice in Rhetoric and Composition. (3 h)**

Training and practice in rhetorical analysis and composition. Students work on developing effective composing processes and strategies, then put them into practice toward a variety of purposes. Course topics vary across semesters. May be repeated once for credit.

**WRI 641. Writing Center Pedagogy. (3 h)**

Introduction to composition pedagogy and writing center theory and practices, with special emphasis on one-to-one and small group peer tutoring techniques.

**WRI 644. Magazine Writing. (3 h)**

Learn and practice the skills needed to produce magazine stories for publication. Focusing on a single topic of their own choosing, students learn advanced principles of interviewing, document research, story structure, character development, and explanatory journalism as they read and analyze some of the best magazine stories written over the past thirty years.

## Governing and Advisory Boards

### The Board of Trustees

*\*Effective as of July 1, 2023*

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 Mr. Andrew J. Schindler, *Winston-Salem, NC*  
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 Dr. Lloyd P. Tate, Jr., *Southern Pines, NC*  
 Kyle A. Young, M.D., *Greensboro, NC*

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**Assistant Secretary:** Ms. Anita M. Conrad

## Graduate Council and Faculty

### The Graduate Council (2022-2023)

Name	Title	E-mail
Dwayne Godwin, PhD	Dean (Bowman Gray)	dgodwin@wakehealth.edu
Brad Jones, PhD	Dean (Reynolda)	jonesbt@wfu.edu
Allyn Howlett, PhD	Assistant Dean (Bowman Gray)	ahowlett@wakehealth.edu
Jennifer Rogers, PhD	Associate Dean for Students (Reynolda)	rogersjl@wfu.edu
Ron Von Burg, PhD	Associate Dean for Academic Initiatives (Reynolda)	vonburl@wfu.edu
Chaowei Zhu, PhD	Assistant Dean for Global Initiatives (Reynolda)	zhuc@wfu.edu

### Graduate Council (3 year terms)

Name	E-mail	Term
Adam Hall, Biomedical Engineering	arhall@wakehealth.edu	Term Expires: 2023
Fred Salsbury, Physics	salsbufr@wfu.edu	Term Expires: 2023
Sarah McDonald Esstman, Biology	mcdonasm@wfu.edu	Term Expires: 2023
Ravi Singh, Cancer Biology	rasingh@wakehealth.edu	Term Expires: 2024*
Elizabeth Jensen, Clin Pop & Transl Sci	ejensen@wakehealth.edu	Term Expires: 2024*
Jeff Katula, Health & Exercise Science	katulaj@wfu.edu	Term Expires: 2024
Christian Waugh, Psychology	waughce@wfu.edu	Term Expires: 2024
Lucy McGowan, Statistics	mcgowald@wfu.edu	Term Expires: 2025
Grey Ballard, Computer Science	ballard@wfu.edu	Term Expires: 2025*
Leslie Poole, Biochem & Molecular Bio	lbpoole@wakehealth.edu	Term Expires: 2025*
Mark Ferris, Neuroscience	mferris@wakehealth.edu	Term Expires: 2025
Tracy Criswell, Int Phys & Pharm	tcriswel@wakehealth.edu	Term Expires: 2025*

\*serving second term

### Graduate Faculty Representative to Faculty Senate (4 year term)

Name	E-mail	Term
Kerry Danelson, Biomedical Engineering	kdanelso@wakehealth.edu	Term: 2022-2026
Melissa Shields Jenkins, English	jenkinms@wfu.edu	Term: 2021-2025

## The Graduate Faculty

Please visit the Graduate School's website (<https://graduate.wfu.edu/faculty-search/>) for a current list of all graduate faculty with their year of appointment and department affiliations.

## The Administration

*Administration reflects leadership as of July 1, 2022. Year following name indicates year of hire.*

## Graduate School of Arts and Sciences

Dwayne Godwin (1997)  
 Dean, Biomedical Sciences  
 BA, University of West Florida; PhD, University of Alabama (Birmingham)

Bradley T. Jones (1989)  
 Dean, Arts and Sciences  
 BS, Wake Forest University; PhD, Florida

Jennifer Rogers (2015)  
 Associate Dean for Graduate Students, Arts and Sciences  
 BA, UNC-Greensboro; MA, Wake Forest, PhD, Syracuse University

Ron Von Burg (2012)  
 Associate Dean for Continuing Studies, Arts and Sciences  
 BA, BS, Arizona State University; MS, PhD, University of Pittsburgh

Dixie Ross (2008)  
 Assistant Dean for Finance and Administration, Arts and Sciences  
 BA, MBA, Vanderbilt University

## Administration – Reynolda Cabinet

Susan R. Wente (2021)  
 President  
 BS, University of Iowa; PhD, University of California Berkeley

Michele K. Gillespie (1999)  
 Provost  
 BA, Rice; MA, PhD, Princeton University

Jane Aiken (2019)  
 Dean, School of Law  
 BA, Hollins College; JD, New York University; LLM, Georgetown University

Ashleigh Brock (2021)  
 Chief of Staff, President's Office  
 BA, University of Richmond; MA, Michigan State University; PhD, College of William and Mary

Andrew R. Chan (2009)  
 Vice President, Innovation and Career Development  
 BA, MBA, Stanford

John Currie (2019)  
 Director of Athletics  
 BA, Wake Forest University; MS Tennessee

James J. Dunn (2009)  
 Special Assistant to the President & CEO, Verger Capital Management, LLC  
 BS, Villanova

Julie A. Freischlag, MD (2018)

CEO, Wake Forest Baptist Medical Center, Dean of Wake Forest School of Medicine and Chief Academic Officer of Atrium Health Enterprise  
BS, University of Illinois; MD, Rush University

Charles Iavocou (2001)  
Dean, School of Professional Studies  
BS, University of Vermont; PhD, University of British Columbia

Julia Jackson-Newsom (2021)  
Senior Advisor for Planning and Partnerships  
BA, Wake Forest University; MS, PhD, Penn State University

Shea Kidd Brown (2022)  
Vice President for Campus Life  
BA, University of Southern Mississippi; MEd, University of Georgia; PhD, University of Memphis

Eric Maguire (2019)  
Vice President for Enrollment  
BA, Muhlenberg College; MA, Indiana University

Anthony P. Marsh (1996)  
Interim Dean of the College  
BPE, MEd, Western Australia; PhD, Arizona State

B. Hofler Milam (2010)  
Executive Vice President and CFO  
BS, MBA, Wake Forest University

James Reid Morgan (1979)  
Senior Vice President and General Counsel  
BA, JD, Wake Forest University

Mark A. Petersen (2008)  
Vice President for University Advancement  
BA, Brandeis; MA, University of Southern California

Annette L. Ranft (2022)  
Dean, School of Business  
BS, Appalachian State University; MS, Georgia Institute of Technology;  
PhD, University of North Carolina Chapel Hill

José Villalba (2011)  
Vice President for Diversity and Inclusion and Chief Diversity Officer  
BS, MEd, EdS, PhD, Florida

Jonathan L. Walton (2020)  
Dean, School of Divinity  
BA, Morehouse College; MDiv and PhD, Princeton Theological Seminary



# THE SCHOOL OF DIVINITY

The course offerings and requirements of the School of Divinity are continually under examination, and revisions are expected.

This Bulletin presents the offerings and requirements in effect at the time of publication and in no way guarantees that the offerings and requirements will remain the same. Every effort is made to provide advance notice of any changes.

## Academic Calendar

### Fall Semester 2023

Date	Day	Event
August 17-18	Thursday-Friday	Faculty retreat
August 22-24	Tuesday-Thursday	New student orientation
August 24	Thursday	New student advising
August 28	Monday	Classes begin
September 1	Friday	Last day to add first part-of-term classes
September 4	Monday	Labor Day (no Divinity classes; University classes meet)
September 12	Tuesday	Last day to add full-term classes
September 13	Wednesday	Last day to drop a first part-of-term class
September 26	Tuesday	Incomplete work from past term due to instructor
September 29	Friday	December graduation application deadline
October 2	Monday	Last day to drop a full-term class
October 2	Monday	Last day to change from a letter grade to pass/fail in an approved full-term class
October 12-15	Thursday-Sunday	Fall Break (No Thursday and Friday classes)
October 17	Tuesday	Last class day first part-of-term
October 18	Wednesday	Classes begin second part-of-term
October 24	Tuesday	Last Day to add second part-of-term classes
October 24	Tuesday	Final grades for first part-of-term classes due by noon
October 30-Nov 3	Monday-Friday	Spring registration advising
November 3	Friday	Last day to drop a second part-of-term class
November 6-8	Monday-Wednesday	Registration begins for Spring 2023
November 22-26	Wednesday-Sunday	Thanksgiving Break (no classes)
December 8	Friday	Classes end

December 11-16	Monday-Saturday	Fall final exams
December 20	Thursday	All Fall final grades due by noon

### Spring Semester 2024

Date	Day	Event
January 17	Wednesday	Classes begin
January 19	Friday	May graduation application deadline
January 23	Tuesday	Last day to add first part-of-term classes
January 31	Tuesday	Last day to add full-term classes
February 2	Friday	Last day to drop a first part-of-term class
February 15	Thursday	Incomplete work from past term due to instructor
February 21	Wednesday	Last day to drop full-term classes
February 21	Wednesday	Last day to change from a letter grade to pass/fail in an approved full-term class
March 5	Tuesday	Last class day first part-of-term
March 6	Wednesday	Classes begin second part-of-term
March 9-17	Saturday-2nd Sunday	Spring Break (no classes)
March 12	Tuesday	Final grades first part-of-term classes due by noon
March 19	Tuesday	Last day to add second part-of-term classes
TBD		Registration for Summer 2023
March 25-28	Monday-Thursday	Fall registration advising
March 29	Friday	Last day to drop second part-of-term classes
March 29	Friday	Good Friday observed (no Divinity classes; University classes meet)
April 1-3	Monday-Wednesday	Registration begins for Fall 2024
May 1	Wednesday	Classes end
May 3-10	Friday-Friday	Spring final exams
May 9	Tuesday	Final grades for May degree candidates due by noon
May 18	Saturday	Hoodying Ceremony
May 20	Monday	Commencement
May 21	Tuesday	Final grades for non-degree candidates due by noon

### Mission and Values

The Wake Forest University School of Divinity is a graduate, professional school that is Christian by tradition, Baptist in heritage, and ecumenical in outlook. Consistent with Wake Forest’s

commitment to academic excellence and in the spirit of the University motto, *Pro Humanitate*, the School of Divinity prepares leaders informed by a theological understanding of vocation. Through imaginative courses and diverse programs of community engagement, students are equipped to be agents of justice, reconciliation, and compassion in Christian churches and other ministries.

## Guiding Principles

**Foster academic excellence:** The School of Divinity faculty fosters critical scholarship across the varied disciplines of theological education through rigorous academic inquiry in the classroom and through research and publication.

**Promote interdisciplinary exploration:** The School of Divinity facilitates interdisciplinary studies that promote dialogue and learning through interaction with faculty and students in other schools and departments of the University.

**Encourage global perspectives:** Through theological reflection, critical inquiry, and ministry formation, the School of Divinity encourages students to explore diverse religious, cultural, and ethnic perspectives within both national and international contexts.

**Embody hospitality:** The School of Divinity seeks to cultivate a community of learners that celebrates diverse religious, racial, ethnic, cultural, gender, and sexual identities and that fosters accessibility for all its members.

**Nurture spiritual growth:** The School of Divinity provides opportunities for spiritual growth and exploration of personal and communal spiritual practices.

**Collaborate with faith communities:** The School of Divinity joins with churches and other faith communities to create opportunities for mutual learning and critical dialogue, including student internships and various forms of mentoring, consultation, community education, and shared advocacy.

**Contribute to the University's mission:** The School of Divinity shares in the University's commitment to *Pro Humanitate* through explorations of religious identity, vocation, social responsibility, and public engagement.

## Hospitality and Language

The Wake Forest University School of Divinity seeks "to cultivate a community of learners that celebrates diverse religious, racial, ethnic, cultural, gender, and sexual identities and that fosters accessibility for all of its members."

Theological commitments lead the faculty to identify language use as one way we embody and practice hospitality. We invite all members of our learning community to join us in paying attention to how we use language and in exploring new language practices that cultivate hospitality. Each faculty member approaches language in different ways depending on our areas of academic expertise and our individual theological perspectives and commitments. We write and speak with an awareness of the historical, political, and societal contexts out of which the theological language emerges and how language can impact readers and listeners. Out of this diversity, faculty conversations about language are lively and vibrant. We invite students to participate in these intentional conversations and to learn to think theologically and creatively about language.

The following suggested practices represent academic expectations for language use in public speech and writing, including scholarly activity (lectures, presentations, discussions, handouts, and publications), communications (official and internal), and worship (sermons, liturgy, and music). The faculty offers these expectations in order to educate leaders who practice hospitality in a range of settings. Each faculty member is committed to discussing these expectations as they relate to course content and assignments and to including guidelines for classroom participation and written work in course syllabi.

## Suggested Practices

**Language about God:** Theologians, ministers, and worship leaders have an opportunity to give voice to the variety and richness of God's presence with God's people. Language used in preaching and worship as well as in academic writing acknowledges and cultivates this richness when it explores diverse ways to write, speak, pray, and sing about and to God.

*Examples:*

1. Our language choices can reflect the richness of the divine. Varied metaphors can be used to speak to and about God. We can name God's attributes. Examples: Rock of Salvation, Fountain of Life, the First and the Last, Refuge and Strength, Shelter from the Storm. We can address God out of our experience of God. Examples: Creator, Mother, Giver of All Good Things, Teacher, Father, Guardian, Redeemer, Friend, Healer.
2. Writers and speakers are encouraged to seek balance when using pronouns to refer to God, for example, alternating between gendered pronouns.

**Language about Creation and Humanity:** Hospitable language acknowledges and affirms the value of all creation and the humanity of all people. While language about God is a theological choice, language about people needs to reflect standard grammatical practices of inclusivity.

*Examples:*

1. Hospitable language should acknowledge and reflect connections between humans and the non-human context upon which life depends.
2. Words like "people," "us," "humanity," "humankind," etc., should be used in place of words that identify all human experience with the experience of men.
3. Non-gendered language should be used whenever possible; for example, writers and speakers should use "clergy" or "clergy person" instead of "clergyman."
4. Writers and speakers should use person-first language such as "persons with disabilities" instead of "the disabled," or "people who live in poverty" instead of "the poor."
5. Language should affirm diverse and multiple racial, ethnic, cultural, gender, and sexual identities by acknowledging varied life narratives. Writers and speakers should avoid language that generalizes human experience (e.g., "all" or "we") and that stereotypes persons or groups. Writers and speakers should use specific examples, rather than generalizations about people or groups, when illustrating a point.

## The Community

Wake Forest University is located in Winston-Salem, North Carolina, a city rich in history and culture. Salem was founded in 1766 by German Moravians as a congregational town, and the nearby city of Winston

was established in 1849. As the area became known for its tobacco, furniture, and textile industries, completion of the railroad line furthered the economic growth of the Winston and Salem communities. In 1913 the two cities merged, and although Winston-Salem is now North Carolina's fourth largest city, it retains its early Southern charm, and visitors can still stroll the cobblestone streets of Old Salem.

In addition to Wake Forest University, Winston-Salem is home to Winston-Salem State University, Salem College, the University of North Carolina School of the Arts, and Forsyth Technical Community College. These institutions, as well as the city's rich offering of cultural, historical, social, and sporting events, combine to make Winston-Salem a unique and pleasurable place to live.

Nestled in the rolling hills of North Carolina's western Piedmont, Winston-Salem offers its visitors and residents the best of many worlds. Winston-Salem is only 2.5 hours away from the Blue Ridge Mountains, and only 4 hours from the beautiful beaches of the Carolinas. The climate is mild, but the Winston-Salem area still experiences all four seasons, with average high summer temperatures around 87° F and average high winter temperatures around 50° F. In addition to the versatility offered by its location, Winston-Salem is also a city of social diversity. The city boasts a cost of living that is at or below the national average.

With an estimated population of over 200,000, Winston-Salem offers most of the activities enjoyed in larger cities with the appeal of a small town. For art lovers, Winston-Salem provides the Southeastern Center for Contemporary Art (SECCA), the Museum of Anthropology, the Museum for Early Southern Decorative Arts, and the Reynolda House Museum of American Art, as well as the Sawtooth Center, which features interactive art exhibits.

Theater buffs will find Winston-Salem a delight. In addition to performances at the city's universities and the University of North Carolina School of the Arts, Winston-Salem is home to several community theaters and the National Black Theatre Festival. Nearby High Point is home to the North Carolina Shakespeare Festival. The RiverRun International Film Festival, one of the premier film festivals in the Southeastern United States, is held in Winston-Salem in spring. The festival showcases a rich blend of works by independent, international, and student filmmakers.

Sports fans and nature lovers will enjoy Winston-Salem as well. The city has over 40 parks and big-time sports excitement with minor league professional baseball and hockey teams.

## Admissions and Financial Aid

- Admissions
- Financial Aid and Scholarships
- Graduate Hall Director and Graduate Assistant
- Student Health Insurance
- Tuition, Fees, and Related Costs

## Admissions

### Applying to the Master of Divinity Program

All applicants to the Master of Divinity program must have earned a baccalaureate degree from a member institution of the Association of Universities and Colleges or an institution accredited by a United States

agency recognized by the Council for Higher Education Accreditation and possess at least a 2.80 GPA on a 4.00 point scale. A well-rounded liberal arts degree is the best preparation for the MDiv degree program. Prior coursework in religious studies, while not required, is certainly appropriate preparation.

Applicants should show evidence of personal integrity, spiritual and emotional maturity, qualities associated with effective leadership, strong communication skills, creativity and personal initiative, and intellectual discernment. As a University-based graduate school, the School of Divinity seeks students who will constructively engage the diversity of the University, with openness to learning from persons of other religious traditions and from those who hold divergent values and commitments.

Applicants are selected on the basis of academic potential for graduate-level work, genuine promise for ministry, a clearly articulated commitment to Christian vocation, and evidence that the applicant will benefit from as well as enhance theological education at Wake Forest University.

Graduate theological education and vocational formation require a substantial commitment of one's time and energy. The MDiv program is designed with the assumption that students will be enrolled full-time. Individuals interested in limited enrollment should consult with the Office of Admissions before applying to the program.

Applicants should complete the online application process at <https://divinity.wfu.edu/apply> (<https://divinity.wfu.edu/apply/>). In addition to the application, candidates must supply the following supporting documents:

1. **official academic transcripts** from prior educational institutions attended. This includes any work done at a community or technical college, study abroad, or any other school at which the applicant has taken coursework. Those whose undergraduate studies are in process need to have an official transcript of work completed to date sent to the admissions office directly from the institution. Additionally, applicants must submit a final transcript documenting the completion of their degree.
2. **three letters of recommendation:** the requirement includes providing at least two academic references. Applicants are encouraged to provide a pastoral recommendation. Those who have been out of school for five or more years may provide professional recommendations from an employer or community leader that speak to the applicant's character.
3. **the admissions essay:** additional information can be found on the online application and at <https://divinity.wfu.edu/admissions/apply-now/application-materials/>.
4. **a well-organized resume** that provides a brief summary of the applicant's educational background, job experience, vocational aspirations, leadership goals and accomplishments, professional affiliations, honors and awards, extracurricular activities, skills, personal qualities, and interests and hobbies.
5. **an application fee** of \$75. The application fee can be paid using a credit or debit card on the online application, or by submitting a check or money order, made payable to Wake Forest University, to the Office of Admissions. The School of Divinity also offers application fee waivers based on qualified program participation. If the applicant has participated in one of the programs below within the last two years, s/he may be eligible for an application fee waiver. Applicants must contact their director/coordinator to request a letter verifying participation in the program and the dates of participation. The letter should be sent to the Office of Admissions in a sealed envelope with the back flap initialed by the authorizing official.

*AmeriCorps, Bill and Melinda Gates Millennium Scholar, Bonner Scholars/Leaders, Careers Opportunity Research/NIHM (COR/NIHM), currently enrolled School of Divinity students, currently serving in the U.S. Military, Institute for Recruitment of Teachers (IRT), Leadership Alliance Summer Research Early Identification Program, Ronald McNair Post-baccalaureate Achievement Program, Mellon Minority Undergraduate Fellows Program, National Association of African American Honors Programs (NAAAHF), National College Advising Corps (NCAC), Organization of American States (OAS), Peace Corps, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), Teach for America*

Graduate Record Exam (GRE) scores are not required. Once an application is complete, the file is reviewed. One of the following decisions will be made: full admission, provisional admission, probationary admission, wait list, or decline of admission.

A limited number of students (no more than 10% of the entering class) may be admitted on academic probation at the discretion of the admissions committee. Students admitted on probation must achieve a minimal GPA of 2.5 in the School of Divinity. They will be expected to make use of the Writing Center and other academic resources. The performance of students admitted on academic probation will be reviewed after their first semester to determine whether they should continue on probation.

## International Students

**International applicants whose native language is not English are required to submit official results of the Test of English as a Foreign Language (TOEFL) with the application for admission.** Proficiency in written and oral English is required for enrollment in an academic program. The TOEFL must have been taken during the past five years. A TOEFL score of 600 paper-based, 250 computer-based, or 95 internet-based are the minimums required with a minimum score of 20 or higher in each of the four sub-areas. The TOEFL is administered at test centers throughout the world at different times during the year. Information on how to register and where to take the test is available at [ets.org/toefl](https://ets.org/toefl) (<https://ets.org/toefl/>). If an applicant successfully graduated from an accredited college or university in the United States, a TOEFL waiver can be requested. A decision regarding the waiver will not be made until an application for admission has been completed.

To meet requirements for entry into the United States for study, applicants must demonstrate that they have sufficient financial resources to meet the expected costs of their educational program. Applicants must provide documentary evidence of their financial resources before visa documents can be issued. United States laws and regulations restrict the opportunity for international students to be employed. Students may be allowed to work off campus only under special circumstances. Many spouses and dependents of international students are not allowed to be employed while in the United States.

International students and their dependents residing in the United States are required to purchase or provide proof of health insurance. Wake Forest University requires that all students registered on a full-time basis be covered by a health insurance policy that meets certain coverage criteria defined by the university. Students have the option of either purchasing coverage through the university plan (Student Blue) or waiving this coverage by proving that they are currently covered by a health insurance policy that meets or exceeds the established criteria. For detailed information as it pertains to the Student Blue plan or the waiver process, please visit the web site at <http://sip.studentlife.wfu.edu/>.

## Transfer Students

The prospective transfer student (a student who began his or her graduate theological education at a school other than Wake Forest University School of Divinity) may apply for admission in the normal manner and, additionally, write a letter stating the reasons for transferring and provide a letter of good standing from the theological school from which transfer is being made. Transfer credit is awarded through the Office of Academic Affairs at the recommendation of the faculty committee on curriculum and academic policy. Transfer credit will only be given for courses in which the student earned a grade of B- or higher and a student may not transfer more than 24 hours of credit into the Master of Divinity program. Transfer credit is not normally given for courses taken more than eight years before entrance into the School of Divinity or for courses that have been utilized or will be utilized for another degree program. Prospective transfer students should review the entire policy on transfer of academic credit on page 47 of the Bulletin.

## Admissions Visit

**All applicants are strongly encouraged to visit the School of Divinity, to observe a class, meet faculty and staff, and tour Wake Forest University's Reynolda Campus.** The School of Divinity offers several opportunities throughout the year that allow prospective students to experience and learn about the school. Individual campus visits can be arranged through the Office of Admissions or online at <https://divinity.wfu.edu/admissions/visit-campus/>.

## Admission to the School of Divinity

**Initial offers of admission will be sent out upon review of the completed application.** Preference for merit-based scholarships is given to those MDiv students whose applications are complete by January 15. Approved applicants will continue to be admitted on a rolling schedule until the class is full.

Approved applicants are required to reply to an offer of admission by submitting a \$150 nonrefundable admission deposit on or before the date specified in their acceptance letters. Upon matriculation, the \$150 deposit is used to open the student's financial account and is subtracted from the first semester fees.

## Dual Degree Programs

**Applicants interested in dual degree programs must apply separately to both the School of Divinity and the appropriate graduate or professional program of interest.** The School of Divinity has dual degree programs in Bioethics (MDiv/MA), Education (MDiv/MA), Counseling (MDiv/MA), Law (JD/MDiv), and Sustainability (MDiv/MA). Review the Programs of Study section of the Bulletin for requirements, program structures, and procedures related to dual programs. Acceptance into one of the programs does not guarantee acceptance into the other.

### MDiv/MA in Bioethics

#### Admissions

Admission to the dual degree program is a two-tiered process. Interested students must apply separately to the School of Divinity and the Graduate School of Arts and Sciences and be accepted for admission by both schools. These applications do not need to be simultaneous, but students should indicate on each application their desire to be considered for the dual degree program. Alternatively, students may submit a separate application to enroll in the dual degree program if already admitted to either School. Applications will be reviewed separately by each program's admissions committee. Typically, students



make application to the dual degree program by the time they complete one semester in either School. A joint admissions committee composed of members from both Schools will make final admissions decisions. The joint committee will also oversee and review admissions policies for the dual degree. The Graduate Record Exam is typically required for application to the bioethics program, but can be waived under certain circumstances. (<http://bioethics.wfu.edu>).

### **Tuition and Fees**

During five semesters of the program, students pay full-time divinity school tuition and are eligible for divinity school financial aid. For at least two additional semesters, students are enrolled in the bioethics program through the Graduate School and pay Graduate School tuition. School of Divinity financial aid is not available to students during these two semesters. A limited amount of aid may be available through the bioethics program.

## **MDiv/MA in Counseling**

### **Admissions**

Applicants to the MDiv/MA in Counseling dual degree program must be accepted for admission by both the Department of Counseling and by the School of Divinity. Applicants are required to submit a separate application to each school by January 15. Applications for the Counseling Program are submitted through the Graduate School of Arts and Sciences at <http://graduate.wfu.edu>. Applications for the School of Divinity are submitted directly to the School of Divinity at <https://divinity.wfu.edu>.

Admissions decisions for the degree in counseling are based on consideration of a combination of criteria: college grade-point average, Graduate Record Examination (GRE) scores, recommendations, professional commitment, work or volunteer experience in the human services field, and suitability for the profession. Candidates for the counseling program are not required to have a specific undergraduate major or minor. Applicants being considered for admission are required to have a personal interview with program faculty. The successful completion of a criminal background check may be required as a condition of acceptance.

### **Campus Interviews**

Based on the material contained in their application, an applicant may be invited to campus for personal interviews with the admissions committees in both Counseling and in Divinity. These interviews are typically scheduled for late February/early March. If invited, applicants must arrange to appear in person even if they have previously visited one or both departments. Divinity and Counseling will work together to coordinate the dates and timing of the interviews.

After the interview phase, a joint admissions committee composed of members from both schools will make the final selection. Unsuccessful applicants to the dual degree program have the option of applying to the School of Divinity by July 25 but would have to wait until January of the following year to apply for admission to the Department of Counseling or to reapply to the dual degree program.

### **Financial Assistance**

During the Counseling degree portion of the program, accepted students will be awarded partial tuition scholarships that cover about 80% of the cost from the Graduate School of Arts and Sciences for the two years they are enrolled in the Department of Counseling portion of the program. Each student also receives a reconditioned laptop computer.

## **MDiv/MA in Education**

### **Admissions**

Candidates for the dual degree must apply both to the Graduate School of Arts and Sciences and the School of Divinity, following the admissions requirements of the respective programs, and be accepted to each program in order to pursue a dual degree. A joint committee consisting of faculty and staff both from the School of Divinity and the Department of Education will make final determinations about an applicant's suitability for the dual degree.

### **Tuition and Fees**

During the seven semesters and two summers of the program, students pay full-time divinity school tuition and are eligible for divinity school financial aid only during the semesters in which the student is enrolled in the divinity school.

### **Financial Assistance**

During the Education portion of the dual degree program, partial scholarships are available typically covering approximately 80% of tuition in the graduate school during the full regular terms (Fall/Spring) and full tuition scholarships are available for the summer.

## **MDiv/MA in Sustainability**

### **Admissions**

Candidates for the dual degree must apply both to the Graduate School of Arts and Sciences and the School of Divinity, following the admissions requirements of the respective programs, and be accepted to each program in order to pursue a dual degree. A joint committee consisting of faculty and staff both from the School of Divinity and Center for Energy, Environment, and Sustainability will make final determinations about an applicant's suitability for the dual degree. These applications do not need to be simultaneous, but students should indicate on each application their desire to be considered for the dual degree program. Alternatively, students may submit a separate application to enroll in the dual degree program if already admitted to either School.

### **Tuition and Fees**

During the eight semesters of the programs, students pay full-time divinity school tuition and are eligible for divinity school financial aid only during the semesters in which the student is enrolled in the divinity school.

## **JD/MDiv**

### **Admissions**

Separate applications for admission must be made to the School of Law and the School of Divinity. The School of Law requires the Law School Admissions Test (LSAT). Once a student is admitted to each school's degree programs, final approval for admittance to the accelerated, dual degree program is decided by a joint admissions committee.

### **Fifth Year**

During the fifth year, students register in and pay tuition to the School of Divinity during one semester, subsequently registering in and paying tuition to the School of Law during the remaining semester. During the School of Divinity fifth year semester, students may take courses in the School of Divinity, courses cross-listed with the School of Law, or courses offered by other schools or departments of the University as approved by the School of Divinity. A similar process applies to the School of Law fifth-year semester.

## Applying for Part-Time Enrollment

**Part-time enrollment (degree seeking):** Students admitted to the MDiv program may pursue the degree on a part-time basis with permission of the senior associate dean and the associate dean of academic affairs. Part-time students who are seeking a degree may be eligible for scholarship assistance in the fall and spring semesters. If eligible, students can receive aid for part-time study for up to four semesters. Part-time students are encouraged to move to full-time after four semesters. Students who take at least 4.5 credit hours may also be eligible for federal aid. Part-time students must complete the MDiv program within six years of matriculation. Students may appeal to the associate dean of academic affairs for an extension to the six-year rule, but financial aid is limited to six years of part-time study and three years of full-time study. Those who apply for this status should know that previous higher education loans may no longer be deferred if they drop below 9 credit hours per semester.

**Exploratory, nondegree enrollment:** Persons seeking to determine if divinity school is an appropriate option may apply for exploratory status. Exploratory student status is also a restricted category of admission for people who do not have need of a degree program and who desire access to graduate theological education for personal or professional enrichment. Courses are taken for credit. If approved, these students may take six credits per semester for one academic year. No financial aid is available for students in this category. Exploratory students who wish to enter the Master of Divinity program must complete the full admissions process. Courses taken during the exploratory process may be transferred into the Master of Divinity program.

**Temporary enrollment:** Students seeking credit to transfer to other degree programs may apply for temporary enrollment status. Temporary students may enroll in School of Divinity courses after completing admissions materials specified by the Office of Admissions. No financial aid is available.

## Spring Semester Admissions

Applicants are strongly encouraged to begin their studies in the fall semester of the school year. This offers a more meaningful sense of continuity and cohort learning for all students who begin the program. The admissions committee gives priority to those applying for admission in the fall semester. Openings for admission in the spring semester are possible under special circumstances, but the number of spaces available may vary from year to year.

## Deferment

Applicants admitted for fall semester may opt to defer for up to one year by submitting a \$150 nonrefundable admission deposit on or before the date specified in their acceptance letters. Applicants will need to submit an additional \$150 nonrefundable admissions deposit by the following year's regular admission deadline. Beyond one year students must reapply for admission. Although not guaranteed, the School of Divinity will make every effort to award the same amount of scholarship monies agreed upon before the deferment.

## Auditors

School of Divinity students, other Wake Forest students, and persons in the community may be admitted to select School of Divinity courses as auditors. A list of courses open to auditors is available in the Office of Academic Affairs or online at [https://divinity.wfu.edu/continuing-](https://divinity.wfu.edu/continuing-education-and-programs/audit-a-course/)

[education-and-programs/audit-a-course/](https://divinity.wfu.edu/continuing-education-and-programs/audit-a-course/). Applications for auditor status are accepted through the Office of Academic Affairs.

Students can elect to audit some courses rather than take them for a letter grade. Students can register for courses in the "audit" mode with approval of the course instructor and their faculty adviser. Each course instructor establishes guidelines for auditor participation. No course credit is earned for audited courses and audited courses do not count toward the overall degree requirements. Audited courses will appear on a student's degree audit and official transcript. Students who want to audit courses outside of the School of Divinity must request permission from the school or department in which the course is offered. Students who want to change a course enrollment from grade mode to audit mode must do so on the first day of classes in any semester.

## Financial Aid and Scholarships

**Institutional financial aid comes in the form of merit-based scholarships and federal aid comes in the form of work-study and loans.** Scholarship funds are available through the gifts of individuals, families, churches, organizations, and foundations. Merit-based scholarships are awarded to candidates who demonstrate in their applications both high academic achievement and outstanding promise for ministry. These scholarships are awarded to full-time degree-seeking students and are usually renewable for up to three years (six semesters) based on continued academic success. Fellowship recipients must maintain a minimum GPA of 3.3 or higher, while all other scholarship recipients must maintain a 2.5 GPA. Merit awards may range from 33% to 100% of tuition and a stipend.

There is no application for School of Divinity scholarships; students are automatically considered for all scholarships. The School of Divinity has received generous gifts to fund scholarships for students. During the process of awarding scholarships, these funds may be noted in the scholarship award letter to specify where monies have been designated and for students to be able to thank donors for their generosity. All candidates for admission are given consideration for these awards.

Priority for merit-based scholarships is given to applicants who apply by January 15.

## Fellowships and Scholarships

**The School of Divinity is committed to assisting students in meeting basic educational and living expenses while they are enrolled.** Merit scholarships are granted to candidates who demonstrate in their application high academic achievement and outstanding promise for ministry. These scholarships are awarded to full-time students enrolled in degree programs. Most are renewable for three years, but there is no automatic increase in the amount awarded to compensate for increases in tuition and fees. Scholarships only cover tuition, not living expenses. All candidates for admission are considered for these awards. Scholarships and fellowships are awarded from funds provided by generous gifts to the University from individuals and organizations.

## Federal Aid

**Need-based financial aid is granted by the Financial Aid Office of Wake Forest University.** This includes state and federal loans, grants, and work-study. All students who are U.S. citizens and wish to be considered for scholarships and other financial aid must complete the FAFSA form. Students use their tax return from the previous year to complete the FAFSA. Divinity students are considered independent students on the FAFSA even if they are still claimed as dependents on their parents' tax returns. For more information, visit <http://grad.financialaid.wfu.edu/>, the

Graduate School and School of Divinity Financial Aid website. The FAFSA form is available here (<https://studentaid.gov/h/apply-for-aid/fafsa/>). Non-degree seeking students and international students are ineligible for federal aid programs.

Federal student loans pay directly to a student's account immediately before the first day of class each semester. If a student's grants, scholarships, and loans exceed their Wake Forest University charges, then the student is eligible for a refund from student billing to use for living expenses. The process for generating credit balance refunds begins the first week of class.

Federal Work-Study positions are available in the School of Divinity for qualified students. Students may earn up to \$2,000 per year. Positions are posted the first week of classes. Students apply to the designated contact person on the available jobs. Work-study is overseen by Khelen Kuzmovich, Academic Skills Coordinator, in the School of Divinity.

## Veterans Educational Benefits

**The US Department of Veterans Affairs (VA) has approved Wake Forest University School of Divinity as an eligible institution at which students may use its Education Benefit Programs.** Wake Forest University's "school certifying officials" for VA Education Benefits are happy to assist recipients by completing enrollment certifications to the VA. Please contact the Student Financial Aid Office with any questions, concerns, or requests for enrollment certifications.

## Pursuant to The Veterans Benefits and Transition Act of 2018

GI Bill® and VR&E beneficiaries (Chapter 33 and Chapter 31 beneficiaries) may attend a course of education or training for up to 90 days from the date the beneficiary provides:

- A certificate of eligibility, or a "statement of benefits" obtained from the VA's eBenefits web site, or a valid VAF 28-1905 form for Chapter 31 authorization purposes, provided that the student beneficiary provides such documentation to the appropriate VA Certifying Official no later than the first day of a course of education, and provided that the student provides any additional payment amount due that is the difference between the amount of the student's financial obligation and the anticipated amount of the VA education disbursement to Wake Forest University.

This policy allows a student to attend the course until the VA provides payment to Wake Forest University. Wake Forest University will not impose a penalty, or require the beneficiary to borrow additional funds to cover tuition and fees due to late payments from the VA.

## Outside Scholarships

**Many divinity students receive financial aid from other agencies, such as local churches, denominational offices, and foundations.** Students need to apply for such funds directly to the agencies involved. Additional financial aid information is available at <https://divinity.wfu.edu/admissions/financial-aid/> under "Non-Institutional Aid" and "Additional Aid Resources."

## Satisfactory Academic Progress and Financial Aid Eligibility Scholarship Renewal

Scholarships awarded by the School of Divinity are awarded to full-time degree-seeking students and are usually renewable for up to three years (six semesters) based on continued academic success. Students receiving fellowships are required to maintain a minimum cumulative GPA of 3.3. Other scholarship recipients are required to maintain a 2.5 GPA. Students who fall below the minimum GPA requirement will be given a semester of scholarship probation. If students remain below the stated requirement after the scholarship probation semester, the scholarship will cease or a smaller award may be provided. The School of Divinity may immediately discontinue scholarship support for students who earn a 2.0 GPA or below either cumulatively or for the term.

## Federal Aid Continuation

Federal regulations require that schools monitor the academic progress of each applicant who applies for and/or receives federal aid. Students must be making Satisfactory Academic Progress (SAP) towards their academic objective in order to maintain their eligibility for financial aid.

To determine financial aid eligibility for the following academic year, the Committee on Scholarships and Student Aid annually evaluates students' satisfactory academic progress at the end of the second summer session. Additional evaluation is made at a student's re-admittance.

The receipt of federally-controlled aid requires half-time enrollment (4.5 or more hours) during the fall and spring semesters and a minimum cumulative grade point average of 2.5 on work attempted in the Wake Forest School of Divinity. Institutional aid is generally not awarded for summer sessions, and not awarded beyond the sixth (fall or spring) semester; this limit can be prorated for transfer students. Certain institutional aid programs have higher academic and/or other requirements, which are communicated to students through the Curriculum and Academic Policy Committee. The Committee may revoke institutionally-controlled financial aid for violation of University regulations, including its honor code, or for violation of federal, state, or local laws.

The Higher Education Act mandates that institutions of higher education establish minimum standards of satisfactory academic progress for students receiving federal aid. Wake Forest University makes these minimum standards applicable to all programs funded by the federal government. Certain federal aid programs have higher academic and/or other requirements, which are communicated to recipients. To maintain academic eligibility for federal aid, a student must:

- Complete the requirements for a master of divinity degree within a maximum number of hours attempted (including transfer hours) of 135. During a semester in which a student drops courses or withdraws, the maximum number of hours attempted includes those hours attempted as of the earlier of:
  1. the withdrawal date, or
  2. the last day to drop a course without penalty (as published in the academic calendar).
- Pass at least two-thirds of those hours attempted (including pass/fail courses, and hours attempted as a visiting or unclassified student) in the School of Divinity. Incompletes count as hours attempted, unless from a non-credit course. Audited classes do not count as hours

attempted. During a semester in which a student drops courses or withdraws, hours attempted includes those hours attempted as of the earlier of:

1. the withdrawal date, or
  2. the last day to drop a course without penalty (as published in the academic calendar). For purposes of this policy, hours attempted also include all instances in which a course is repeated.
- Maintain the following minimum cumulative grade point average on all graded hours attempted (including incompletes from graded courses, but excluding pass/fail courses) in the undergraduate schools of the University, for graded hours attempted: at least 9, fewer than 135, a minimum cumulative GPA of 2.5.

The Wake Forest University grade point average calculation also excludes pass/fail courses. In cases where a student repeats a course for which he or she received a grade of C- or lower, the cumulative grade point average is calculated by considering the course as attempted only once, with the grade points assigned reflecting the highest grade received. However, this provision does not apply to any course for which the student has received the grade of F in consequence of an honor code violation. During a semester in which a student drops courses or withdraws, all graded hours attempted in the undergraduate schools of the University include those graded hours attempted as of the earlier of:

1. the withdrawal date, or
2. the last day to drop a course without penalty (as published in the academic calendar).

The policy on satisfactory academic progress applies only to the general eligibility for aid consideration. There are other federally mandated requirements a student must meet to receive federal aid. For instance, certain federal loan programs also require either the passage of a period of time or the advancing of a grade level between annual maximum borrowing, regardless of general eligibility for aid. Other general student eligibility requirements for a student to receive federal financial aid are listed in *Funding Education Beyond High School: The Guide to Federal Student Aid*, a publication of the U.S. Department of Education.

## Appeal Procedure

Denial of aid under this policy may be appealed in writing to the

Committee on Scholarships and Student Aid  
P.O. Box 7246  
Winston-Salem, NC 27109-7246

or delivered to the Office of Student Financial Aid, Reynolda Hall Room 4.

The Committee may grant a probationary reinstatement of one semester (in exceptional cases this period may be for one full academic year) to any student, upon demonstration of extenuating circumstances documented in writing to the satisfaction of the Committee. Examples of extenuating circumstances and appropriate documentation include, but are not necessarily limited to the following: illness of the student or immediate family members – statement from physician that illness interfered with opportunity for satisfactory progress; death in family – statement of student or minister; temporary or permanent disability – statement from physician. During a probationary period, students are considered to be making satisfactory academic progress under this policy and may continue to receive aid. A determination of satisfactory academic progress for any period of enrollment after the probationary

period is made, upon the student's written request, at the end of the probationary period. Reinstatement after probation can be made only after the student has received credit for the appropriate percentage of work attempted with the required cumulative grade point average. Any student determined ineligible for any academic year may request a special review at the end of one semester or summer term and may thereby be reinstated for all or part of the academic year. The student must request any such mid-year review in writing; otherwise only one determination of satisfactory academic progress will be made each academic year. Reinstatement cannot be made retroactive.

## Graduate Hall Director and Graduate Assistant

### Graduate Hall Director and Graduate Assistant

Divinity students are invited to apply for graduate hall director and graduate assistant positions with Wake Forest University's Office of Residence Life and Housing. Information is available at [www.rlh.wfu.edu](http://www.rlh.wfu.edu) (<http://www.rlh.wfu.edu>).

*The School of Divinity encourages students to keep work hours at a maximum of 20 hours per week in order to engage fully in studies and community life.*

## Student Health Insurance

Wake Forest University is committed to the health and well-being of all of its students. Health insurance is required as a condition of enrollment for your admission to the School of Divinity. The School of Divinity is not associated with nor do we endorse a particular insurance plan. The Wake Forest University Student Insurance Plan is one option you may choose from should you not already have coverage.

**Student Health Insurance Premium.** Wake Forest University requires health insurance for all full-time, degree-seeking students. Students who demonstrate coverage that meets our criteria may waive the insurance provided by WFU. Students who only need part-time status to complete their degree are eligible for the student insurance. International students will be allowed to waive enrollment in the student insurance, if they are covered by a plan reviewed and approved by the University. Premiums for student health insurance will be determined each year and published on the Wake Forest University website. Complete details and criteria can be found at <http://sip.studentlife.wfu.edu/>.

**Medical Withdrawal or Medical Change to Continuous Enrollment Status.** Students enrolled in the health insurance plan may continue coverage for a maximum of one year while on a medical leave or on medical continuous enrollment status approved by the university. Students must intend to return and remain a degree-seeking candidate and remit appropriate premiums. To determine if you are eligible, please contact Student Blue for more information at 800.579.8022.

## Tuition, Fees, and Related Costs

### Tuition for Master of Divinity Program: Fall 2023 - Spring 2024

Fee	Amount
Full-time	\$21,220
Part-time	\$846 (per hour)



DMin Tuition	\$965 (per hour)
Audit	\$120 (per hour)
Summer School 2023	\$430 (per hour)
Student Health Fee	\$550
Wellness Fee (can be waived)	\$394
Student Activity Fee	\$380
DMin Application Fee	\$100
Application Fee	\$75

Charges are due in full on August 1st for the fall semester, December 1st for the spring semester, and June 1st for both summer sessions. Student accounts not paid in full may not be entitled to receive an official transcript, diploma, or to register for future classes. Institutional fellowships, scholarships, and grants generally appear as credits on student accounts. Divinity students enrolled for full-time resident credit are entitled to full privileges regarding libraries, student publications, athletic contests, the Student Union, the University Theatre, the Secrest Artists Series of Wake Forest University, and the Student Health Service. Occasional students are entitled, after paying tuition, to the use of the libraries but not to the other privileges listed above. They may, however, secure admission to concerts, athletic events, and recreational facilities by paying a nominal activity fee.

## Refund of Charges Policy and Return of Financial Aid Policy

A student who officially withdraws or is granted continuous enrollment status during a semester may be entitled to a refund of tuition depending on the student's date of withdrawal, and/or date of continuous enrollment status.

Tuition refunds are based on the date of official withdrawal or the effective date of continuous enrollment status. Please refer to the official "Schedule of Refunds for Withdrawal or Continuous Enrollment" for the respective semester of enrollment. Refunds will be reduced by the amount of any outstanding charges on a student's account. If refunded charges leave a credit balance on the student account, the student is responsible for completing an online student refund request at (<http://finance.wfu.edu/sfs/student-refund/>) or the credit balance will remain on the student account and will be applied for future semesters. If the credit is a direct result of Title IV aid, the credit is automatically refunded to the student.

### Schedule of Refunds for Withdrawal or Continuous Enrollment

#### Fall & Spring Semesters

Official Date	Tuition Refunded
Before semester begins	100% tuition, less deposit
First week of semester	85%
Second week of semester	75%
Third week of semester	50%
Fourth week of semester	30%
Fifth week of semester	20%
After fifth week of classes	0%

#### Summer Sessions I & II (6 week sessions)

Official Date	Tuition Refunded
First three days of session	100% tuition, less deposit
Fourth day of session	75%

Fifth day of session	50%
Sixth day of session	25%
After sixth day of session	0%

#### Full Summer Session (12 week session)

Official Date	Tuition Refunded
First five days of session	100% tuition, less deposit
Sixth - Ninth day of session	75%
Tenth - Twelfth day of session	50%
Thirteenth - Fifteenth day of session	25%
After fifteenth day of session	0%

There are no refunds for mandatory fees after the first class day in a semester as reflected in the academic calendar.

Students are responsible for officially dropping courses to be eligible for an adjustment. Nonpayment for classes for which you are registered or non-attendance in a registered class does not release you from financial obligation and will not drop you from the class.

A student using scholarships, grants, or loans to help pay educational expenses, whose account was paid-in-full prior to withdrawal, is likely to owe the University after withdrawal. Return of Title IV funds are handled in accordance with federal law. Students should consult the Office of Financial Aid for more information.

Vehicle registration fees will not be refunded unless the issued permit is returned to Transportation and Parking Services before the first day of class. Students graduating or studying abroad for spring semester may receive a prorated refund of the vehicle registration fee by returning the issued permits to the Transportation and Parking Services office.

Tuition, fees, dining and all other charges will not be refunded when a student is suspended or expelled from the University as a result of a conduct or honor code violation. Return of Title IV funds are handled in accordance with federal law.

\*Refunds will be reduced by the amount of any outstanding charges on a student's account.

## Pursuant to The Veterans Benefits and Transition Act of 2018

GI Bill® and VR&E beneficiaries (Chapter 33 and Chapter 31 beneficiaries) may attend a course of education or training for up to 90 days from the date the beneficiary provides:

A certificate of eligibility, or a "statement of benefits" obtained from the VA's eBenefits web site, or a valid VAF 28-1905 form for Chapter 31 authorization purposes, provided that the student beneficiary provides such documentation to the appropriate VA Certifying Official no later than the first day of a course of education, and provided that the student provides any additional payment amount due that is the difference between the amount of the student's financial obligation and the anticipated amount of the VA education disbursement to Wake Forest University.

This policy allows a student to attend the course until the VA provides payment to Wake Forest University. Wake Forest University will not impose a penalty, or require the beneficiary to borrow additional funds to cover tuition and fees due to late payments from the VA.

## University Disruption Refund Policy

Circumstances may arise during a semester that cause significant disruptions to University operations and result in the University closing the campus. These circumstances include, without limitation, extreme weather, fire, natural disaster, war, labor disturbances, loss of utilities, riots or civil commotions, epidemic, pandemic, public health crisis, power of government, or any other circumstance like or unlike any circumstance mentioned above, which is beyond the reasonable control or authority of the University.

In the event of a significant disruption to University operations either:

- During a semester that results in the University closing campus for the remainder of the semester;
- At the beginning of a semester that delays or prevents the University opening campus; or
- During a semester that results in the University closing campus temporarily during the semester

The University will issue refunds for housing and dining charges and wellness and parking fees to students where applicable and according to the refund schedule below. There will be no refunds for tuition or Student Health, Student Activity, or any other fees paid by or on behalf of students. Refunds (if applicable) will be calculated at the end of the semester.

This policy applies to significant disruptions where the University closes campus. It does not apply where students officially withdraw from the University or are officially granted continuous enrollment status during a semester. Refunds, if any, in those circumstances are governed by the University's Refund of Charges Policy.

### Fall & Spring Semesters - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	85%
2	78%
3	71%
4	64%
5	57%
6	50%
7	43%
8	36%
9	29%
10	22%
11	15%
12	10%
13	No Refund
14	No Refund
15	No Refund
16	No Refund

### Summer Sessions I & II (6 week sessions) - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	75%
2	50%
3	25%
4	No Refund
5	No Refund
6	No Refund

### Full Summer Session (12 week session) - University Disruption Refund Schedule

Number of Whole or Partial (Sunday-Saturday) Weeks When Campus is Open	Refund Percentage
0	100%
1	85%
2	75%
3	65%
4	55%
5	45%
6	35%
7	25%
8	15%
9	No Refund
10	No Refund
11	No Refund
12	No Refund

## Estimated Cost of Attendance Fall 2023 - Spring 2024

To determine need-based financial aid, the School of Divinity, in cooperation with the Graduate School of Arts and Sciences, estimates annual costs. The figures below are based on tuition, fees, and living expenses. Note that actual living expenses may vary, depending on specific choices of housing, food, and personal expenses.

Fee	Amount
Tuition	\$21,220
Student Health Fee	\$550
Student Activity Fee	\$380
Room <sup>1</sup>	\$14,400
Meals <sup>2</sup>	\$4,050
Books & Supplies <sup>3</sup>	\$1,000
Transportation <sup>4</sup>	\$2,790
Personal Expenses <sup>5</sup>	\$2,700
Insurance <sup>6</sup>	\$2,858
Wellness Fee <sup>7</sup>	\$394
Estimated Total Costs of Attendance	\$49,948

Average Direct Loan Fees (if applicable)	\$154
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1

Room expenses reflect 9 month average of single bedroom apartments as specified by 5 local apartment complexes in close proximity to campus. An estimated \$350 per month for utilities has been included.

2

Meal expenses for residence hall and off-campus apartment students are based on \$19.29 per day for thirty weeks. An investigation of food allowances at comparable schools in the southeast reveals our food allowance to be fair.

3

Book and supplies expenses are based on an average yearly cost as estimated by the WFU bookstore and the WFU Divinity Student COA Survey. The amount for part-time enrollment is a prorated amount based on the assumption that full-time enrollment includes 3 classes per term. All classes taken for credit toward the student's degree are included in the determination of the COA component.

4

Transportation expenses for residence hall and off-campus apartment students are based on around \$93 per week for thirty weeks. For students living at home, the amount reflects one-half of the residence hall and off-campus amounts.

5

Personal expenses for residence hall and off-campus apartment students are based on \$12.85 per day for thirty weeks, rounded to the nearest \$10.

6

Health insurance is required for all degree-seeking domestic graduate students and all international graduate students with F or J visas. For 2023-2024, student health insurance is estimated based on the WFU/BCBS Insurance Policy for 2022/2023. More information is available on the WFU Student Health Insurance Program website. Students who demonstrate coverage that meets criteria may waive the insurance provided by WFU. If you are unsure of your eligibility, please contact studentinsurance@wfu.edu.

7

A wellness fee will be charged to all student accounts. This wellness fee grants access to campus wellness, recreation, and fitness facilities, equipment, and programs. Each semester's charge will support the overall operation of the state-of-the-art wellbeing center facilities. Graduate students may opt out to have the fee waived online through the Wake Information Network (WIN). Graduate students who elect to opt out of the wellness fee will not have access to campus wellness, recreation and fitness facilities, equipment and related programs, such as intramurals and club sports. If you opt out and change your mind at a later date, you can obtain a membership fee on a month-to-month basis at a fee of \$35/month.

## Programs

- Master Programs
  - Bioethics, MDiv/MA Dual Degree
  - Counseling, MDiv/MA Dual Degree
  - Education, MDiv/MA Dual Degree
  - JD/MDiv Dual Degree

- Master of Divinity
- Sustainability, MDiv/MA Dual Degree
- Concentrations
  - Interfaith Literacy and Leadership
  - Religious Leadership in Food, Health, and Ecology
  - Sustainability Concentration
- Related Programs at Wake Forest University
  - Religious Studies, Master of Arts
  - Women's, Gender, and Sexuality Studies, Graduate Concentration
- Other Program Opportunities
  - Hispanic Summer Program

## Master Programs

- Bioethics, MDiv/MA Dual Degree
- Counseling, MDiv/MA Dual Degree
- Education, MDiv/MA Dual Degree
- JD/MDiv Dual Degree
- Master of Divinity
- Sustainability, MDiv/MA Dual Degree

**The Wake Forest University School of Divinity offers the Master of Divinity degree and five dual degrees:**

- **The Master of Divinity (MDiv)** is a professional degree for persons preparing to be religious leaders in diverse congregational and not-for-profit settings.
- **The Master of Divinity/Master of Arts in Bioethics Dual Degree (MDiv/MA Bioethics)** facilitates an interdisciplinary conversation between theology and bioethics for persons preparing for vocations in either discipline.
- **The Master of Divinity/Master of Arts in Counseling Dual Degree (MDiv/MA Counseling)** is for persons who seek vocations that combine theological, ministerial, and counseling skills.
- **The Master of Divinity/Master of Arts in Education Dual Degree (MDiv/MA Education)** prepares students to teach in public and/or private schools and provides them an opportunity to combine teaching/educational interests and skills with a wide range of ministerial vocations.
- **The Master of Divinity/Master of Arts in Sustainability Dual Degree (MDiv/MA Sustainability)** equips students to lead in congregations and other religiously-affiliated organizations that seek to respond to critical ecological and other social issues.
- **The Juris Doctor/Master of Divinity Dual Degree (JD/ MDiv)** prepares students for theologically informed vocations either in law or religious leadership.

## Bioethics, MDiv/MA Dual Degree

The goal of the Master of Divinity/Master of Arts in Bioethics (MDiv/MA Bioethics) dual degree program is to facilitate an interdisciplinary conversation between theology and bioethics and to provide resources for students whose vocational aims require knowledge and/or competence in both disciplines.

## Requirements

### Plan of Study and Requirements

A student typically will first complete two and one-half years of work (five semesters, 59-63 credit hours) primarily in the School of Divinity. This dual degree is designed to be completed in seven semesters. The final two semesters will be completed in the bioethics program but with some electives taken in the School of Divinity. Shared courses will be dual degree appropriate, selected from a list of courses agreed upon by the School of Divinity and the bioethics program. Students will complete a total of 91 credit hours in order to earn the dual degree. An outline of a typical MDiv/MA seven semester schedule is shown below.

#### Typical Dual Degree Program Outline

Year	Fall	Spring
Year One	Mainly Divinity (13)	Mainly Divinity (13)
Year Two	Mainly Divinity (13)	Mainly Divinity (13)
Year Three	Mainly Divinity (13)	Mainly Bioethics (13)
Year Four	Mainly Bioethics (13)	

**Students are required to complete 61 hours toward the Master of Divinity Degree.**

Code	Title	Hours
<b>Biblical Studies</b>		
BIB 521	Old Testament Interpretation I	3
BIB 522	Old Testament Interpretation II	3
BIB 541	Introduction to New Testament	3
BIB 542	Interpreting New Testament Letters	3
or BIB 543	Interpreting New Testament Gospels	
Biblical Studies elective		3
<b>Historical and Theological Studies</b>		
HIS 501	History of Christianity	3
HIS 502	History of Christianity II	3
THS 501	Christian Theology	3
Theology elective		3
THS 521	Foundations of Christian Ethics	3
or THS 522	History of Theological Ethics	
<b>Ministerial Studies</b>		
MIN 501	Art of Ministry I: Introduction to the Life and Work of Ministry	2
MIN 602A	Internship Reflection Seminar	1.5
MIN 602B	Internship Reflection Seminar	1.5
One 300-hour ministry internship placement (as described in the Art of Ministry Program section above)		
MIN 705	Third Year Capstone	1
Proclamation *		3
Relational Care *		3
Community Building *		3
Formation *		3
<b>Divinity Electives</b>		
General Elective		3
One Divinity Ethics elective		3
Select five hours from the following:		5
MIN 636A	Clinical Pastoral Education I	

Any Pastoral Care elective

Any Theology elective

#### Shared Electives

Elective credit hours chosen from either program 4

\*

Courses fulfilling these requirements are offered each semester.

#### MA Bioethics Required Courses (26 hours)

The 26 hours include a 6-credit thesis requirement and 4 elective credit hours from either program. The dual degree program will utilize the current courses offered through both the bioethics program (<https://graduatebioethics.wfu.edu/courses/>) and the School of Divinity (<https://divinity.wfu.edu/academics/academic-resources/>).

## Policies and Procedures

### Advising

Every student in the dual degree program will be assigned a faculty adviser from each school with whom they are expected to meet regularly throughout the duration of the program. Students are required to follow the student handbook of the school through which they are enrolled.

### Continuing Eligibility

To continue in the program, the Graduate School requires that a student maintain a minimum cumulative grade point average of 2.5.

This requirement applies to the MA component of the dual degree program. A student who fails to satisfy this requirement will be placed on academic probation and will have one semester to bring their GPA to 2.5 or greater; otherwise, the student may be dismissed from the program. The minimum grade point average required for successful completion of the MA portion of the degree is 3.0. Continuing eligibility in the Master of Divinity program is outlined in the School of Divinity's Continuing Eligibility Policy.

## Counseling, MDiv/MA Dual Degree

This program is for students seeking to enter vocations in religious leadership with skills both in theology and counseling. Students enrolled in the dual degree program can complete the requirements for both the Master of Divinity and Master of Arts in Counseling degrees in four years instead of the five years needed if each program is undertaken separately. The curriculum meets the accrediting standards for each degree program. The dual degree program is designed to ensure that students meet the educational requirements for licensure as professional counselors in North Carolina and most other states.

## Requirements

### Plan of Study and Requirements

Students in the dual degree program spend the first two years of the four year program enrolled in courses in the School of Divinity. During these first two years, students complete on average 50-53 credit hours of required courses, required electives, and general electives. Dual degree students are required to complete a basic unit of Clinical Pastoral Education (CPE) through an ACPE accredited program. Students generally meet the CPE requirement in a summer session during their first two years of the program. Guidelines for applying CPE credit toward the degree can be obtained through the Office of Academic Affairs.



The introductory CPE unit and CNS 738A/CNS 738B, the counseling practicum, satisfy the MDiv internship placement requirements.

Students spend the second two years of the dual program satisfying requirements for the Master of Arts in Counseling.

As part of the dual degree program, students are required to complete a series of one-hour capstone courses that emphasize intersections between theology and counseling. Dual degree students are expected to complete these courses beginning in their third year of the four year program. The capstone courses are offered through the School of Divinity.

Upon successful completion of the dual degree requirements, students receive both the Master of Divinity and the Master of Arts in Counseling degrees.

## Degree Requirements

**Students are required to complete 53 hours toward the Master of Divinity Degree.**

Code	Title	Hours
<b>Biblical Studies</b>		
BIB 521	Old Testament Interpretation I	3
BIB 522	Old Testament Interpretation II	3
BIB 541	Introduction to New Testament	3
BIB 542	Interpreting New Testament Letters	3
or BIB 543	Interpreting New Testament Gospels	
Biblical Studies elective		3
<b>Historical and Theological Studies</b>		
HIS 501	History of Christianity	3
HIS 502	History of Christianity II	3
THS 501	Christian Theology	3
Theology elective		3
THS 521	Foundations of Christian Ethics	3
or THS 522	History of Theological Ethics	
<b>Ministerial Studies</b>		
MIN 501	Art of Ministry I: Introduction to the Life and Work of Ministry	2
Relational Care		3
Capstone Requirement:		
MIN 710	Topics in Psychology of Religion	1
MIN 711	Topics in Spiritual Development	1
MIN 712	Topics in Pastoral Theology	1
Clinical Pastoral Education		5
Choose any 4 credit hours from the following:		4
Proclamation (1-3h)		
Community Building (1-3h)		
Formation (1-3h)		
<b>Electives</b>		
Select at least 6 hours of divinity electives		6
<b>Counseling (CNS) Required Courses</b>		
CNS 721	Research and Statistical Analysis in Counseling	3
CNS 736	Appraisal Procedures for Counselors	3
CNS 737	Basic Counseling Skills and Techniques	3

CNS 739	Advanced Counseling Skills and Crisis Management	3
CNS 740	Professional Orientation to Counseling	3
CNS 741	Theories and Models of Counseling	3
CNS 742	Group Procedures in Counseling	3
CNS 743	Career Development and Counseling	3
CNS 747	Cultures and Counseling	3
CNS 748	Life Span Development: Implications for Counseling	3
CNS 750	The Vienna Theorists-Freud, Adler, Moreno and Frankl	3
CNS 773	Family Counseling	3
CNS 780	Professional, Ethical and Legal Issues in Counseling	2
CNS 786	Consultation and Program Development in Counseling	2
CNS 790	Professional Identity Capstone Course	2
<b>Clinical Courses</b>		
CNS 738A	Counseling Practicum - School	3
or CNS 738B	Counseling Practicum - Clinical Mental Health	
CNS 744A	Counseling Internship I A. School	2,3
or CNS 744B	Counseling Internship I: Clinical Mental Health	
CNS 745A	Counseling Internship II A. School	2,3
or CNS 745B	Counseling Internship II: Clinical Mental Health	
<b>Program Specialty Courses</b>		
Select 9 hours of Community Counseling Program Specialty Courses:		9
CNS 746	Counseling Children	
CNS 749	School Guidance and Counseling	
CNS 760	Issues in School Counseling	
CNS 762	Case Formulation and Treatment Planning in Clinical Mental Health Counseling	
CNS 770	Classification of Mental and Emotional Disorders	
CNS 771	Clinical Mental Health Counseling	

## Policies and Procedures Continuing Eligibility

Satisfactory academic progress in the Master of Arts in Counseling portion of the program is defined as maintaining a B or better grade point average. Expectations of personal and professional behaviors and/or attitudes are outlined in the Department of Counseling "Evaluation and Continuation Policy." Continuing eligibility in the Master of Divinity program is outlined in the School of Divinity's Continuing Eligibility Policy.

## Education, MDiv/MA Dual Degree

This degree promotes interdisciplinary conversation between theological education, public education, and community engagement. The degree provides students pathways for developing skills and acquiring competencies necessary for achieving excellence in careers where religious leadership and education intersect.

The Master of Arts in Education is fully accredited by the North Carolina Department of Public Instruction (NCDPI). For the teaching license

areas approved by NCDPI, please visit the department website ([https://education.wfu.edu/wp-content/uploads/lic\\_areas2\\_.pdf](https://education.wfu.edu/wp-content/uploads/lic_areas2_.pdf)).

Four different programs are available for the Education portion of the dual degree. The Master Teacher Fellows (MTF) program is for candidates who seek the initial teaching license. The MTF-S program is for the secondary (9-12) license. The MTF-E program is for the elementary license. The Master Teacher Associates (MTA) program is for candidates who hold a current teaching license and seek an advanced license. The Master of Educational Studies (MES) program is for candidates who are not seeking a teaching license.

## Requirements

This dual degree is designed to be completed in seven semesters and two full summer sessions (based on full-time enrollment), for a total of 92 credit hours for the MTA and MES tracks, and 97 credit hours for MTF-S track. The MTF-E track is designed to be completed in eight semesters and two full summer sessions (based on full-time enrollment), for a total of 103 credit hours.

**Students are required to complete 56 hours toward the Master of Divinity Degree.**

Code	Title	Hours
<b>Biblical Studies</b>		
BIB 521	Old Testament Interpretation I	3
BIB 522	Old Testament Interpretation II	3
BIB 541	Introduction to New Testament	3
BIB 542	Interpreting New Testament Letters	3
or BIB 542	Interpreting New Testament Letters	
Biblical Studies elective		3
<b>Historical and Theological Studies</b>		
HIS 501	History of Christianity	3
HIS 502	History of Christianity II	3
HIS 501	History of Christianity	3
Theology elective		3
THS 521	Foundations of Christian Ethics	3
or THS 522	History of Theological Ethics	
<b>Ministerial Studies</b>		
MIN 501	Art of Ministry I: Introduction to the Life and Work of Ministry	2
MIN 705	Third Year Capstone	1
Proclamation		3
Relational Care		3
Community Building		3
Formation		3
<b>General Electives</b>		
Students in the dual degree program are required to take at least 11 hours of divinity electives.		11
<b>Paths</b>		
Select one of the following paths toward the Master of Education degree:		36-47
Master Teacher Fellows (MTF-Secondary) (seeking initial licensure)		
Master Teacher Fellows (MTF-Elementary) (seeking initial licensure)		

Master Teacher Associates (MTA) (already licensed, seeking advanced licensure)

Master of Educational Studies (MES) (not seeking licensure)

### Master Teacher Fellows (MTF-Secondary) (seeking initial licensure)

Code	Title	Hours
EDU 721	Educational Research	3
EDU 712	Learning & Cognitive Science	3
EDU 707	Educational Policy & Practice	3
EDU 654	Content Pedagogy	3
EDU 654L	Content Pedagogy Rounds	2
EDU 717	Instructional Design, Assessment and Technology	3
EDU 715	Action Research	3
Content Course or EDU course		3
EDU 664L	Student Teaching Internship	9
EDU 665	Professional Development Seminars	3
EDU 758	Studies in Educational Leadership	3
EDU 716	Professional Growth Seminar	3

### Master Teacher Fellows (MTF-Elementary) (seeking initial licensure)

Code	Title	Hours
EDU 612	Teaching Exceptional Children	3
EDU 614L	Elementary Teaching Rounds	2
EDU 641	Teaching Elementary Literacy	3
EDU 642	Teaching Elementary Social Studies	3
EDU 643	Teaching Elementary STEM (Science, Technology, Engineering, Mathematics)	3
EDU 650L	Student Teaching: Elementary	9
EDU 655	Professional Seminar: Elementary	3
EDU 707	Educational Policy & Practice	3
EDU 712	Learning & Cognitive Science	3
EDU 715	Action Research	3
EDU 716	Professional Growth Seminar	3
EDU 717	Instructional Design, Assessment and Technology	3
EDU 721	Educational Research	3
EDU 758	Studies in Educational Leadership	3

### Master Teacher Associates (MTA) (already licensed, seeking advanced licensure)

Code	Title	Hours
EDU 721	Educational Research	3
EDU 712	Learning & Cognitive Science	3
EDU 707	Educational Policy & Practice	3
EDU 717	Instructional Design, Assessment and Technology	3
Content or EDU Course		3
EDU 715	Action Research	3
Content or EDU Course		3
Content or EDU Course		3
Content or EDU Course		3

Content or EDU Course	3
EDU 758      Studies in Educational Leadership	3
EDU 716      Professional Growth Seminar	3

#### Master of Educational Studies (MES) (not seeking licensure)

Code	Title	Hours
EDU 721	Educational Research	3
EDU 712	Learning & Cognitive Science	3
EDU 707	Educational Policy & Practice	3
EDU 717	Instructional Design, Assessment and Technology	3

Content or EDU Course	3
EDU 715      Action Research	3
Content or EDU Course	3
Content or EDU Course	3
Content or EDU Course	3
Content or EDU Course	3
EDU 758      Studies in Educational Leadership	3
EDU 716      Professional Growth Seminar	3

## Policies and Procedures

### Advising

Each student in the dual program will be assigned a faculty adviser from each school with whom they are expected to meet regularly throughout their enrollment in the program.

### Continuing Eligibility

The Graduate School requires that a student maintain a minimum cumulative GPA of 2.5. This requirement applies to the MA component of the dual degree program. A student who fails to satisfy this requirement will be placed on academic probation and will have one semester to bring their GPA to 2.5 or greater; otherwise, the student may be dismissed from the program. The minimum GPA required for successful completion of the MA portion of the degree is 3.0. Continuing eligibility requirements for the School of Divinity are outlined in the School of Divinity's Continuing Eligibility Policy.

## JD/MDiv Dual Degree

The School of Divinity, in partnership with the School of Law, offers a five-year, dual degree program, Juris Doctor and Master of Divinity (JD/MDiv). The program provides a vocational perspective different than that available in separate law or divinity degree concentrations. The program also enriches the learning and experience of students who want to pursue careers in either discipline. The dual degree curriculum meets standards set by the accrediting bodies of each partner.

## Requirements

### Plan of Study and Requirements

Students in the dual degree program must complete all requirements of each program. Students may choose to complete their first two years of study in either the School of Divinity or the School of Law. Two additional years of study are then undertaken in the alternate school. The fifth and final year includes dual degree electives offered each academic year as determined and scheduled by each school. Upon successful completion

of the dual degree requirements, students receive both the Juris Doctor and the Master of Divinity degrees.

When undertaken as part of the dual JD/MDiv program, the MDiv degree requires completion of 62 hours of divinity coursework including the degree requirements prescribed by the School of Divinity for graduation. When undertaken as part of the dual JD/MDiv program, the JD degree requires completion of 75 hours of law coursework including the degree requirements (<http://academics.law.wfu.edu/degree/jd/>) prescribed by the law school for graduation.

#### Students are required to complete 62 hours toward the Master of Divinity Degree.

Code	Title	Hours
<b>Biblical Studies</b>		
BIB 521	Old Testament Interpretation I	3
BIB 522	Old Testament Interpretation II	3
BIB 541	Introduction to New Testament	3
BIB 542	Interpreting New Testament Letters	3
or BIB 543	Interpreting New Testament Gospels	
Biblical Studies elective		3
<b>Historical and Theological Studies</b>		
HIS 501	History of Christianity	3
HIS 502	History of Christianity II	3
THS 501	Christian Theology	3
Theology elective		3
THS 521	Foundations of Christian Ethics	3
or THS 522	History of Theological Ethics	
<b>Ministerial Studies</b>		
Art of Ministry Program:		
MIN 501	Art of Ministry I: Introduction to the Life and Work of Ministry	2
MIN 602A	Internship Reflection Seminar	1.5
MIN 602B	Internship Reflection Seminar	1.5
One 300-hour ministry internship placement (as described in the Art of Ministry Program section above)		
MIN 705	Third Year Capstone	1
Required Ministerial Studies Electives:		
Proclamation *		3
Relational Care *		3
Community Building *		3
Formation *		3
<b>General Electives</b>		
Select 14 hours of electives		14
<b>Total Hours</b>		<b>62</b>

\*

Courses fulfilling these requirements are offered each semester.

#### Students are required to complete 75 hours toward the Juris Doctor Degree.

## Policies and Procedures Advising

Students will be assigned a faculty adviser from each school and are required to meet with their advisers at least once during each semester of the five-year program. Course selection is made in consultation with advisers.

## Fifth Year

During the fifth year of the program, students register in and pay tuition to the School of Divinity during one semester, subsequently registering in and paying tuition to the School of Law during the remaining semester. During the School of Divinity fifth-year semester, students may take courses in the School of Divinity, courses crosslisted with the School of Law, or courses offered by other schools or departments of the University as approved by the School of Divinity. A similar process applies to the School of Law fifth-year semester.

## Continuing Eligibility

Students in the School of Law must maintain at least a 73 average during each academic year enrolled in order to remain academically eligible for the School of Law. A student who earns at least a 73 average but ranks in the lowest 20 percent of the class at the end of the first year of the program will be strongly advised to take courses during the final three semesters in the School of Law that cover subjects related to the Bar Examination. Continuing eligibility in the Master of Divinity program is outlined in the School of Divinity's Continuing Eligibility Policy.

## Master of Divinity

The Master of Divinity (MDiv) degree stands at the center of the School of Divinity's degree offerings. The program prepares students through diverse ministry experiences and theological perspectives for religious leadership. The program encourages students to engage the rich histories and traditions of Christian congregations, to increase awareness and understanding of issues facing churches in their local and global contexts, and to integrate their knowledge of varied theological and ministry disciplines with what they encounter in ministry settings and in the world.

## Goals for the Master of Divinity Degree

Students who graduate with the Master of Divinity degree from the Wake Forest University School of Divinity shall demonstrate a broad variety of competencies for religious leadership that promotes justice, reconciliation, and compassion, including:

- Academic integration of Christian traditions, theologies, scriptures, and practices;
- Sustained vocational reflection and spiritual formation that inform ministry in pluralistic contexts;
- Innovative application and embodiment of a range of ministerial practices for a continually transforming religious world;
- Theologically informed analysis of social, cultural, political, and ecological systems within a variety of particular settings.

The Master of Divinity degree is a 76-hour program designed to be completed in three years of full-time, residential study. Students may also pursue the degree on a part-time basis with permission of the

associate dean of academic affairs. The maximum length of time allowed to complete the program is six years.

## Denominational Studies

The School of Divinity is committed to educating persons who are pursuing ministry within a wide array of Christian denominations and traditions.

Denominational studies courses in the School of Divinity are designed to support students as they explore professional affiliations, cultivate diverse denominational and congregational connections, and prepare for ordination within particular denominational and congregational entities.

As a first step in exploring denominational affiliations, students are encouraged to consult with appropriate denominational representatives to learn about opportunities for service and, where appropriate, requirements for ordination. Students are encouraged to consult with denominational advisers and representatives as they choose settings for required internships as these internships give students opportunities to explore denominational ministry in congregations or agencies.

Courses specific to some denominations are taught regularly at the School of Divinity by denominational leaders. These courses are designed to introduce students to denominational theologies and politics and to assist students with preparation for denominational ordination exams. A student may also request that the associate dean of academic affairs explore course offerings specific to their denominational affiliation. Other opportunities for preparation for ministry within particular denominations include independent study, clinical pastoral education, and transfer credit.

Some of these courses fulfill Community Building or other elective requirements.

## Moravian Studies

The city of Winston-Salem, NC is shaped by its Moravian heritage and a rich ongoing Moravian presence. While enrolled at Wake Forest University School of Divinity, students seeking candidacy for ordination in the Moravian Church may earn the twelve-credit Certificate in Moravian Studies online through Moravian Theological Seminary, as well as complete internships at local Moravian churches.

The Certificate in Moravian Studies is offered as a possible alternative to a year of residential study at Moravian Seminary in partial fulfillment of requirements for ordination. Interested students should first contact the Provincial Elders' Conference (PEC) regarding this possibility. If approved, The School of Divinity and Moravian Seminary will work with the PEC to advise interested students. Tuition assistance for the Certificate is available through the PEC.

All courses must meet ATS requirements for transfer credit to apply toward the WFU MDiv degree. Additional eligible courses from Moravian Seminary, beyond the Certificate in Moravian Studies, may be accepted for transfer with a written recommendation from the PEC that these courses are required preparation for ordination in the Moravian Church.

## Requirements The Master of Divinity Curriculum

The Master of Divinity curriculum is composed of four categories of courses:



**Required courses:** Required of all students; may be prerequisites for other courses.

**Required elective courses:** Biblical Studies elective, Theological Studies elective, and Ministerial Studies electives in Proclamation, Relational Care, Community Building, and Formation.

**General elective courses:** Chosen by students in consultation with their advisers and may include courses from other University departments and schools.

**Area requirements:** Required of all students; designated from among required courses, required elective courses, and general elective courses; may include courses from other University departments and schools.

## Language Requirement

To graduate with the MDiv degree from Wake Forest University School of Divinity, students must have a basic proficiency in a language other than their own. Basic proficiency in another language is important as students undertake ministry in multicultural settings and engage a broad range of theological traditions and voices.

Normally students will demonstrate that proficiency by:

1. Prior documented foreign language study at the bachelor's level (a minimum of six credit hours in one language);
2. Achievement of placement into the 153-level (third semester) or higher on the Wake Forest University online foreign language placement test; or
3. Six credits of ancient or modern language coursework as part of the MDiv degree. The six credits must all be in the same language. If a student has completed only three credits in a particular language, she or he can complete the requirement in our program by taking another three hours of the same language.
4. When language courses are taken only for general elective credit, then they may be taken on a pass/fail basis.

## Required Courses and Required Electives

Required courses and required electives provide students with foundational theological and ministerial knowledge and skills for the practices of ministry and religious leadership in diverse settings.

## General Electives

Students can choose from a variety of graduate level courses offered in the School of Divinity and in other schools and departments of the University (subject to course availability and suitability to the overall requirements for the Master of Divinity degree).

## Area Requirements

Students can choose from a variety of graduate level courses offered in the School of Divinity and in other schools and departments of the University that meet the requirements of the five areas:

1. Cross-Cultural Connections (CC);
2. Race and Class (RC);
3. Gender and Sexuality (GS);
4. Religious Pluralism (RP); and
5. Science, Health, and Ecological Well-Being (SE).

Ordinarily, these are three-credit courses. Some three-credit courses may fulfill more than one area. No more than two one-credit courses may

count toward area requirements. Students may apply one independent study course toward these requirements.

On rare occasions, a student may petition the Curriculum and Academic Policy Committee to identify a substitute for one of the five areas. The proposed substitution must relate to an area that reflects changing 21st-century patterns of religious life and comport with the rubric for these courses outlined by the committee.

## The Art of Ministry Program

The Art of Ministry curriculum provides a three-year framework for integrating theory and practice while exploring vocational identity. The curriculum is designed to prepare students for ministry in a changing world by creating space for both theological reflection and the development of key professional skills.

The Art of Ministry curriculum consists of both coursework and an internship placement in the following progression:

### MDiv Year 1: Introductory Course

MIN 501 Art of Ministry I: Introduction to the Life and Work of Ministry is a required first-year seminar providing a forum for dialogue among students, faculty, and religious leaders about pressing issues facing the church and ministry in the 21st century. This course will introduce students to the complexity of vocation in general and ministerial vocations in particular across a variety of contexts. The course meets weekly in a 75-minute plenary session as well as an hour-long peer group meeting, typically in the fall term.

### MDiv Year 2 and/or 3: Internship

All students are required to complete one (1) ministry internship placement following the first year of the MDiv program. They can fulfill the internship requirement in the second or third year. If the first internship is successfully completed in the second year, they also have the *option* of doing a second ministry internship in the third year.

As described below, there are broadly four ways from which students can choose their internship placement to complete the required internship: (a) an academic year-long (two semesters) internship, (b) a summer intensive internship, (c) an internship in Clinical Pastoral Education (CPE) at Atrium Health Wake Forest Baptist Medical Center, or (d) an internship in Clinical Pastoral Education (CPE) in an ACPE-approved program. With the exception of Clinical Pastoral Care (CPE) internships (described below), internships do not count toward credit hours.

#### Option 1

- [Academic Year-long Internship] A 300-hour ministry internship placement completed during the second or third academic year, concurrent with MIN 602A ("Internship Reflection Seminar") in the fall term for 1.5 credit hours and MIN 602B ("Internship Reflection Seminar") in the spring term for 1.5 additional credit hours. Or,

#### Option 2

- [Summer Intensive Internship] A 300-hour ministry internship placement completed the summer after the first or second academic year, followed by completion of MIN 602A ("Internship Reflection Seminar") in the fall term for 1.5 credit hours and MIN 602B ("Internship Reflection Seminar") in the spring term for 1.5 additional credit hours. Or,

#### Option 3

- [CPE] A 400-hour ministry internship placement in Clinical Pastoral Education (CPE) at Atrium Health Wake Forest Baptist Medical Center

(200 hours of internship service in the fall term and 200 hours in the spring term), concurrent with MIN 636A ("Clinical Pastoral Education I") in the fall term for 3 credit hours and MIN 636B ("Clinical Pastoral Education II") in the spring term for 2 additional credit hours. Or,

#### Option 4

- [CPE] Students can also complete a 400-hour introductory unit of Clinical Pastoral Education (CPE) in any summer program accredited by the Association of Clinical Pastoral Education (<https://acpe.edu/>) (ACPE). Students will earn five transfer elective credits for completing a summer introductory unit of CPE.

Students can repeat a seminar reflection course (MIN 602A/B) to earn up to 3 additional credits when completing the second optional internship. Students cannot apply more than a total of six credit hours towards the MDiv degree from any number of internship seminars.

WFUSD provides some stipend to students engaged in an internship. The stipend is available for only *one* internship, regardless of its format (i.e., the academic year-long, the summer intensive, or the 400-hr CPE internship placement after matriculation into the MDiv program).

### Choosing an Internship

The director of the Art of Ministry Program works with students in the spring of each academic year to arrange ministry internship placements. The director also tracks student progress toward fulfilling the internship requirement.

Students will ordinarily select placements in two different ministry contexts if they complete an optional second internship:

- Congregational Settings
- Non-Profit Organizations
- Parachurch Organizations
- Settings related to MDiv Concentrations, e.g. Food, Health, Ecology, or Sustainability.
- Settings related to joint degree programs: Bioethics, Law, Counseling, Education, Sustainability.
- Prison Ministry
- Academic/College Chaplaincy
- Hospital/Chaplaincy Settings (See Clinical Pastoral Education below)

### MDiv Year 3: Capstone Course

All third-year students will complete MIN 705, a capstone seminar for 1 credit hour in the fall term with two interrelated components:

1. A capstone reflection component, in which students develop a digital portfolio organizing their cumulative learning around the School of Divinity curricular standards across three areas:
  - disciplinary knowledge,
  - vocational reflection, and
  - skill development for leadership;
2. professional development component, in which students will continue vocational reflection and prepare for employment searches.

The capstone course is developed and facilitated by the director of the Art of Ministry Program. It is offered as a pass/fail course.

## Clinical Pastoral Education (CPE)

Clinical pastoral education is a form of theological education that takes place in clinical settings where ministry is being practiced (health care

facilities, correctional institutions, hospices, congregations, and a variety of other settings). Through involvement with persons in need and with supervision from peers and supervisors, students engage issues of ministry and pastoral care while developing enhanced skills and a clearer awareness of themselves as caregivers. Students who complete a full unit of CPE earn five credit hours, according to one of the following options:

### Option 1: Fall and Spring

Upon satisfactory completion of a full unit of CPE at the Atrium Health Wake Forest Baptist Medical Center during the fall and spring terms, students will satisfy their internship placement requirement. This option will satisfy the three-credit Art of Ministry primary reflection seminar requirement and will generate two extra elective credits. Alternatively, for students who have already completed the reflection seminar, this program will generate five elective credits.

### Option 2: Summer

Upon satisfactory completion of a full unit of CPE during the summer, students are eligible for five hours of transfer course credit and will satisfy their internship requirement. In order for students to receive credit for CPE, the program in which they enroll must be accredited by the Association for Clinical Pastoral Education. A directory of accredited CPE centers is available online at <http://www.acpe.edu>.

Transfer credit for CPE will appear on a student's transcript only if application for credit is made through the Office of Academic Affairs. To receive credit, the student must have the CPE center where the program was completed provide a letter stating that a full unit of credit was awarded. Application and tuition fees for CPE are paid directly to the CPE center by the student.

Students who complete CPE within five years prior to enrollment in the Master of Divinity program may request transfer of credit equivalent to five hours for completion of a full unit of CPE at an accredited center and may use their CPE unit to satisfy their internship placement requirement.

## One-credit Courses

The School of Divinity offers several types of one-credit courses.

- Topics courses introduce students to themes or perspectives of current interest within theological, spiritual, ministerial, or cultural research and conversations.
- Readings courses provide students with opportunities to do intensive reading and study in particular subjects within the curriculum.
- Practicum courses provide students with opportunities to receive course credit for applied disciplines such as planning community worship.

One-credit courses are designed and taught by School of Divinity and University faculty and by visiting professors. Only four practicum course hours can be applied toward the overall degree requirements. Beyond the four-hour practicum limit, students may continue to participate in practicum courses and are not required to register for audit status.

## Master of Divinity Program Requirements

Code	Title	Hours
<b>Biblical Studies</b>		
BIB 521	Old Testament Interpretation I	3
BIB 522	Old Testament Interpretation II	3

BIB 541	Introduction to New Testament	3
BIB 542	Interpreting New Testament Letters	3
or BIB 543	Interpreting New Testament Gospels	
Biblical Studies elective		3
<b>Historical and Theological Studies</b>		
HIS 501	History of Christianity	3
HIS 502	History of Christianity II	3
THS 501	Christian Theology	3
Theology elective		3
THS 521	Foundations of Christian Ethics	3
or THS 522	History of Theological Ethics	
<b>Ministerial Studies</b>		
<i>Art of Ministry Program</i>		
MIN 501	Art of Ministry I: Introduction to the Life and Work of Ministry	2
MIN 602A & MIN 602B	Internship Reflection Seminar and Internship Reflection Seminar	3
or MIN 602C	Summer Internship Reflection Seminar	
MIN 705	Third Year Capstone	1
<i>Required Ministerial Studies Electives *</i>		
Proclamation		3
Relational Care		3
Community Building		3
Formation		3
<b>General Electives</b>		
For the remaining 28 hours of the degree program, students may choose from a broad selection of courses in the School of Divinity or approved in the University. <sup>***</sup>		28
<b>Total Hours</b>		<b>76</b>

\*

Courses fulfilling these requirements are offered each semester.

\*\*

During this course of study, students must complete courses that satisfy the five area requirements:

1. Cross-Cultural Connections (CC);
2. Race and Class (RC);
3. Gender and Sexuality (GS);
4. Religious Pluralism (RP); and
5. Science, Health, and Ecological Well-Being (SE).

## Sustainability, MDiv/MA Dual Degree

The Master of Divinity/Master of Arts in Sustainability dual degree acknowledges the growing demand for professionals in religious leadership venues who have the knowledge and the skills to lead communities to respond to critical ecological and other social issues. Congregations and other religiously affiliated organizations are increasingly interested in sustainability concerns and seek leaders who can guide their efforts to respond to these concerns. Knowledge from the biological, physical, chemical, and earth sciences are critical to any working professional who designs and implements sustainability practices. The humanities and social sciences incorporate information about spirituality, religious beliefs, and an understanding

and appreciation of our relationship to the natural world. The MDiv/MA is designed to be completed in seven semesters and one summer of study.

## Requirements

The degree is designed to be 93 credit hours completed in seven semesters plus one full summer session (based on full-time enrollment).

**Students are required to complete 48 hours toward the Master of Divinity Degree.**

Code	Title	Hours
<b>Biblical Studies</b>		
BIB 521	Old Testament Interpretation I	3
BIB 522	Old Testament Interpretation II	3
BIB 541	Introduction to New Testament	3
BIB 542	Interpreting New Testament Letters	3
or BIB 543	Interpreting New Testament Gospels	
Biblical Studies elective		3
<b>Historical and Theological Studies</b>		
HIS 501	History of Christianity	3
HIS 502	History of Christianity II	3
THS 501	Christian Theology	3
Theology elective		3
THS 521	Foundations of Christian Ethics	3
or THS 522	History of Theological Ethics	
<b>Ministerial Studies</b>		
MIN 501	Art of Ministry I: Introduction to the Life and Work of Ministry	2
Select 16 credit hours of the following:		16
Proclamation (1-3h)		
Relational Care (1-3h)		
Community Building (1-3h)		
Formation (1-3h)		
MIN 561	Faith, Food, Health, and Community	
Any Ethics elective		
<b>Requirements Specific to the Master of Arts in Sustainability Degree</b>		
SUS 701	Global Human Systems	3
SUS 702	Sustainable Organizational Mgt	3
SUS 703	Natural Science for Sustainability	3
SUS 704	Environmental Law & Policy	3
SUS 706	Applied Sustainability: Creativity and Impact	2
Any Sustainability elective		3
<b>Requirements Shared by the Two Degree Programs <sup>1</sup></b>		
MIN 602A & MIN 602B	Internship Reflection Seminar and Internship Reflection Seminar <sup>2</sup>	3
SUS 706 & MIN 706	Applied Sustainability: Creativity and Impact and Directed Reflection in Applied Sustainability <sup>3</sup>	3
Research Thesis or Extended Practicum <sup>4</sup>		4
<b>General Electives</b>		
Select 18 hours of electives.		18

Ordinarily, students will take 9 elective credits in Divinity and 9 elective credits in Sustainability.

1

These courses constitute the integrative foundation of the dual degree.

2

In consultation with advisers from both degree programs, students will complete one, 200-hour internship placement in a setting in which they can utilize and explore sustainability concerns.

3

These courses provide opportunities for students to experience sustainability in action in a variety of settings. Students will enroll in the course through the sustainability program and will be assigned a divinity faculty mentor to facilitate directed theological reflection on the experiences.

4

This requirement, taken in the summer term, combines capstone courses from both degree programs. Students will prepare a research thesis, under the guidance of a faculty adviser on a topic approved in advance by the sustainability program director and the associate dean of academic affairs of the School of Divinity. Alternatively, students may participate in a summer practicum or internship. If they select that option, they will meet with a faculty adviser periodically to discuss their internship, which will culminate with a written reflection on their experience submitted to a designated faculty person in one of the two programs. The research thesis/extended practicum is taken in lieu of the third-year capstone course requirement in the MDiv program.

## Policies and Procedures Advising

Students will be assigned a primary faculty adviser from each of the degree programs. The Sustainability Program director and the associate dean of academic affairs for the School of Divinity will consult on appropriate advising for dual degree students. During the semester preceding the thesis or capstone project, the primary adviser from each degree program will meet with the student to discuss appropriate program and course options. If a student chooses to complete the degree program with a capstone project (extended practicum), the Sustainability Program director and the Art of Ministry director will work together to determine a placement and placement activities. If a student elects the thesis option, one of the student's primary advisers or a faculty mentor with experience in the student's area of research will oversee thesis development.

## Continuing Eligibility

Continuing eligibility requirements prior to the student's enrollment in the thesis or capstone project during the final summer term will be based on the School of Divinity continuing eligibility policy. Prior to beginning the thesis or capstone project, a committee composed of student faculty advisers from both programs, the Sustainability Program director, and the associate dean of academic affairs for the School of Divinity will consider a student's overall performance to that point and determine by consensus if the student is suited to continued candidacy. Once a student enters the final phase of the dual degree program, the academic committee will evaluate the thesis or project and determine whether to award the degree. If the committee requests revisions, the student will return a satisfactory thesis or deliverable within the following semester in order to graduate.

## Concentrations

- Interfaith Literacy and Leadership
- Religious Leadership in Food, Health, and Ecology
- Sustainability Concentration

The Wake Forest University School of Divinity provides an integrative, multi-disciplinary approach to theological education. One of our aims is to equip our students to be public religious leaders. Several concentrations within the Master of Divinity degree offer courses that allow students to develop skills and gain knowledge specific to particular fields of study and areas of religious leadership.

While concentrations are not required, students can choose a concentration that allows them to explore in greater depth areas of particular interest. Each concentration includes several foundational courses along with related internship requirements.

The School encourages students by the end of their second full semester of study in the MDiv program to state an interest in a concentration by submitting a "concentration declaration" form to the Office of Academic Affairs. Students will work with their faculty advisers to design an appropriate course of study for the student's remaining semesters in the program.

Courses taken to fulfill requirements of a concentration will also count as Divinity electives.

Currently, three concentrations are available.

- An **Interfaith Literacy and Leadership** concentration is designed to provide students with opportunities for focused study of a non-Christian religious or spiritual tradition.
- A concentration in **Religious Leadership in Food, Health, and Ecology** explores the implications for and intersections of contemporary religious leadership with foodways, the health of the public, and ecology. Students may focus on one of these three tracks.
- A **Sustainability** concentration is completed through coursework offered by the Wake Forest Center for Energy, Environment, and Sustainability (CEES).

## Interfaith Literacy and Leadership

A religiously pluralistic society needs leaders committed to respectful and collaborative engagement with diverse faith traditions. This concentration will provide students with opportunities for critical engagement with non-Christian religious or spiritual traditions.

## Requirements

The concentration requires 12 credit hours and a capstone project approved by the academic dean. Students will usually complete the following progression:

- REL 695 Exploring Interfaith Practice and Leadership (3h)
- Choose 9 hours of coursework engaging with non-Christian religious or spiritual traditions.
- Leadership Practice: an internship emphasizing interfaith literacy and leadership or similar practical project as deemed appropriate by the concentration adviser.



# Religious Leadership in Food, Health, and Ecology

This concentration explores the implications for and intersections of contemporary religious leadership with foodways, the health of the public, and ecology.

For each of the tracks, the concentration is 12 credits plus an internship. Students may also complete the concentration with 15 credits from any of the tracks (or that carry the SE area requirements) plus an internship.

For students who wish to focus in one of the three areas, the following tracks are suggested. Students interested in applying to pursue this concentration should contact the academic dean.

## Requirements Food Track

Code	Title	Hours
<b>Requirements</b>		
Select nine credits in food and faith, for example:		9
MIN 561	Faith, Food, Health, and Community	
MIN 660	Sacraments and Ordinances: History, Theologies, and Practices	
HIS 630	Culinary Culture in Black Religious Experience	
Select three credits from one of the other tracks		3
<b>Internship</b>		
Complete a food and faith internship		

## Health Track

Code	Title	Hours
<b>Requirements</b>		
Select nine credits in faith and health, for example:		9
MIN 561	Faith, Food, Health, and Community	
MIN 636A	Clinical Pastoral Education I	
MIN 636B	Clinical Pastoral Education II	
MIN 638	Trauma and Resilience in the Care of Individuals and Groups	
Select three credits from one of the other tracks		3
<b>Internship</b>		
Select one of the following:		
MIN 636A	Clinical Pastoral Education I	
Other health internship		

## Ecology Track

Code	Title	Hours
<b>Requirements</b>		
Select nine credits in ecological vocation, for example:		9
MIN 660	Sacraments and Ordinances: History, Theologies, and Practices	
THS 650	Ecowomanism: Religion, Gender and Environmental Justice	
Select three credits from one of the other tracks or courses from the Sustainability concentration		3

### Internship

Complete a faith and ecology internship

## Sustainability Concentration

The Wake Forest Center for Energy, Environment, and Sustainability (CEES) and the School of Divinity provide students with exposure to sustainability issues through the Sustainability concentration. The concentration requires the completion of 12 credit hours in sustainability coursework related to natural science, social sciences and humanities, business management, and law and policy. An application is required.

## Requirements

Students who elect to pursue this concentration will be required to complete 12 credit hours of the following SUS courses as electives toward the 76 hours of the MDiv. Students must complete SUS 701 (Global Human Systems) and SUS 691 (Inventing Your Future). Students must complete 7.5 hours of additional Sustainability courses:

Code	Title	Hours
<b>Fall Courses</b>		
SUS/CDS 701	Global Human Systems	3
SUS 703	Natural Science for Sustainability	3
SUS 705	Applied Sustainability 1	2
<b>Spring Courses</b>		
SUS 691	Special Topics ( Inventing Your Future)	1.5
SUS 702	Sustainable Organizational Mgt	3
SUS 704	Environmental Law & Policy	3
SUS 706	Applied Sustainability: Creativity and Impact	2

A variety of 1h optional electives are also available each year.

Although these credit hours can be completed during any year of the Master of Divinity program, students with this concentration are considered students in the Graduate School during the final (sixth) semester of their course of study.

## Related Programs at Wake Forest University

- Religious Studies, Master of Arts
- Women's, Gender, and Sexuality Studies, Graduate Concentration

## Religious Studies, Master of Arts

The Master of Arts in Religious Studies is administered by the Department for the Study of Religions and the Graduate School of Arts and Sciences. The Master of Arts in Religious Studies provides students an opportunity to forge a unique, creative, and rigorous program of study. The degree can serve either as a terminal degree or as preparation for a doctoral program. It emphasizes the comparative and theoretical study of religion in its various traditions and forms. Reflecting the teaching and research interests of the current graduate faculty in the department, the program fosters interdisciplinary approaches, offering training in traditional and contemporary theories and methods in conjunction with substantive investigations of diverse religious traditions and topics. Students are encouraged to make imaginative use of all available

resources in the creation of their own distinctive programs of study. Typically, this would involve:

1. focus on a particular religious culture/region or historical period, and
2. an approach or approaches to the study of the subject area.

Ordinarily, applicants for admission into the MA in Religion program majored in religious studies in their undergraduate coursework. The Department will consider applications from students who have majored in other social science or humanities disciplines and who have focused on the topic of religion. Admission is based on the degree of success in previous courses in religion, the clarity of the applicant's educational goals, and the general potential for successfully engaging in graduate-level work within the program. Additional information about the program is available here (<https://religion.wfu.edu/masters-program-in-religious-studies/>).

## Women's, Gender, and Sexuality Studies, Graduate Concentration

Director: Dr. Julia Jordan-Zachery

The graduate concentration in Women's, Gender, and Sexuality Studies (<https://wgss.wfu.edu/graduate-concentration/>) at Wake Forest will provide graduate students the opportunity to study gender and sexuality from a variety of disciplinary perspectives in conjunction with their study toward a graduate degree. Interdisciplinary by nature, Women's, Gender, and Sexuality Studies courses primarily address the diversity of gendered experiences based on race, ethnicity, class, religion, nationality, and sexual orientation. The graduate concentration is an appropriate option for graduate students who wish to focus on gender and/or sexuality in their particular disciplinary field.

## Other Program Opportunities

- Hispanic Summer Program

## Hispanic Summer Program

Wake Forest University School of Divinity is a sponsoring institution of the Hispanic Summer Program, which offers several 3-credit intensive summer courses during the month of June each year, along with an online J-term course in January. These courses are taught by Latinx faculty from accredited colleges and universities in the USA and Puerto Rico and are geared towards Latinx students, though a number of seats are available for non-Latinx students. Students may take one course per summer. The course fee for an in-person course for students from sponsoring institutions is \$475 which covers tuition, room and board, and airfare reimbursement. Tuition for an online course is \$375. All HSP credits are transferable to Wake Forest University School of Divinity.

## Courses A-Z

### B

- Biblical Studies (BIB)

### C

- Cross Disciplinary Studies (CDS)

### H

- Historical Studies (HIS)

### I

- Independent Study (IDS)

### M

- Ministerial Studies (MIN)

### S

- Spirituality (SPI)

### T

- Theological Studies (THS)

## Requirements

The School of Divinity reserves the right to change programs of study, academic requirements, and assignment of lecturers. The courses listed here are a sample of the courses offered in the School of Divinity. These courses, with the exception of some required courses, are not necessarily taught each semester or each academic year. Their availability is a function both of staffing constraints and student demand. While no guarantees about future scheduling can be made, students are encouraged to alert advisers and the associate dean of academic affairs to course needs or desires. An official list of courses offered in each semester and summer session is issued through the Office of Academic Affairs during the preceding term. Required courses are indicated by the symbol "R" following the course number and name. Course prerequisite requirements are indicated by the symbol "P" following the course name and number. Courses that require the permission of instructor in order to enroll are indicated by the symbol "POI." Unless otherwise specified courses listed here count as 3 hours (3h).

## Area Requirements

Each semester, courses in the School of Divinity and the University are designed as meeting the area requirements in five areas:

1. Cross-Cultural Connections (CC);
2. Gender and Sexuality (GS);
3. Race and Class (RC);
4. Religious Pluralism (RP); and
5. Science, Health, and Ecological Well-Being.

To fulfill the Cross-Cultural Connections requirement, students may complete one course with a travel component to a place outside the student's home region. Courses vary each year. Details about each academic year's courses can be found on the school's website or in the course listings below.

## Biblical Studies (BIB)

### BIB 501. Elementary Hebrew I. (3 h)

A course for beginners in the classical Hebrew of the Bible, with emphasis on the basic principles of grammar and the reading of biblical texts. Core requirement is met only after both semesters are completed.

**BIB 502. Elementary Hebrew II. (3 h)**

A course for beginners in the classical Hebrew of the Bible, with emphasis on the basic principles of grammar and the reading of biblical texts. Core requirement is met only after both semesters are completed.

**BIB 503. Intermediate Hebrew. (3 h)**

A course for beginners in the classical Hebrew of the Bible, with emphasis on the basic principles of grammar and the reading of biblical texts.

**BIB 504. Advanced Hebrew. (3 h)**

Permission of Instructor.

**BIB 511. Intro to New Testament Greek I. (3 h)**

A beginning course in Koine Greek, covering the fundamentals of grammar, with extensive reading in New Testament texts. Core requirement is met only after both semesters are completed.

**BIB 512. Intro to New Testament Grk II. (3 h)**

A beginning course in Koine Greek covering the fundamentals of grammar, with extensive reading in New Testament texts. Core requirement is met only after both semesters are completed.

**BIB 521. Old Testament Interpretation I. (3 h)**

An introduction to the history, literature, and religion of ancient Israel. This course covers the Pentateuch and Former Prophets.

**BIB 522. Old Testament Interpretation II. (3 h)**

An introduction to the history, literature, and religion of ancient Israel. This course covers the Latter Prophets and the Writings.

**BIB 541. Introduction to New Testament. (3 h)**

This course provides an overview of New Testament texts and contexts. Students will explore the content, historical context, literary structures, and theological perspectives of New Testament texts. In addition, students will learn some basic tools for biblical interpretation.

**BIB 542. Interpreting New Testament Letters. (3 h)**

This course focuses on the early Christian epistolary tradition, deepening students' knowledge of Pauline letters, catholic letters, and texts often associated with letter writers (e.g., Hebrews). Students will intensify their ability to use a variety of exegetical tools for New Testament interpretation and begin to explore different interpretive frameworks. Prerequisite: BIB 541.

**BIB 543. Interpreting New Testament Gospels. (3 h)**

This course focuses on the early Christian gospel tradition, deepening students' knowledge of canonical gospel texts (including Acts). Students will intensify their ability to use a variety of exegetical tools for New Testament interpretation and begin to explore different interpretive frameworks. Prerequisite: BIB 541.

**BIB 611. Intermediate Readings in Koine Greek. (1-3 h)**

Prerequisite: BIB 511 and 512 or equivalent.

**BIB 612. Angels and Demons. (3 h)**

An exploration of angelic and demonic figures in the biblical text and in the history of interpretation in Jewish, Christian, and Muslim traditions. This course will also consider the portrayal of angels (some fallen) in contemporary fiction, television, and film.

**BIB 614. Multicultural Biblical Interpretation. (3 h)**

Through case studies of New Testament texts, this course introduces students to interpretive frameworks and perspectives from multiple cultural perspectives, particularly those of women from various social locations, nationalities, socio-economic classes, and faith commitments. Students will learn skills for interacting with textual frameworks that are not their own. The course will focus on two primary questions: What constitutes difference in biblical interpretation? What sustains biblical interpretation across difference?.

**BIB 615. Myth and Scripture: The Bible and Ancient Near Eastern Myth. (3 h)**

This seminar explores biblical texts that depict the creation of the world, divine combat, and the abode of the dead within their ancient Near Eastern mythological contexts. We will study Genesis 1–11 and Babylonian creation myths (Enuma Elish, Atrahasis and others); the Ugaritic Baal Cycle and biblical traditions of God's defeat of the Dragon and Sea (e.g. Isaiah 51, Revelation 12); and descents to the Netherworld (Nergal and Ereshkigal, The Descent of Ishtar, Isis and Osiris, Isaiah 14, and others). Goddess traditions may receive special attention.

**BIB 616. Myths of Creation. (3 h)**

This course explores a variety of ancient and "primitive" mythological texts concerned with the origins of the cosmos, the gods, and humanity. Selections from Hindu, Buddhist, Native American, Babylonian, Egyptian, Hebrew, Greek, Persian, and Norse mythology are examined within their respective cultures as well as in a comparative context. Attention is given to various anthropological and psychological theories of myth and literary methods of myth analysis. We also explore Genesis 1-3 and the creative reinterpretation of the Biblical images of Adam and Eve in the Garden of Eden. The course concludes with a consideration of the survival of myth in the postmodern world and the relationship of the mythological imagination to recent scientific explanations of universal origins and cosmology.

**BIB 617. The Bible and Film. (3 h)**

This course explores the different ways in which the Bible, theology, and film can be placed into mutually critical conversation. While some attention is given to how the Bible and its stories are depicted in film, the goal of the class is to construct enriching dialogues between specific biblical texts and recent films of various kinds. How can biblical texts provide new lenses for our viewing of films? In what ways can films enrich our understanding and interpretation of Scripture? How can films be used in congregational settings to deepen our theological reflection and engagement?.

**BIB 618. Egypt and Babylon: Ancient Near Eastern Myth. (3 h)**

An introduction to ancient Egyptian, Babylonian, and Canaanite myths and their relation to the biblical tradition. This course examines the ancient Near Eastern context within which Israelite religion and literature developed. Topics include myths of creation and destruction, prayers and incantations, gods and goddesses, wisdom literature, and fertility and funerary cults discovered in the archaeological remains of these early civilizations. Primary readings in the world's oldest literatures will include such texts as the Epic of Gilgamesh, Ishtar's Descent to the Netherworld, Isis and Osiris, the Book of the Dead, and the Baal Cycle.

**BIB 619. Africa and the Bible. (3 h)**

This seminar explores the significance of Africa and Africans within biblical literature, with a primary focus on ancient Egyptian history and literature. Topics include Egyptian myth, magic, and poetry; the history and stories of Joseph, Exodus, and the Holy Family in Egypt; and biblical characters such as Hagar, the Queen of Sheba, the Black Pharaohs, and the Ethiopian eunuch. We will also survey the history of Judaism and Orthodox Christianity in Egypt, Meroë, and Ethiopia (including Rastafarianism) before concluding with some contemporary (post-colonial) readings of the Bible in Africa.

**BIB 625. The Major Prophets. (3 h)**

A close reading (exegesis) of Jeremiah, Isaiah, or Ezekiel with traditional and contemporary methods. Topics will vary between the study of a single book and particular historical contexts (preexilic, exilic, and postexilic). P-BIB 522.

**BIB 627. Proclaiming Judges: Tales of Sex and Violence. (3 h)**

Many Hebrew Bible texts contain disturbing images and stories related to sex, gender, and violence. Examples include Deborah and Jael, Jephthah's daughter, the Samson narrative, the rape of the unnamed Levite's concubine, and Ruth's apparent seduction of Boaz. This course will examine in detail these stories and others as they appear in the books of Judges and Ruth. As a MIN offering in the Proclamation area, the course will move from exegesis and ancient literature to look at how Christian communities have dealt with, and should continue to deal with, these difficult and impious texts in preaching, liturgy, and religious education. The course will include analysis of how these texts have been presented in modern film, books, and music and in some Christian children's resources, such as Veggie Tales.

**BIB 630. Daniel: Stories and Visions. (3 h)**

A close reading (exegesis) of the book of Daniel with traditional and contemporary methods. P-BIB 522.

**BIB 631. The Five Festival Scrolls. (3 h)**

A literary and theological study of Esther, Ruth, Lamentations, Song of Songs, and Qoheleth (Ecclesiastes) as canonical books and as festival readings in the Jewish liturgical year.

**BIB 633. The Book of Psalms: Poetry and Spirituality. (3 h)**

An examination of the development, literary characteristics, and theological contents of the works of ancient Israel's sages and poets.

**BIB 642. Women and Slaves in the New Testament. (3 h)**

This course explores the role of marginalized persons, particularly women, enslaved people, and impoverished people in the texts and contexts of the New Testament. Students will explore intersectional historical, literary, and theological frameworks for better understanding New Testament interpretation for and with contemporary faith communities.

**BIB 651. Reading Our Common Scriptures: Jewish-Christian Dialogue. (3 h)****BIB 666. The Book of Revelation. (3 h)**

From visions of heavenly worship to visions of renewed creation, from fantasmic monsters to epic battles, the book of Revelation remains one of the most enigmatic texts in our scriptural canon. In the first half of this course, students will explore the historical context, including contemporaneous apocalyptic literature, archaeological materials, and early Christian uses of the Revelation of John. The second half of the course will turn to an examination of modern interpretations of Revelation found in popular literature (e.g. Left Behind series), political discourses, and contemporary Christianity. We will focus on how these interpretations manifest theologically and ethically in the life of the church. P-BIB 541.

**BIB 701. Readings in Hebrew. (1-3 h)**

Directed study for those who have completed the required courses and one intermediate course in Biblical Hebrew. Permission of Instructor.

**BIB 711. Advanced Readings in Greek. (1-3 h)**

An opportunity to read early Christian texts in Greek at an intermediate level for one to three hours a week. Readings and meeting times are decided by students and the instructor.

**BIB 790. Topics in Biblical Studies. (1-3 h)**

Courses in biblical studies can be developed and offered on a one-time basis using this designation.

**BIB 790A. Topics in Biblical Studies. (1-3 h)****BIB 790B. Topics in Biblical Studies. (1-3 h)****BIB 790C. Topics in Biblical Studies. (1-3 h)**

## Cross Disciplinary Studies (CDS)

**CDS 510. Nicaragua. (3 h)****CDS 512. Introduction to Research and Writing. (2 h)**

This course will introduce students to writing and research in biblical and theological studies. Students will learn the foundational aspects of planning, writing, and revising academic papers as well as how to access and evaluate resources for research. We will also discuss important reading strategies, organizational practices, and appropriate citations.

**CDS 612. Advanced Research and Writing. (1 h)**

This course will introduce students to advanced writing and research methods in biblical and theological studies. Through assignments such as preparing annotations for specific types of research sources and learning strategies for completing significant writing projects, students will develop skills that will support their work in the School of Divinity and any future graduate degrees they may pursue.

**CDS 701. Global Human Systems. (3 h)**

This course will draw on anthropology, sociology, and health sciences to focus on the global social outcomes of decision making and resource management, with an emphasis on sustainability in cultural contexts. Topics that will be covered include sustainable community development, agricultural policy, the effects of sustainability policy choices on public and community health, and public policy regulating the built environment. Students will look at these through the lens of environmental ethics and learn to think critically about the interdependence of economic and environmental policy and community well-being. After studying sustainability initiatives in developing nations, they should be able to realistically assess the feasibility of development strategies in various societies.



**CDS 790. Topics. (1-3 h)**

Courses in cross-disciplinary studies can be developed and offered on a one-time basis using this designation.

**CDS 790A. Topics. (1-3 h)****CDS 790B. Topics. (1-3 h)****CDS 790C. Topics. (1-3 h)**

## Historical Studies (HIS)

**HIS 501. History of Christianity. (3 h)**

This course surveys the first through the 16th centuries. Attention is given to the early Councils, the rise of the papacy, dissenting movements, and the development of the sacraments. Medieval studies include mysticism, church/state affiliations, and scholasticism. Reformation issues survey the work of Luther, Zwingli, Calvin and the Radical Reformers.

**HIS 502. History of Christianity II. (3 h)**

This course surveys the 17th through the 20th centuries. Attention is given to the rise of modernism and its impact on philosophy, theology, ecclesiology and politics. Catholic studies focus on individuals such as Sor Juana de la Cruz, Teresa of Avila, Alfred Loisy, Pius IX, John XXII and Dorothy Day, and the impact of Liberation Theology. Protestant studies examine the rise of Puritanism, missionary movements, dissenters, global Christianity, slavery and civil rights, and religions in America.

**HIS 591. African-American Religious History and Experience. (3 h)**

An exploration of the religious dimensions of African-American life from its African antecedents to contemporary figures and movements.

**HIS 594A. Egypt. (1 h)**

This course provides an historical introduction to Egypt's Muslim society as the context within which minority Christian communities have practiced their faith. By traveling to the Arab Republic of Egypt, students will directly experience Muslim culture and religion as they investigate Egypt's rich religious heritage. The class will visit numerous pharaonic, Christian, Muslim, and (historically) Jewish places of worship in the greater Cairo area and in Egypt's stunning archeological sites at the southern environs of Luxor. We will witness the grandeur of Islamic civilization in Cairo's medieval mosques and modern monuments. We will discuss the tumultuous history of Jews in Egypt while touring Cairo's historic Ben Ezra Synagogue. We will examine Christian monasticism in the place of its origin at the Wadi Natrun. Site visits to numerous Christian churches, including All Saints Anglican Church (with its Sudanese refugee congregation), will expose students to a diversity of Christian practices in Egypt.

**HIS 594B. Egypt. (2 h)**

This course provides an historical introduction to Egypt's Muslim society as the context within which minority Christian communities have practiced their faith. By traveling to the Arab Republic of Egypt, students will directly experience Muslim culture and religion as they investigate Egypt's rich religious heritage. The class will visit numerous pharaonic, Christian, Muslim, and (historically) Jewish places of worship in the greater Cairo area and in Egypt's stunning archeological sites at the southern environs of Luxor. We will witness the grandeur of Islamic civilization in Cairo's medieval mosques and modern monuments. We will discuss the tumultuous history of Jews in Egypt while touring Cairo's historic Ben Ezra Synagogue. We will examine Christian monasticism in the place of its origin at the Wadi Natrun. Site visits to numerous Christian churches, including All Saints Anglican Church (with its Sudanese refugee congregation), will expose students to a diversity of Christian practices in Egypt.

**HIS 598. O Jerusalem! Jews, Christians, and Muslims in the Holy City. (3 h)**

An introduction to the history and religious heritage of Jewish, Christian, and Muslim communities in Jerusalem and the Holy Land. Participants will metaphorically "walk the pilgrim's road" as we trace the historic development of Judaism, Christianity, and Islam from their ancient origins, through the medieval period and Crusades, into the modern controversies around colonialism, Zionism, and contemporary politics. Special attention will be given to the city of Jerusalem through the ages; the spirituality of pilgrimage; Hasidism, Kabbalah, and modern ultra-Orthodox Judaism; the art and architecture of the Dome of the Rock and Al-Aqsa mosque; the Via Dolorosa, the Church of the Holy Sepulcher, and other pilgrimage sites on the Mount of Olives; Eastern Orthodox Christian communities; and diversity within each of the Abrahamic traditions (including Baha'i and Druze sects) in the Holy Land.

**HIS 598A. Reading for Holy Land Travel. (1 h)**

Readings and preparation for a pilgrimage to Israel and Palestine. This course is required as a prerequisite for MIN 598B.

**HIS 598B. Holy Land. (2 h)**

A pilgrimage to the contested lands of Israel and Palestine over winter break, followed by class discussions during the spring semester.

**HIS 630. Culinary Culture in Black Religious Experience. (1-3 h)**

An exploration of the historical, social, cultural, theological, ethnographic, and practical components of African American religious life and foodway culture. Particular attention is given to the historical relationship between eating and church life, highlighting diverse and creative forms of culinary expression in the African American faith tradition and the ways in which food becomes transformative for those struggling for human dignity.

**HIS 660. Islam and Interfaith Encounters in Morocco. (1.5-3 h)**

Since 1994 the historic North African city of Fes, Morocco, has hosted the annual Festival of World Sacred Music. Musicians and dancers come from across the globe to perform and share in intercultural and interfaith conversations. The nine-day festival celebrates "the spiritual heart of Islam—peaceful, pluralistic, generous and cheerful—" as it honors the diverse spiritual traditions of the world. Each day of the festival features a morning forum, an intimate afternoon concert in the courtyard of the Batha Museum, an evening performance outside the medina's medieval gate (Bab Al-Makina), and a late-night exhibition of Sufi chants and dancing (dhikr) from various Moroccan brotherhoods. Academic topics include Islam, Sufism, world sacred music, and Moroccan culture, history, and literature.

**HIS 661. World Religions. (3 h)**

An examination of the ideas and practices of major religious traditions in their historical and cultural contexts. The primary focus is on the Hindu and Buddhist traditions, the religions of China and Japan, and Islam.

**HIS 671. Religions in America. (3 h)**

A study of religious traditions, events, and individuals shaping religious life in America. Attention is given to native religions, colonization, denominations, awakenings, religious liberty, the western movement and the rise of the American Self. The development of pluralism and the impact of immigration, civil rights, and new religions is studied.

**HIS 672. Interfaith Dialogue. (1-3 h)**

An exploration of the challenges and opportunities presented by the contemporary encounters between Christians and people of other religious communities.

**HIS 673. Evangelicalism in North America. (3 h)**

An examination of evangelicalism with regard to its important contributions to American religious culture, its variety in forms, and its ability to reconsider itself in an increasingly pluralistic United States.

**HIS 674. Religion and the Civil Rights Struggle. (3 h)**

Resistance to racial bias dates back to institutional slavery. This course will chart an intellectual history from antebellum America through the most publicized protest movement during the mid-to- late twentieth century—the Civil Rights Movement. Students will assess several classic and contemporary texts on radical black political thought, connecting those historical voices to contemporary religious thinking and social activism. This course will consider the ways in which faith communities, organizations, and individuals have fueled or been reinforced by African American protests and demands for equal rights. As a site of investigation, this class also will pay some attention to the history and nature of the civil rights struggle in Winston-Salem and surrounding areas. Ultimately, this class will engage the complexity of religious voices within the American freedom struggle—including Judaeo-Christians, Muslims, or even the non-religious. We will trace the role religious faith plays in the various forms of the resistance over the nearly 400 years of the African American pilgrimage for equal rights.

**HIS 682. A History of the Baptists. (3 h)**

A study of Baptist history with particular attention to Baptists in the United States and the diversity of Baptist ways of belief and practice.

**HIS 683. Anglican Theology and Historical Roots. (3 h)**

This course will explore the core tenants of Anglican theology as they have developed historically. The class will begin with the work of Richard Hooker and theological reform of the Reformation. The next section will examine the development of Anglican theology in England and the United States with particular attention to social theology.

**HIS 693. African-American Religious Traditions. (3 h)**

A history of religious movements, communities, and individuals within African-American traditions.

**HIS 712. Gender and the Trinity in the Early Church. (3 h)**

In the ancient church—as in the present day—theological debate was never only about theology. In this class we will explore ancient controversies over the Trinity in their historical context, uncovering the complex ways that theological debates over the divine persons were intertwined with conceptions of gender and the rhetorical battle to define the communal identities of “Christian,” “Roman,” “Greek,” and “Jew.” Through engagement with the writings and history of early Christians, we explore the challenge and promise of striving to speak truthfully about God.

**HIS 725. Preachers of the Early Church. (3 h)**

Christianity, from the beginning, has been a preached religion. This class will explore the varied landscape of preaching in the first five centuries of the church. From the difficulties of Christian doctrine to interpretive puzzles in the Biblical text to flights of mystical poetry to declamations against societal injustice, the sermons of the early church offer a window onto the world of the ancient Christians and a whetstone to hone the practice of preaching today.

**HIS 735. Lit Classics World Religions. (3 h)**

This course examines great works of literature from the world's religious traditions including Judaism, Christianity, Islam, Hinduism, and Buddhism. While the basic teachings of selected religions are introduced for students with little or no background in the subject, the focus of this class remains on scriptural and literary texts that offer classic theological perspectives on the human condition. These are beautiful and profound writings, ranging from the tragic to the sublime, that challenge readers with perennial questions of religious significance. Our subjects and readings may encompass philosophical discourses, prophetic oracles, lyric and mystical poetry, lamentation and tragic narrative, erotic imagery, and apocalyptic visions of cosmic destruction. Readings include the Gilgamesh Epic, biblical texts, the Qur'an, Sufi poetry, Upanishads, the Bhagavad Gita, the Dhammapada, and Zen sutras.

**HIS 743. Poets Questioning God. (3 h)**

Do things happen for a reason? Why have my people suffered such tragedy? Why have I? Is death the end? Why has the Church become an instrument of oppression? In this class we will see how Christians from a wide variety of pre-modern historical contexts wrestled with these questions through poetry and narrative. Key texts will include The Recognitions of Clement (an ancient Jewish-Christian novel), poetry on war and natural disasters by Ephrem of Nisibis, Boethius's The Consolation of Philosophy, and Piers Plowman (a long poem of biting satire and profound visions from medieval England). Through these texts we will also explore how different forms of writing offer different resources for spiritual and theological reflection.

**HIS 771. Religious Experience in America. (3 h)**

An examination of the nature of conversion, mysticism, and other forms of religious experience in American religious life.

**HIS 790. Topics. (1-4 h)**

Courses in history can be developed and offered on a one-time basis using this designation.

**HIS 790A. Tpcs Course in Historical Stud. (1-3 h)****HIS 790B. Tpcs Course in Historical Stud. (1-3 h)****HIS 790C. Tpcs Course in Historical Stud. (1-3 h)**

## Independent Study (IDS)

**IDS 791. Independent Study I. (1-3 h)**

A student may request to take an independent study (IDS) course with a faculty member. The following rules apply: (1) An independent study will count only as a general elective course, not as a required course or a required area elective. (2) A student may take no more than 6 hours of independent studies in the MDiv program. (3) A student must have a GPA of at least 3.0 in order to register for an independent study. (4) A student must be in their fourth, fifth, or sixth semesters of M.Div. study to register for an independent study. (5) A request for the study must be made in writing by the student to the faculty member. (6) The faculty member must be convinced that special circumstances warrant the request. (7) The terms for an independent study must be put in writing and agreed to by the student and the faculty member. (8) No faculty member is obligated to offer independent studies. (9) Credit varies from one to three hours.

**IDS 792. Independent Study II. (1-3 h)**

See description for IDS 791. Offered spring semester.

**IDS 793. Independent Study III. (1-3 h)**

See description for IDS 791. Offered summer session, first semester.

**IDS 794. Independent Study IV. (1-3 h)**

See description for IDS 791. Offered summer session, second semester.

## Ministerial Studies (MIN)

**MIN 501. Art of Ministry I: Introduction to the Life and Work of Ministry. (2 h)**

An introduction to vocational formation for religious leadership.

**MIN 501L. Art of Ministry I-Small Group. (0 h)**

A core aspect of Art of Ministry is the opportunity for formative engagement and intentional reflection with peers regarding the life and work of ministry in various settings. Art of Ministry 501 engages small group learning and reflection to facilitate this growth and development with peers and small group mentors who are serving in community ministry.

**MIN 501S. Art of Ministry Small Group. (0 h)****MIN 512. Healthy Boundaries: Ministry, Ethics, and Leadership. (1 h)**

This course explores relationships between ministry, professional ethics, and pastoral leadership. Topics include clergy confidentiality, healthy clergy relationships, clergy self-care, pastoral issues related to business and finances, healthy use of social media in ministry, and practices for ensuring the safety of children and youth in ministerial programs. This course is based on a similar course developed by the Faith Trust Institute and is designed to meet denominational healthy boundaries training requirements. The professor has been certified as a healthy boundaries trainer through the Faith Trust Institute. This course is equivalent to Healthy Boundaries 101 and 201 offered by the Faith Trust Institute.

**MIN 513. Introduction to Congregational Budgeting and Finance. (1 h)**

This course is designed to provide ministry leaders a basic understanding of business and financial concepts in a congregational (and nonprofit) context. The overall goal is to help students learn how to use financial information in decision-making and leadership roles. The course will be praxis-oriented, aimed at helping learners develop basic skills in the areas of budgeting and related financial processes. The course will also provide an overview of effective fundraising and giving philosophies and practices.

**MIN 515. Transforming Leadership? Exploring Practical Theologies for 21st Century Ministry. (3 h)**

How does religious leadership transform communities? What strategies are effective in today's ministering contexts? This course explores models of practical theological reflection and methods of reflective professional practice as frameworks for religious leadership in a variety of contexts. Students will develop reflective strategies to place into conversation their personal vocational narratives, institutional and cultural contexts, biblical leadership tropes, and elements of what they are learning across theological disciplines.

**MIN 520. The Church in Contemporary Cultures. (1-3 h)**

A study of social factors that pose challenges to church life. Students consider the everyday lives of churchgoers and how faith plays a role in their responses to social, cultural, and political issues. Attention is also given to the ways in which communities of faith create religious culture as a means of strength, cohesion, and survival.

**MIN 530. Introduction to Christian Worship and Liturgy. (3 h)**

A study of the role of symbol and ritual, sacred times and festivals, sacred places and persons, and expressions of art and music.

**MIN 531. Children in Worship. (1 h)**

How can worship leaders effectively encourage the participation of children in Sunday worship? What is the role of worship in shaping children's spiritual life? What is the purpose of the "children's sermon" or "children's worship"? This one-credit course will explore these and other topics related to the presence of children in worship.

**MIN 533. Worship Practicum. (1 h)**

In this course, students will learn to create, plan, and lead weekly worship services for the School of Divinity community. In addition to learning different worship and liturgical traditions, students will reflect theologically on the meaning of worship elements, thereby giving them tools to plan worship services with attention and intention.

**MIN 535. The Samuel DeWitt Proctor Institute for Child Advocacy. (3 h)**

Seminar with clergy, seminarians, Christian educators, young adult leaders and other faith-based advocates for children for spiritual renewal, networking, movement-building workshops, and continuing education about urgent needs of children at the intersection of race and poverty.

**MIN 540. Specialized Internships. (0.5-3 h)**

Students may elect to do summer, semester, or academic year internships away from the Divinity School's geographic region. Course credit may be given for a specialized internship if the student submits a proposal and the internship is approved by the faculty. If approved, a faculty member serves as an adviser to the student, and a reflection paper, along with other related readings, is required.

**MIN 541. Summer Internship Reflection. (1 h)**

The School of Divinity makes funding available to students who wish to serve in full-time internship placements during the summer recess. Summer interns serve in a ministry setting for six to eight weeks for a minimum of 200 hours. The School of Divinity invites competitive applications for summer internship funding in early January and makes stipend offers by mid-March. Some ministry settings partner with the School of Divinity to provide part of the funding for summer internship placements. The format of full-time summer internship placements is similar to the part-time format of Art of Ministry II. At the beginning of the summer, students work with their site mentors to create learning/ministering covenants that spell out the student's roles, responsibilities, and learning goals. Summer interns meet weekly with their mentors to reflect on the student's internship work. At the end of the summer, students and mentors write assessments of the internship placement. Summer interns enroll in a one-credit course, meeting one day in May and another in August. The summer internship course creates opportunities for students to reflect on their summer internship work and structures that hold students accountable to their commitments to their internship settings. Students work in peer groups to reflect on their summer internship work.

**MIN 542A. Internship. (0 h)**

A part-time ministry internship placement (2 semesters at 100 hours per semester, for a total of 200 hours) taken in either the second or third year of program.

**MIN 542B. Internship. (0 h)****MIN 543. Internship. (0 h)**

A full-time ministry internship placement (200 total hours, to be completed in 5-7 weeks of full-time internship work) in the summer following either the first or second year of the program.

**MIN 544. Internship. (0 h)**

A summer intensive, full-time internship placement; 300 hrs to be completed between mid-May and mid-August.

**MIN 545. PRIME Internship Reflection Seminar. (2 h)**

This course is a general elective used for the fulfillment of the summer internship reflection requirement. Pass/fail only. P-POI.

**MIN 551. Introduction to Worship and Preaching. (3 h)**

This course provides instruction in the preparation and delivery of sermons in the context of worship. Attention is given to the history of Christian preaching, to techniques of effective biblical interpretation for preaching, and to the development of a theology of proclamation. P-BIB 521 or 541.

**MIN 561. Faith, Food, Health, and Community. (3 h)**

This course introduces students to the Religious Leadership in Food, Health, and Ecology concentration. The concentration develops leadership skills applicable to either congregational or nonprofit ministries. Interdisciplinary conceptual lenses and methods introduce participants to food systems and health systems as overlapping "loci" for understanding brokenness and cultivating shalom in community. Students interact with community leaders, local data, and faith-based initiatives working at these intersections.

**MIN 564. Podcasts, Livestreams, and Vlogs: Proclamation in the Digital Age. (3 h)**

This course investigates the many ways religious leaders are increasingly using digital media to proclaim the Gospel thus engaging with people who are not in the same space. As social media is now part of the daily lives of many people around the globe, this course explores how religious leaders engage and make meaning of their encounters on Facebook, Instagram, SnapChat, Twitter and other social and digital media formats. Specifically, the course examines how preaching is re-imagined through digital pulpits i.e., podcasts, livestreams and vlogs.

**MIN 565. Watershed Discipleship. (3 h)**

This course will introduce and explore a new (and ancient) paradigm for ecological theology and practice that will enable and equip participants to understand and respond to the greatest crisis our civilization has ever faced - the global degradation of our planet and its waters.

**MIN 570. Exploring Interfaith Practice. (3 h)**

This course will provide foundational knowledge of interfaith engagement with focus on forms of leadership. The course will consist of 4 units examining: 1) interfaith history and identifying interfaith movements; 2) principles of interfaith leadership; 3) case studies in interfaith leadership; 4) special topics in interfaith practice and leadership. Students will be encouraged to identify their own leadership styles and to build relationships with effective interfaith leaders within their own communities.

**MIN 592. Appalachia. (3 h)**

Studies in rural church and community ministry through Appalachian Ministries Educational Resources Center (AMERC), Berea, Kentucky. Particular attention is given to traditional communities amid the changing face of the Appalachian region.

**MIN 599. Multicultural Contexts for Ministry. (1-3 h)**

Multicultural contexts for ministry courses focus on specific ministries in diverse cultural and regional contexts. Each course includes a required travel component. Courses vary each year.

**MIN 600. Korea: Conflicts, Reconciliation, and Peacemaking. (3 h)**

A faculty-led travel course which confronts the problem of conflict resolution and peace-making in a country marred by Japanese colonial rule and torn by the Korean war. During Japanese colonial rule (1910-1945), Korea was subject to various kinds of brutal exploitation and persecution by Japanese imperialism, and its liberation was soon followed by a war (1950-1953) that would become a symbol of the Cold War and that still threatens the peace and security of the world. Focusing on some recent events in Korean history, this course will critically examine common sources of national and international conflicts, forms of dehumanization and oppression, processes of political regeneration, and the role of the church in the work of reconciliation and peace-making. We will explore various approaches to conflict resolution and peacebuilding through readings, case studies, and visiting relevant locations. In particular, we will consider theological grounds for forgiveness and peacemaking.

**MIN 601A. Art of Ministry II: Shared Wisdom: Reflective Practice in Ministry. (3 h)**

Academic year internship that includes experiential learning, mentoring, peer group reflection, and classroom learning.

**MIN 601B. Art of Ministry II: Shared Wisdom: Reflective Practice in Ministry. (3 h)**

Academic year internship that includes experiential learning, mentoring, peer group reflection, and classroom learning.

**MIN 602A. Internship Reflection Seminar. (1.5 h)**

Internship Reflection Seminar engages second-year students in theological reflection through a year-long internship. The 3-hour, two-semester course (1.5 credits in each semester) includes plenary sessions that focus on skills development. At the center of the internship learning process is a structured relationship between each student and an on-site mentor. Students also learn how to reflect theologically about ministry and leadership through work with peer groups consisting of other student interns.

**MIN 602B. Internship Reflection Seminar. (1.5 h)**

Internship Reflection Seminar engages second-year students in theological reflection through a year-long internship. The 3-hour, two-semester course (1.5 credits in each semester) includes plenary sessions that focus on skills development. At the center of the internship learning process is a structured relationship between each student and an on-site mentor. Students also learn how to reflect theologically about ministry and leadership through work with peer groups consisting of other student interns.

**MIN 602C. Summer Internship Reflection Seminar. (3 h)**

A full-time ministry internship placement (300 total hours, to be completed in 6-9 weeks of full-time internship work) during the summer.

**MIN 612. Angels and Demons. (3 h)**

An exploration of angelic and demonic figures in the biblical text and in the history of interpretation in Jewish, Christian, and Muslim traditions. This course will also consider the portrayal of angels (some fallen) in contemporary fiction, television, and film.



**MIN 627. Proclaiming Judges: Tales of Sex and Violence. (3 h)**

Many Hebrew Bible texts contain disturbing images and stories related to sex, gender, and violence. Examples include Deborah and Jael, Jephthah's daughter, the Samson narrative, the rape of the unnamed Levite's concubine, and Ruth's apparent seduction of Boaz. This course will examine in detail these stories and others as they appear in the books of Judges and Ruth. As a MIN offering in the Proclamation area, the course will move from exegesis and ancient literature to look at how Christian communities have dealt with, and should continue to deal with, these difficult and impious texts in preaching, liturgy, and religious education. The course will include analysis of how these texts have been presented in modern film, books, and music and in some Christian children's resources, such as Veggie Tales.

**MIN 628. Financial Leadership in Ministry. (1 h)**

This course will explore how pastoral leaders approach personal and church finances and how their approach relates to their theology. Money is a medium of social exchange that creates hope, anxiety, blessing, conflict, opportunity and temptation. Students will examine the values related to money in the communities that have shaped them; think through their beliefs about money biblically and theologically; evaluate their current money practices in light of their faith; and develop a money-related practice to pursue throughout the course. How will you organize your own finances and provide leadership within your church in addressing financial matters? In this course students will seek to answer questions like this by considering biblical and theological resources for developing a theology of finance along with developing the tools needed for personal financial planning and the management of finances in a church setting.

**MIN 629. Public Leadership in Nonprofit Organizations: Legal and Theological Perspectives. (3 h)**

The goal of this course is twofold: (1) to consider how legal and theological inquiry shed light on public leadership roles that theologically and legally trained professionals inhabit; and (2) to prepare students to be competent leaders of nonprofit organizations, considering issues like: the legal structure and status of a nonprofit organization (a 501(c)(3)), the process of casting a mission and vision in nonprofit organizations; fund-raising; developing and engaging a leadership board; cultivating a volunteer staff; representing an organization as a public leader; etc.

**MIN 630. Christian Ministry and Public Leadership in America. (3 h)**

This course explores the role of minister as public leader. It attends to four areas of concern: (1) what public leadership is, and what it means in the context of Christian ministry; (2) how U.S.-Americans make morally relevant meaning of their social and political life together, and how these meanings are relevant to ministry leadership in broader publics; (3) what models of public leadership are available to ministry leaders, and what it means to lead well through them, and (4) how ministry leaders reflect theologically on their role as public leaders. To focus our conversation around these matters, the course will examine the theme of urban poverty throughout.

**MIN 631. The Ministry of Pastoral Care. (3 h)**

A study of the church's ministry of caring for persons throughout the life cycle which is grounded in theological understandings of the human condition, the spiritual journey, and the nature of ministry.

**MIN 633. Introduction to Pastoral Counseling. (3 h)**

An introduction to theories and methods of pastoral counseling, including the nature of pastoral identity and essential skills for effective counseling.

**MIN 636A. Clinical Pastoral Education I. (3 h)**

A clinical pastoral education unit focused on multi-cultural concerns in hospital chaplaincy and pastoral care. Offered through the Atrium Health Wake Forest Baptist Medical Center. Open to second and third year students only.

**MIN 636B. Clinical Pastoral Education II. (2 h)**

A clinical pastoral education unit focused on multi-cultural concerns in hospital chaplaincy and pastoral care. Offered through the Atrium Health Wake Forest Baptist Medical Center. Open to second and third year students only.

**MIN 638. Trauma and Resilience in the Care of Individuals and Groups. (3 h)**

A study of theories and practices related to individual and community traumas, trauma-informed care, and the human capacities for resilience and growth. The course will utilize sources from multiple disciplinary lenses and practices, including neuroscience, psychology, practical theology, and restorative justice.

**MIN 641. Congregational Leadership and Presbyterian Polity. (1-3 h)**

A study of the polity of the Presbyterian Church (USA). Attention is given to issues of congregational leadership as they are affected by Presbyterian polity structures.

**MIN 643. Homiletics, Ethics and Community Leadership. (3 h)**

This course focuses on the relationship between leadership ethics, and preaching in communities of faith. Special attention is given to the roles of gender, race, ethnicity and class in homiletical practice and theology. The course also considers the role of pastoral leadership in guiding communities toward ethical decision-making that can result in justice and liberation. Also listed as Theological Studies 643.

**MIN 644. Preaching, Worship, and the Care of Souls: Funerals, Weddings, and Other Pastoral Rites. (3 h)**

A study of pastoral rites. This course is a seminar and practicum through which students learn how to design and lead pastoral rites, with an emphasis on funerals and weddings. Each student is required to preach for the class a funeral sermon and a wedding sermon.

**MIN 645. Preaching in the Tradition of the African American Church. (3 h)**

This course invites students to explore the heart and soul of the African American preaching traditions with attention to the historical emergence of the Black Church, its dual function as a religious and socio-political institution, and the theologies, practices and histories that continually give shape to its preaching traditions. The course is designed to enhance students' ability to create theologically grounded sermons that are intelligible, accessible and transformational by exploring the Black Preaching tradition's contributions to homiletical theory and practice. Course emphases include the theological dimensions of preaching, biblical interpretation, sermon preparation and delivery, preaching as formative practice, and preaching as a communal communicative act.

**MIN 654. Preaching and Worship in Sacred Time. (1-3 h)**

This course analyzes the biblical, theological, and pastoral nature of the seasons and special moments of the church year. In addition to instruction on sermon preparation for the major liturgical moments (e.g., Advent, Christmas, Lent, Easter, Pentecost), attention is given to baptism, communion, weddings, and funerals.

**MIN 658. Womanist Proclamation. (3 h)**

This course explores womanist proclamation, a practice of truth telling, wisdom bearing and justice seeking that is identified via the radical inclusion of marginalized voices, as an embodied rhetorical and theological act of resistance. Through the carving out of sacred spaces, the course will examine how Black women and girls use speech (performed word) and movement (embodied word) to intentionally disrupt popular terrains where Black bodies are literally and metaphorically disembodied. Ultimately, the course theorizes that womanist proclamation is a means through which Black women's bodies generate and transmit spiritual power from traditional and alternative pulpits and sources to unfetter themselves and their communities from the vestiges of interlaced oppressive systems.

**MIN 660. Sacraments and Ordinances: History, Theologies, and Practices. (3 h)**

A place-based exploration of the history, theologies, and practices of baptism and the Lord's Supper in diverse Christian contexts.

**MIN 663. Ritual & Congregational Life. (3 h)**

An examination of the history, theology, and practice of the sacraments and other pastoral rites in congregational life. Attention is given to the meaning and function of ritual in a contemporary context. The course is taught from a Reformed perspective.

**MIN 668. The Prophetic Pulpit: Preacher as Public Intellectual. (3 h)**

The purpose of this course is to introduce students to the intellectual tradition of preaching as both spiritual witness and prophetic resistance in the United States. The ultimate aim is to foster intellectual dispositions, ethical orientations, and personal motivations which enable us to raise voices of dissent against any status quo and/or ideological options offered by popular society. We will thus seek to fulfill the three following interrelated tasks: 1.) Clarify the role of the public intellectual within a prophetic tradition, 2.) Examine historical examples of those who bore witness to horrors otherwise denied and their methods of public address, and 3.) Encourage students to craft creative sermons, write clear, concise, and compelling editorials, and engage pressing social issues in ways that are ethically based, intellectually sound, and emotionally animating.

**MIN 671. Contemporary Spiritual Writers. (3 h)**

A study of the principles of the spiritual life as presented in the works of selected contemporary writers.

**MIN 681. American Denominationalism. (3 h)**

A study of the development of denominationalism in America with particular attention to specific faith communities and the shape of religious organizations for the future. Also listed as HIS 681.

**MIN 682. A History of the Baptists. (3 h)**

A study of Baptist history with particular attention to Baptists in the U.S. and the diversity of Baptist ways of belief and practice. Also listed as HIS 682.

**MIN 693. History and Polity of the Christian Church, Disciples of Christ. (2 h)**

The course will explore the history, polity, theological foundation, and characteristic beliefs of the Christian Church, Disciples of Christ.

**MIN 695. United Church of Christ Polity and History. (2 h)****MIN 705. Third Year Capstone. (1, 1.5 h)**

The third-year capstone course will have two interrelated components: (1) A capstone reflection component, in which students develop an electronic portfolio to facilitate reflection on their cumulative learning in light of School of Divinity curricular standards (in the areas of disciplinary knowledge, vocational reflection, and skill development for leadership). (2) A professional development component, in which students will continue vocational reflection and ready themselves for employment searches. The capstone course will be developed and facilitated by the director of the Art of Ministry program. The third-year seminar is a pass/fail course.

**MIN 706. Directed Reflection in Applied Sustainability. (1 h)**

This one credit course is taken concurrently with the two credit practicum in Applied Sustainability. With a divinity faculty mentor, students engage in directed theological reflection on practicum experience.

**MIN 710. Topics in Psychology of Religion. (1 h)**

(1h course required for MDiv/MA in Counseling dual degree students)  
A consideration of "classic" and contemporary texts and research in the psychology of religion pertinent to theory and practice of pastoral counseling.

**MIN 711. Topics in Spiritual Development. (1 h)**

This seminar looks at "classic" and contemporary texts and research in human psychological and spiritual development (and critical responses to same) pertinent to theory and practice of pastoral counseling. This class will examine psychoanalytic and cognitive-structural approaches to human development and critical responses.

**MIN 712. Topics in Pastoral Theology. (1 h)**

(1h course required for MDiv/MA in Counseling dual degree students)  
A consideration of selected issues and contemporary perspectives in pastoral theology, with a focus on theological anthropology foundational to integrative reflective practice of pastoral care and counseling.

**MIN 771. Classics of Christian Devotion. (3 h)**

A study of the principles of the spiritual life presented in the enduring classics of devotion.

**MIN 790. Topics Courses. (1-3 h)**

Courses in ministerial studies can be developed and offered on a one-time basis using this designation.

**MIN 790A. Topics in Ministerial Studies. (1-3 h)****MIN 790B. Topics in Ministerial Studies. (1-3 h)****MIN 790C. Topics in Ministerial Studies. (1-3 h)****MIN 790D. Topics in Ministerial Studies. (1-3 h)****MIN 790E. Topics in Ministerial Studies. (1-3 h)****MIN 790F. Topics in Ministerial Studies. (1-3 h)****MIN 790G. Topics in Ministerial Studies. (1-3 h)****MIN 790H. Topics in Ministerial Studies. (1-3 h)**

## Spirituality (SPI)

### **SPI 530. Liturgical Writing as Spiritual, Theological, and Prophetic Act. (1-3 h)**

Divinity students are often called upon to write or speak extemporaneously various elements for worship, such as prayers, litanies, confessions, invocations, and intercessions. This course provides students with diverse resources for worship leadership. The course encourages students to locate their own prayer styles, theologies and rhythms within the shared narratives and prayer experiences of historic and contemporary worshiping communities. The course also challenges students to explore and name what theologies they are embodying through their choices of language, images, styles, and forms in public prayers. The course is part worship literature review and reflection and part workshop. Students will learn about elements of worship and explore historic and contemporary examples. Students will also share each week in a writers' workshop format their own liturgical writing samples. A primary aim of the course is to invite students to explore relationships between their own unique voices and theologies and their roles as public prophets, theologians, and spiritual leaders.

### **SPI 571. Introduction to Christian Spiritualities and the Religious Leader's Spiritual Life. (3 h)**

What is "spirituality"? In this course, we will listen in on two thousand years of responses to this question, examine a diversity of mediums through which Christians have sought to encounter God, and consider the wide variety of spiritual practices Christians have embodied in their quests to experience and respond to God's presence. Students will be invited to reflect on their own responses to the question "what is spirituality?" by writing spiritual autobiographies and sharing portions of them with others in the course. Students will also explore contemporary spiritual and contemplative practices.

### **SPI 623. Music and the Church. (3 h)**

This course is offered by the Music Department for Music and Divinity School Students. The course looks at the history of church music and practices of the use of church music in the contemporary church.

### **SPI 669. Modern Spiritual Writing. (3 h)**

When St. Augustine penned his Confessions, he began a genre of Christian writing that has continued to this day. Part literature course, part writer's workshop, this course will introduce students to examples of literary nonfiction whose subject is faith. We will study narrative structure, voice, character development, scene, and dialogue—all tools of the writer's craft—and discuss how those tools can be employed to create compelling stories of religious experience. Students will workshop their own essays, and will also be introduced to a variety of writers (Christian and otherwise) whose modern spiritual narratives form part of our current cultural dialogue.

### **SPI 671. Contemporary Spiritual Writers. (3 h)**

A study of the principles of the spiritual life as presented in the works of selected contemporary writers.

### **SPI 678. Christian Mysticism. (3 h)**

The theologian Karl Rahner said, "The Christian of the future will be a mystic or will not exist at all." Mysticism has been an underground stream for Christianity. This course will explore the readings of key figures from the 16th to the 21st Century and seek to connect their experience with our current context. The paradox of our time is that even as fewer people attend church in the USA, more people have claimed to have had a direct mystical experience. The mystics covered are Teresa of Avila, John of the Cross, Thomas Merton, Bede Griffiths, Evelyn Underhill, Dorothee Soelle, Howard Thurman, Richard Rohr, Simone Weil, and Cynthia Bourgeault. Each class will begin with a short lecture followed by discussion and, when assigned, student presentations. Our focus is "What do these mystics have to teach our world and our Church?"

### **SPI 773. Worship as Spiritual Practice. (3 h)**

A study of how worship shapes spirituality. Students explore spirituality, broadly defined, along with how congregational worship is a form of spiritual practice.

### **SPI 790. Topics Courses. (1-3 h)**

Examples of one hour topic courses include: Spiritual Development in Contemplative Prayer; Pentecostal Spirituality for the Whole Church; Quaker Spirituality; African American Spirituality: Representative Motifs.

### **SPI 790A. Topics in Spirituality. (1-3 h)**

Courses in Spirituality and the Arts can be developed and offered on a one-time basis using this designation.

### **SPI 790B. Topics in Spirituality. (1-3 h)**

### **SPI 790C. Topics in Spirituality. (1-3 h)**

### **SPI 790D. Topics in Spirituality. (1-3 h)**

### **SPI 790E. Topics in Spirituality. (1-3 h)**

### **SPI 790F. Topics in Spirituality. (1-3 h)**

## Theological Studies (THS)

### **THS 501. Christian Theology. (3 h)**

A study of central themes and systematic connections in Christian theology from a variety of perspectives.

### **THS 521. Foundations of Christian Ethics. (3 h)**

This course is designed to show the relevance of Christian ethics to the contemporary world by way of exploring its distinct approaches to ethical reflection. To this end, we will study a number of classical and contemporary approaches in Christian ethics and their responses to contemporary moral challenges.

### **THS 522. History of Theological Ethics. (3 h)**

This course provides a historical overview of the development of Christian morality from the Hellenistic period through the early 20th century. Throughout the course we will explore (1) major philosophical and theological ideas that helped shape the development of Christian morals and (2) how some of these ideas remain relevant to our contemporary ethical reflection. The purpose of this course is to help students appreciate the ways in which theological concepts and ideas can become resources for navigating today's moral challenges and dilemmas.

**THS 523. Dangerous Memories: Theologies and Practices of Remembering Suffering. (3 h)**

This course explores communal practices of remembering suffering that have healing and redemptive potential for persons and entire communities, especially in contexts of historical violence and marginalization. We will begin with case studies that raise important theological and pastoral questions about how remembering suffering endured in the past may or may not contribute to healing, enduring present suffering with hope and resilience, and working towards liberation and life abundant for all. With case studies in mind, we will reflect theologically on the meaning and appropriateness of practices of remembering suffering for not only the suffering community, but also communities that have been complicit in the perpetration of violence and oppression. Particular attention will be paid to how remembering suffering correlates theologically with the Christian memory of the suffering, death, and resurrection of Jesus Christ. Students will conclude the course with a final project that combines theological reflection and pastoral creativity aimed at transformative practices of remembering suffering in their own respective contexts.

**THS 530. Readings in Liturgical Theology: Denominations & Worship. (1 h)**

This course explores how worship in various Christian traditions shapes and is shaped by those traditions' theologies. The focus is ecumenical, with texts selected from an array of Christian traditions and denominations.

**THS 612. Theological Anthropology. (3 h)**

Perspectives on the origin, nature, and destiny of humanity in contemporary theological discussion.

**THS 618. Feminist, Womanist, Mujerista Theologies. (3 h)**

This course investigates theological discourse featuring the voices of feminist, womanist, and mujerista theologies as "lived" and "living" religious orientations that shape theological and ethical worldviews. This body of discourse cultivates communal landscapes and offers theo-ethical responses that center women's voices and experiences of religious, ethical, and spiritual life.

**THS 619. Readings in Queer Theology. (1-3 h)**

This seminar-style reading course surveys classic and new works in queer theology, an approach to Christian thought that questions dominant constructions of gender identity and sexuality.

**THS 620. Classics of Modern Theological Ethics: Kierkegaard, Bonhoeffer, Barth, and Tillich. (1-3 h)**

This course is a study of classic texts in modern theological ethics. By closely reading the works of Kierkegaard, Barth, Bonhoeffer, and Tillich, we will examine unique features of their theological and ethical methods and the relevance of their thought to contemporary religious and moral life. The purpose of this course is not only to get familiar with some of the great Christian thinkers but also to gain insights of permanent importance that can help us live faithfully and morally in a rapidly changing world.

**THS 621. Christianity and Public Policy. (3 h)**

A study of biblical warrants, historical developments, and contemporary issues related to Christianity and public policy. A look at the literature, relationship to other theological disciplines and basic ethics is involved.

**THS 623. Religious Traditions and Human Rights. (3 h)**

A study of relationships and tensions between religious traditions and human rights, with illustrations from historical and contemporary issues and movements. Also listed as Religion 336.

**THS 624. Church & State in America. (3 h)**

This course examines the theology, history, sociology and politics leading to the unique relationship of Church and State in the United States. The course engages contemporary issues and conflicts in the Church-State field with special attention to current developments and media coverage of those events.

**THS 626. Contemporary Ethical Issues. (3 h)**

This course explores contemporary ethical issues that have wide social, political, and religious significance. The issues include health care, environment, immigration, dying, and criminal justice. In order to properly understand the issues, we will examine arguments of various kinds – philosophical, sociological, political, economic, and theological, as they are often heard in public discussion. In particular, we will pay close attention to the ways in which theological discourse may make contribution to moral reflection.

**THS 628. Postmodernism and Christian Ethics. (1-3 h)**

Postmodernism has become an important movement in contemporary theology and ethics. In this course we will explore several variants of postmodern ethics in order to critically evaluate their strengths and weaknesses. In particular, we will take a close look at the ways in which certain features of postmodern ethics are used by contemporary Christian thinkers.

**THS 630. The Problem of Evil. (3 h)**

Many people, including religious believers, experience the existence of evil in the world. But how can this experience be reconciled with a theistic belief that the world is under the loving care of God who is all-powerful, all-knowing, and perfectly good? Can the experience of evil be evidence for challenging the existence of God or the common assumptions about the divine being? How should we make sense of various religious beliefs in light of the experience of evil?

**THS 631. Black Theologies in the U.S.. (3 h)**

An examination of the historical and cultural development of Black Theology in the United States. The course includes engagement with multiple modes of the black theological tradition, including early Black Liberation Theology, critical theorists of theodicy, Womanist Theology, intersecting feminist theories, and "Third Wave" Womanists thought.

**THS 632. Feminist Theologies. (3 h)**

Feminist critiques and reconstructions of Christian theology.

**THS 637. African-American Theology. (3 h)****THS 642. Theology and Disability. (1-3 h)**

Considers how Christian theology can overcome traditional exclusions of persons with disabilities and how practitioners can make worship more inclusive and hospitable to all people. The seminar will explore these questions through contemporary theological work on disability, conversations with guest speakers, and field trips in the community.



**THS 645. Contemporary Eco-theologies: Reimagining and Reembodying God, Humanity, and Creation. (3 h)**

Over the past several decades, Christian theologians have responded to climate change, environmental racism, and ecological degradation by reimagining the nature of and relationship between God, humanity, and creation. This course examines how ecological concerns have been brought to bear on these topics in Christian theology. It begins by briefly considering how Christian theological traditions have been complicit in the anthropocentric, patriarchal, and racist ideologies that justify the economic and political mechanisms of ecological destruction. The course then turns to a series of constructive theological proposals that seek more just and sustainable ways of imagining and embodying the relationship between human beings and the non-human world. Throughout the semester and in their final projects, students will critically engage the viability of ecotheology as a resource for religious leadership in the realms of environmental justice and ecological well-being.

**THS 650. Ecowomanism: Religion, Gender and Environmental Justice. (3 h)**

Ecowomanism is an approach to environmental ethics that centers the perspectives, theo-ethical analysis, and life experiences of women of color—specifically women of African descent. It centers discussion in ecology on how womanist voices contribute new attitudes, theories and ideas about how to face the ecological crises we are living in today. This course will introduce students to the growing field of Ecowomanism in the study of religion and ecology. As a learning community we will engage womanist intersectional race-class-gender and anti-oppression forms of analysis as we examine links between oppressions suffered by women across the globe and oppressions suffered by the earth. We will also ask questions about sacred relationships between African American and African women and the earth regarding planetary and self care as well as practices of spiritual activism for earth justice. The course will use interdisciplinary approaches used in religion and ecology and reflect upon methods in religion, theology, ethics, literature, anthropology, environmental studies and more.

**THS 672. Interfaith in Winston-Salem. (1-3 h)**

This course seeks to prepare students to respond to issues related to religious diversity through experiential engagement in interfaith dialogue and critical reflection on these experiences. Also listed as MIN 672.

**THS 712. Contemporary Christology. (3 h)**

An examination of the definitive issues and basic alternatives for interpreting the person of Jesus Christ today, with specific attention to the formulation of the humanity and deity of Christ.

**THS 715. Latin American Liberation Theologies. (3 h)**

Latin American liberation theology is a body of religious thought that offers both a prophetic critique of unjust and violent systems of oppression and a hopeful vision of a more just and peaceful future. This course offers students a historical, contextual, and theological overview of Latin American liberation theology and asks students to enter into critical and constructive dialogue with the relevance of this body of thought for their own contemporary contexts.

**THS 730. Life, Death, and Beyond: Theories of Human Nature. (3 h)**

A scientific, philosophical and theological exploration in search of answers to Big Questions: What is a human person? Is the person all material? Does the universe contain consciousness? Has science proven that religion is a mere illusion? Is life after death really possible?

**THS 735. Grace: East and West. (3 h)**

What does it mean that salvation is a gift? In this class we join the centuries-long conversation on this core concept of Christian theology. By engagement with authors from antiquity to the present we will examine some classic questions of the western theological tradition, such as the relationship between grace and nature, grace and free will, grace and merit. However, we will also call into question the normative status of this western tradition by exploring alternative accounts of grace from ancient authors Origen of Alexandria and Ephrem of Nisibis. Such questions are not merely theoretical: throughout this class we will constantly return to the practical implications of different concepts of grace for pastoral care and faith leadership.

**THS 739. Neuroscience and Ethics. (3 h)**

A study of central philosophical and ethical issues at the intersection of neuroscience, ethics, and theology. The course explores neuroscientific accounts of human nature and morality as well as the ethical implications of neurotechnology.

**THS 771. The Church in Contemporary Cultures. (3 h)**

A study of historical antecedents, current structures, changing trends, and global relationships which impact the church now and toward the future.

**THS 789. Biotechnology and Ethics. (3 h)**

With the convergence of medicine, nanotechnology, computer science, molecular biology, genetic engineering, and business, biotechnologies are emerging not only as an important provider of life-saving and life-enhancing treatments but also a fast-growing and very profitable industry. This course explores some of the major ethical issues related to the current and proposed uses of biotechnologies with particular attention to the reasons and arguments that are often used to support various views on the use of biotechnology.

**THS 790. Topics Courses. (1-3 h)**

Courses in theological studies can be developed and offered on a one-time basis using this designation.

**THS 790A. Topics in Theological Studies. (1-3 h)****THS 790B. Topics in Theological Studies. (1-3 h)****THS 790C. Topics in Theological Studies. (1-3 h)****THS 790D. Topics in Theological Studies. (1-3 h)**

## Academic Programs, Policies, and Procedures

- University Policies
- Academic Policies
- Student Academic Code of Conduct
- Non-Academic Student Code of Conduct
- Students' Rights and Responsibilities
- Important Contacts

## Academic Policies

- Student Classification
- Class Attendance
- Grading System/Grade-Point Equivalent
- Academic Standing
- Independent Study

- Travel Policy
- Modern Language Policy
- Registration and Student Status Policies/Procedures
- Policies on Non-Residential Academic Credit
- Graduation Application Process
- Holds for Registration or Graduation
- Grievance Policy

## Student Classification

Classification of students by class standing is calculated in terms of hours completed, not in progress. In order for class standing to reflect transfer credit towards completed hours, a student must submit their final transcripts and/or CPE certificates by August 1 for the fall semester or January 4 for the spring semester.

**First Year** - completion of fewer than 26 hours toward the degree;

**Second Year** - completion of 26+ credit hours toward the degree;

**Third Year** - completion of 52+ credit hours toward the degree.

## Class Attendance

All students are required to attend classes regularly. Course syllabi specify class attendance expectations. Failure to attend classes regularly can result in academic penalties.

## Grading System/Grade-Point Equivalent

- Repetition of Courses
- Pass/Fail Option
- Incomplete Grades

## Grading System

**The School of Divinity registrar maintains academic records of progress on all enrolled students.** For all courses carrying graduate credit in the School of Divinity, there are three passing grades—A (excellent), B (commendable), and C (low pass) — and one failing grade, F (failure). An A has the grade point value of 4.00 for each semester hour of credit involved, a B the value of 3.00 for each semester hour of credit involved, and C the value of 2.00 for each semester hour of credit involved. An F grade carries no credit. Required courses with a grade of F must be repeated. Pluses and minuses may be given at the discretion of the faculty member.

## School of Divinity Grade/Point Equivalent

Grade	Points	Definition
A	4.00	Excellent
A-	3.67	
B+	3.33	
B	3.00	Commendable
B-	2.67	
C+	2.33	
C	2.00	Low Pass
C-	1.67	

F	.00	Failed
I	.00	Incomplete
NR	.00	Not reported
P	**	Pass
AUD	**	Audit
WF	.00	Withdraw Failing
WP	**	Withdraw Passing

\*\*Grade not calculated in grade point average. Grades of F, I, or NR which are earned in the Pass/Fail mode do not affect the grade point average.

**RPT** in the GPA column indicates that the course is part of a repeat condition.

## Repetition of Courses

A student may repeat a School of Divinity course for which they have earned a B- or lower. In this case, all grades received will appear on the student's transcript, but the course may be counted only one time for credit. For purposes of determining the cumulative grade point average, a course will be considered as attempted only once, and the grade points assigned will reflect the highest grade received. These provisions do not apply to any course for which the student has received the grade of F as a consequence of an honor violation; in this case, both the F and the grade for the repeated course are calculated in the student's grade point average.

## Pass/Fail Option

The School of Divinity allows students to register for a limited number of general electives on a pass/fail basis rather than for a letter grade, with the permission of the instructor. Courses taken under the pass/fail option yield full credit when satisfactorily completed but, whether passed or not, they are not computed in the student's grade point average. Dates to change from grade to pass/fail mode, or from pass/fail to grade mode, are set by the University Registrar.

The pass/fail option is limited to general elective credits, including elective courses taken to satisfy the language requirement. In no case may a student use a course taken in the pass/fail mode to satisfy a required course (including required disciplinary electives and area requirements). This limitation does not include required courses offered only in the pass/fail mode.

A student may count toward the MDiv degree program no more than 6 hours taken in the pass/fail mode. This number does not include courses that are offered only in the pass/fail mode. No more than 7 hours may be taken on a pass/fail basis in any one semester.

Courses taken through the Graduate School cannot be taken in the pass/fail mode.

## Incomplete Grades

The grade of I (incomplete) may be assigned only when a student fails to complete the work of a course because of an emergency. In order to receive a grade of I, the student, in consultation with the professor of the course, must complete an Incomplete Grade Request Form and submit it to the Office of Academic Affairs. The student and professor are required to agree to a due date for the incomplete work and specify that due date on the Incomplete Grade Request Form. In all cases, if the work recorded as an I is not completed within 30 days after a student

enters his or her next semester (excluding the summer session), the grade automatically becomes an F (failure). A graduate degree will not be awarded to a student who has an I grade on record.

## Academic Standing

Understanding that theological education requires significant investment of time, energy, money, and other resources, the School of Divinity strives to empower students to complete the MDiv program in a timely fashion. When students struggle to make satisfactory academic progress, the School implements strategies to help students achieve academic success. When those strategies fail, or it becomes clear that a student is not well positioned to complete the MDiv degree, the School may elect to dismiss a student from the MDiv program. Dismissal is unfortunate, but it always reflects a concern for the student's financial, personal, spiritual, and vocational well-being.

Students are in good academic standing when they earn satisfactory or higher grades in courses they undertake (without failing courses or failing to complete them), earn a minimum term GPA of 2.33 in any semester, maintain a minimum cumulative GPA of 2.5, and make significant progress toward the completion of the MDiv degree. Students who fail to reach these benchmarks will be placed on academic review or academic probation in following semesters until these benchmarks are reached or until failure to reach these benchmarks results in dismissal from the MDiv program.

- Academic Review
- Academic Probation
- Process for Initiating and Concluding Academic Review and Academic Probation Status

## Academic Review

Academic review is ordinarily enforced when students fail to make satisfactory progress towards the MDiv degree in a given semester. Indicators of unsatisfactory progress may include, but are not limited to, any of the following: failure to reach a minimum term GPA of 2.33; failure to complete attempted courses with satisfactory grades (e.g., one or more courses with a failing, withdraw-failing, or incomplete grade); failure to earn enough credit hours in a given semester. A student can be placed on academic review even if their cumulative GPA is 2.5 or higher.

Academic review status indicates that while a student may not be at risk for being dismissed from the MDiv program, problems with academic progress in any semester merit the attention of the associate dean of academic affairs and a student's faculty adviser.

In consultation with the associate dean of academic affairs, a student on academic review will work with his or her faculty adviser to develop an academic plan, the goal of which will be to remedy problems that created the need for academic review status. Faculty advisers will monitor progress on the academic plan over the course of the semester.

## Academic Probation

Academic probation is enforced when students fail to earn a minimum 2.5 cumulative GPA or fail to make satisfactory progress in earning credit toward the MDiv degree. Academic probation status supersedes academic review status.

Students who fail to earn a cumulative GPA of 2.5 or higher at the end of any semester will be placed on academic probation. At the discretion of

the associate dean of academic affairs, full-time students may be placed on academic probation when they fail to complete the minimum number of credit hours required for full-time academic standing over the course of an entire academic year, impeding timely progress towards graduation. Academic probation status indicates that students are at risk of being dismissed from the MDiv program.

## Process for Initiating and Concluding Academic Review and Academic Probation Status

At the end of each semester, the associate dean of academic affairs will meet with the assistant dean of admissions and student services, one representative of the Curriculum and Academic Policy Committee, and a representative from the Student Financial Aid Office to review and make decisions about satisfactory academic progress cases.

Following that meeting, the associate dean of academic affairs will notify students and their academic advisers, via email and letter, of the students' academic review or probation status and the academic plan they will follow in the following semester.

Working with the student's academic adviser, the associate dean of academic affairs will arrange check-ins with the student at regular intervals in the following semester or semesters to ensure that the student is working toward academic success.

Students will ordinarily be released from academic review status when they have completed all applicable requirements as prescribed by their academic plan in the following semester. Students will ordinarily be released from probation status when they have completed all applicable requirements as prescribed in their academic plan in the following semesters and have achieved a minimum cumulative GPA of 2.5.

**The following are the continuation requirements for students enrolled in the Master of Divinity degree program:**

- Students are required to earn a 2.5 overall GPA in order to graduate from the Master of Divinity program.
- A student whose cumulative GPA falls below 2.5 will be placed on academic probation.
- A student whose term GPA is 2.33 or lower will be placed on academic review and may be placed on academic probation after consideration of their overall record.
- In order to come off of academic probation, a student must earn at a minimum a B (3.00) term average in each successive term until the minimum cumulative grade point average of 2.5 is reached.
- Students on academic probation who fail to earn a B (3.00) term average in the immediately succeeding semester may be advised to withdraw or be dismissed from the program.
- After two semesters of full-time enrollment, a student whose overall GPA falls below 2.0 may be advised to withdraw or be dismissed from the program.

### Students on academic probation

- cannot receive an "incomplete" grade for any course;
- are advised to take manageable course loads, not to exceed 12 hours;
- are not allowed to take letter-grade courses on a pass/fail basis.

Students who are dismissed from the program for academic reasons may reapply but must wait a minimum of one year from the date of withdrawal to re-enroll in the program. The reapplication process will require at minimum an academic letter of reference and a statement from the student indicating how they intend to make progress toward successful completion of the degree. All requests for reapplication should be directed to the Office of Admissions. Students on academic probation should review the policy on satisfactory academic progress found at [http://www.wfu.edu/finaid/grad\\_policies.html](http://www.wfu.edu/finaid/grad_policies.html). Those who do not demonstrate satisfactory academic progress may be ineligible for financial aid.

## Independent Study

A student may request to take an independent study (IDS) course with a faculty member. Independent study courses provide students opportunities to complete advanced academic research or creative activity in a field of theological inquiry. It is suggested, but not required, that independent study courses follow upon the completion of required courses in the curricular areas most relevant to the proposed independent study project or theme. It is also suggested, but not required, that students design IDS courses using a syllabus template provided by the Office of Academic Affairs.

An Independent Study form must be filled out and signed by the faculty member and the associate dean of academic affairs.

The following rules apply for this option:

1. An independent study will count only as a general elective course, not as a required course or a required area elective.
2. A student may take no more than 6 hours of independent studies in the MDiv program.
3. A student must have a GPA of at least 3.0 in order to register for an independent study.
4. A student must be in their fourth, fifth, or sixth semesters of MDiv study to register for an independent study.
5. A request for the study must be made in writing by the student to the faculty member.
6. The faculty member must be convinced that special circumstances warrant the request.
7. The terms for an independent study must be put in writing and agreed to by the student and the faculty member.
8. No faculty member is obligated to offer independent studies.
9. Credit varies from one to three hours.

## Travel Policy

The School of Divinity is committed to the safety and well-being of students. Students must also take reasonable steps to ensure a healthy and safe learning experience during their travel. Before departure and in order to remain enrolled in any course associated with the travel, students traveling with the School of Divinity are required to do the following:

1. Pay all course fees by the deadline specified in the course syllabus;
2. Complete all travel forms and follow all procedures (<http://studyabroad.wfu.edu/planning-your-experience/before-you-go/>) required by the University through the Center for Global Programs and Studies;

3. Attend all briefing sessions required or provided by the Center for Global Programs and Studies.

Students who fail to meet these requirements may be dropped from the course. Information about University travel procedures is available through the University Center for International Studies ([studyabroad.wfu.edu](http://studyabroad.wfu.edu) (<http://studyabroad.wfu.edu/>)).

Each year, the School of Divinity may make funds available for travel scholarships. Students are eligible for one travel scholarship, which is applied to the first Cross-Cultural Connections course taken. If additional travel grants become available, priority goes to students who need to fulfill the Cross-Cultural Connections requirement.

Regular drop policies apply to travel courses. However, the School of Divinity cannot guarantee any refund of program fees should a student withdraw from the course, though the school will try to provide refunds on a pro-rata basis when possible.

## Modern Language Policy

Students in the Master of Divinity program may receive credit for no more than 6 hours for modern language study in the undergraduate college as elective credit toward the degree and/or toward the school's language requirement (see additional information about the language requirement). Students who want to enroll in language courses in the College must complete the process for taking courses outside of the School of Divinity. Information about this process is available in the Office of Academic Affairs. Also, undergraduate students are generally given preference for 100-level courses. This means that School of Divinity students can enroll in courses where there are seats available and where the instructor of the course gives her or his permission.

## Registration and Student Status Policies/Procedures

- Dropping a Course
- Policy on Withdrawal (Termination of Studies)
- Policy on Leave of Absence

## Dropping a Course

During the Add/Drop period, a student may drop a course without penalty or notation on the transcript. The Add/Drop dates for full-term courses are set by the University Registrar. For all other courses, including weekend courses, the drop date will be 8 days before the course begins, or the date set by the Registrar, whichever is sooner.

After the Add/Drop period, a student may withdraw from a course with the approval of the associate dean of academic affairs, the professor, and the student's faculty adviser. If the student has completed passing work for the course, the grade of Withdraw Passing (WP) is assigned. Courses marked WP are not counted in determining the grade point average. If a student is failing the course, the grade is WF and counts as a 0 toward the grade point average.

Students may access Add/Drop and Withdrawal/Leave of Absence forms on the Academic Registrar page of the website. Students are responsible for officially dropping or withdrawing from courses to be eligible for a refund of tuition. Nonpayment for classes for which a student is registered or non-attendance in a registered class does not release the



student from financial obligation, and it does not result in withdrawal from a course.

## Policy on Withdrawal (Termination of Studies)

All enrolled divinity students who must withdraw from the University may do so by completing a withdrawal form and submitting the form to the Office of Academic Affairs. Ordinarily, a withdrawal signals the intent not to return to the University. Students who intend to return to the University should follow the process for Leave of Absence. Withdrawal/Leave of Absence forms are available on the Academics page of the school's website.

While forms completed prior to the semester drop deadline will not result in academic penalties, meeting the deadline may not prevent negative implications for merit and need-based financial aid. Withdrawing from the University within the period allowed for dropping and adding courses may result in partial or total charges for the term and may alter scholarships, grants, and loan amounts, according to the published schedule. Students who borrow under federal loan programs are responsible for repaying loans granted based upon full-time enrollment. Students are strongly urged to discuss the financial implications of all withdrawals from the University with the financial aid office.

Withdrawing from courses after the last day to drop courses and before the last day of classes may result in academic penalties. If a student withdraws after the drop deadline and, in the judgment of the professor, is passing a course, a grade of WP will appear on the transcript and does not affect a student's grade point average. If in the judgment of the professor the student is failing a course, a WF will be granted and will appear on the transcript. The grade of WF does factor into a student's overall grade point average and as such may negatively affect academic standing. A course abandoned with insufficient reason for withdrawal is assigned the letter grade F. Students who drop all courses are considered withdrawn from the University. A student who has withdrawn from the School of Divinity and wishes to return within one academic year must reapply with the assistant dean of admissions and student services at least one month prior to the semester in which they wish to re-enroll.

## Policy on Leave of Absence

A Leave of Absence allows students enrolled in the Wake Forest University School of Divinity to interrupt their studies for a compelling reason, for example, a medical condition or a personal or family matter requiring absence from campus. A Leave of Absence is defined as a temporary separation from the School of Divinity, for up to one year from the start of the semester during which the Leave of Absence is requested. To be eligible for a Leave of Absence, students should ordinarily be in good academic standing. Students who intend to take a Leave of Absence must submit a Withdrawal/Leave of Absence form to the Office of Academic Affairs along with a letter detailing the request for the Leave of Absence. This letter must indicate all unsatisfied degree requirements for the student. If available, other supporting letters should be included in the request for a Leave of Absence.

Until students are notified by the Office of Academic Affairs that the leave has been approved, they remain registered and are expected to fulfill their responsibilities. A Leave of Absence will not be granted retroactively. The maximum time for a leave of absence is one year. A student requesting a Leave of Absence by the drop date for the semester, as established by the academic calendar, will not have a grade recorded

for courses in progress. A student who requests a Leave of Absence after the drop deadline will be assigned a grade of withdraw-passing (WP) or withdraw-failing (WF) for each course in progress, which will appear on the transcript. The grade of WP does not affect a student's grade point average. The grade of WF does factor into a student's overall grade point average and as such may negatively affect academic standing. If applicable, tuition is refunded on a prorated basis, and the refund schedule is set by the Wake Forest University Board of Trustees.

A student on a Leave of Absence will have limited access to University facilities normally available to enrolled students. In order to facilitate communication between the student and the School of Divinity, access to the campus network will be continued during the leave but will be deactivated if the student does not return. Library access will be continued during the period of leave, but it will be revoked if the student does not return. ID access to buildings will be deactivated during the period of leave.

Students are **not** permitted to fulfill any degree requirements including work on a thesis, dissertation, or other degree requirements during the time on leave.

Students who are granted a Leave of Absence must consult with their health insurance provider about the status of their policy while on leave. Students who have contracted for health insurance through the university should immediately contact the Student Health Insurance Coordinator. Health insurance is subject to federal and state laws and regulations. International students who are granted a Leave of Absence must notify the Office of Global Studies. Visa status is subject to federal laws and regulations.

Students on an approved Leave of Absence are not eligible for federal financial aid, including Federal Direct Loans. In some cases, student loans may not be deferred for the entirety of a leave. Students should contact Student Financial Services for additional information. Students on Leave of Absence should submit a request to return to the associate dean of academic affairs at least one month prior to the first date of the semester or term in which a return is planned. This request may require a letter which addresses the suitability of the student's return. Students who have decided not to return from a Leave of Absence should inform the associate dean of academic affairs in writing. Students who fail to petition to return after a Leave of Absence will be withdrawn from the School of Divinity and need to apply for readmission in order to return.

The time spent during an approved leave or while withdrawn will not count in the maximum time allotted for the degree. Students who have withdrawn from the School of Divinity and who wish to re-enter after one academic year must reapply for admission by the application deadline. If a student is approved for readmission to the School of Divinity within an eight-year period, previous coursework may count towards the degree requirements at the discretion of the associate dean of academic affairs. If the student re-enters the School of Divinity after an eight-year period, previous courses will not count toward the degree requirements.

## Policies on Non-Residential Academic Credit

- Policy on Transfer of Academic Credit
- Policy on Credit for Clinical Pastoral Education and Specialized Internships
- Advanced Academic Standing

## Policy on Transfer of Academic Credit

**Credit earned prior to matriculation.** Academic credit earned at another school may be submitted for review during the first semester a student is enrolled in a degree program. Transfer credit is awarded through the Office of Academic Affairs at the recommendation of the Curriculum and Academic Policy Committee. A student may not transfer more than 24 hours of credit into the Master of Divinity program. No more than 10 of these transfer credits will be awarded as required courses. Students should be prepared to submit supporting documents, including course transcripts and syllabi, to the Curriculum and Academic Policy Committee and registrar.

In order for class standing to reflect transfer credit, a student must submit their final transcripts and/or CPE certificates by August 1 for the fall semester or January 4 for the spring semester.

The following requirements must be met before a request for transfer credit can be submitted:

1. The course must be taken at an institution accredited by an accrediting body recognized by the U.S. Department of Education or the Council on Post-Secondary Education.
2. Courses must be taken at the graduate or professional level.
3. A grade of B- or higher must be earned in the course in order for the course to be considered for transfer credit. If the course is to be considered for transfer credit as a required course the grade earned must be a B or higher.
4. Applicants for transfer credit must have earned the credit after earning a bachelor's degree.
5. The course must have been taken within the eight years prior to matriculating at the School of Divinity.
6. Any course credit earned that has been utilized or will be utilized for another degree program is not normally transferred.
7. No more than 12 hours will be transferred from a non-theological graduate program. If 12 hours are to be transferred, the student will be required to demonstrate the course's or courses' relevance to the Master of Divinity degree.

**Credit earned during matriculation.** Credit earned at another institution while enrolled in a degree program at the Wake Forest University School of Divinity is subject to the general transfer credit guidelines. All coursework taken at another institution during matriculation and intended for transfer must be preapproved by the associate dean of academic affairs on recommendation from the Curriculum and Academic Policy Committee.

## Policy on Credit for Clinical Pastoral Education and Specialized Internships

Students enrolled in the Master of Divinity program may earn credit by successfully completing an accredited program in Clinical Pastoral Education. To receive credit for Clinical Pastoral Education, the student must provide to the Office of Academic Affairs a letter from the accredited program stating the number of units the student has completed. Additional credit may be earned in a select number of internships. Information is available in the Office of Academic Affairs.

## Advanced Academic Standing

Students who can demonstrate that they have had the academic equivalent of required courses may petition the associate dean of academic affairs to substitute advanced elective courses for those requirements. Ordinarily, advanced standing is without credit, exempting certain classes but not reducing the total number of credits required for the degree. Advanced standing with credit cannot be granted on the basis of life or ministerial experience. Advanced standing should account for no more than one quarter of total degree requirements. The associate dean of academic affairs will forward appropriate petitions to the Curriculum and Academic Policy Committee, which will make a recommendation to the associate dean of academic affairs for final approval.

## Graduation Application Process

**Third year students must apply for graduation in order for their records to be activated for certification.** The application form is provided by the registrar at the beginning of the third year. Applications must be submitted to the registrar no later than 30 days prior to the expected commencement date. During the final term, the associate dean of academic affairs and the registrar will examine each candidate's transcript. All requirements, except those satisfied by courses in progress, must be completed no later than 30 days prior to the expected commencement date. All requirements must be completed and certified, and the student must have applied for hooding or graduation before a student may participate in the commencement exercises. No further entries or alterations may be made toward the Master of Divinity degree once the student has graduated.

## Holds for Registration or Graduation

Holds placed on a student account result from a lack of payment of tuition, overdue library books, unpaid fines, failure to provide proper medical information to Student Health Services, or failure to meet preset academic requirements. Holds may only be lifted from a student record by the office that issues a hold. For example, a hold on one's financial account can only be lifted by the Office of Financial and Accounting Services. Holds may prevent one from registering for courses or from graduating. Each student is responsible for addressing the circumstances related to holds.

## Grievance Policy

Situations may arise in which a student believes that they have not received fair treatment by a representative of the University or has a complaint about the performance, actions, or inaction of the staff or faculty affecting a student.

Students are encouraged to seek assistance from their advisers or another member of the faculty or staff in evaluating the nature of their complaints or deciding on an appropriate course of action.

The School of Divinity provides the following process for students to voice concerns regarding specific academic or other grievances:

**Step 1.** Student concerns about professors or staff persons, specific courses, or other matters should begin with a conference with the particular professor or staff person, offering formal or informal statements of concern.

**Step 2.** If the concern is not resolved in consultation with the professor or staff person, then the student(s) should schedule a conference with the

associate dean of academic affairs. At that time, an informal or formal statement of concern will be brought to the associate dean of academic affairs.

**Step 3.** The associate dean of academic affairs will attempt to resolve the issue to the satisfaction of the relevant parties by convening a meeting between the student(s) and the professor or staff person. If the associate dean of academic affairs is the professor against whom the student(s) has the grievance, the student(s) may begin the appeal with the dean of the School of Divinity.

**Step 4.** If the issue remains unresolved, the student(s) may appeal to the dean of the School of Divinity who will meet with the student(s) and the professor or staff person and attempt to resolve the issue formally or informally. Formal grievances against the dean should be made to the University provost. The provost will function in the dean's role in the remaining steps of the process.

**Step 5.** If concerns remain, the student may initiate a formal grievance procedure. At this point, the student(s) should present the grievance in the form of a written statement of concern. Within 14 days, the dean will appoint a grievance committee composed of two faculty members and one student. The committee will meet with the student(s) making the appeal, the professor or staff person, and the associate dean of academic affairs for a full discussion of the grievance.

**Step 6.** The committee will make a recommendation to the dean who will communicate the final decision in writing to the student(s) and the professor or staff person.

## Student Academic Code of Conduct

- Plagiarism
- Honor Code

### Plagiarism

To put your name on a piece of work is to say that it is yours, that the praise or criticism due to it is due to you. To put your name on a piece of work any part of which is not yours is plagiarism unless that piece is clearly marked and the work from which you have borrowed is fully identified. Plagiarism is a form of theft. Taking words, phrasing, sentence structure, or any other element of the expression of another person's ideas, and using them as if they were yours, is like taking from that person a material possession, something that person has worked for and earned. Even worse is the appropriation of someone else's ideas. "Ideas" mean everything from the definition or interpretation of a single word to the overall approach or argument. If you paraphrase, you merely translate from the person's language to yours; another person's ideas in your language are still not your ideas. Paraphrase, therefore, without proper documentation, is theft, perhaps of the worst kind. Here, a person loses not a material possession, but something of what characterized the person as an individual.

If students wish to do one project for two courses or to draw on work previously done in order to complete an assignment for a current course, they must get the expressed permission of all affected faculty in advance of turning in the assignment. The faculty suggests that approved combined projects should represent significantly more effort than the individual projects they supplanted.

Plagiarism is a serious violation of another person's rights, whether the material stolen is great or small; it is not a matter of degree or intent.

You know how much you would have had to say without someone else's help, and you know how much you have added on your own. Your responsibility, when you put your name on a piece of work, is simply to distinguish between what is yours and what is not, and to credit those who have in any way contributed.

An online plagiarism tutorial is available here (<https://zsr.wfu.edu/research/guides/recognizing-avoiding-plagiarism/>) through Wake Forest University's ZSR Library. An online guide to the Chicago Style of referencing works is available here ([http://www.chicagomanualofstyle.org/tools\\_citationguide.html](http://www.chicagomanualofstyle.org/tools_citationguide.html)).

## Honor Code

**The honesty, trustworthiness, and personal integrity of each student** are integral to the life and purposes of the School of Divinity and of the broader Wake Forest community. When any student signs an application for admission to any of the schools of Wake Forest University, that student agrees to live by the honor system (<https://studentconduct.wfu.edu/honor-system-wfu/>) of the University. The mutual commitments and standards of conduct stipulated in the honor system derive from the founding of Wake Forest University and are a cornerstone of community life and relationships.

The Divinity School and the Graduate School share a formal Honor Code to provide guidance for student conduct with respect to academic pursuits. This policy may be accessed at the Graduate School website (<https://prod.wp.cdn.aws.wfu.edu/sites/275/2020/02/Honor-Code-Policy-1.30.2020.pdf>).

All students in the School of Divinity commit themselves to the following code:

We conduct our academic endeavors with honor, integrity, and professionalism. We do our own work, credit the work of others, and provide the full truth about our work.

Violations of the graduate student honor code include lying, cheating, stealing, vandalism, research misconduct, or failure to report an Honor Code violation by any graduate student in his or her academic pursuits or within the university community.

In most cases, allegations of violations are handled by the Graduate Honor Council, which includes both faculty and student representatives from the Graduate School and the School of Divinity. In some situations, allegations of violations may be handled by the administration and the faculty of the School of Divinity.

## Non-Academic Student Code of Conduct

- Professional Integrity
- Adjudicating Student Conduct Code Violations
- Appeal of Decisions Regarding Conduct Violations
- Administrative Withdrawal Policy

The Wake Forest University School of Divinity expects good citizenship and responsible behavior from students. When these expectations are not met, the non-academic misconduct process may be used to redirect students into more acceptable patterns of behavior. This process encourages students to take responsibility for their choices and actions, while also allowing the University to determine an appropriate disciplinary

response. This includes commitments as they relate to the Sexual Misconduct Policy and the Student Code of Conduct outlined in the Office of the Dean of Students (<https://deanofstudents.wfu.edu/>).

Misconduct cases may result in the sanction of a formal reprimand and the imposition of an educational condition, or a more severe level of sanction, including disciplinary probation, suspension, or expulsion. Students need to be aware that certain types of behaviors may be deemed incompatible with membership in the School's community and that choices they make can compromise their education and future.

The list below, while not exhaustive, includes examples of the types of prohibited conduct for which students are subject to disciplinary action:

- a. Actual or threatened physical injury to any person on University owned or controlled property or at a University-sponsored or supervised function, or conduct that endangers the health or safety of a person.
- b. Engaging in individual or group conduct that is violent, abusive, indecent, unreasonably loud, or similar disorderly conduct that infringes upon the privacy, rights, or privileges of others or disturbs the peace or the orderly process of education on campus. Alleged sexual misconduct will be governed under the University's sexual misconduct policy.
- c. In violation of University policy, unauthorized use, possession, or storage of any weapon or explosive (including fireworks) on University premises or at University sponsored activities.
- d. Forgery, counterfeiting, alteration, or misuse of any University record, document, or identification card.
- e. Unauthorized entry into or alteration of any University computer records, or violation of University computer use policies.
- f. Sending threatening or obscene messages to another student or individual via e-mail, phone, or voice-mail.
- g. Knowingly filing a false police, honor code, or non-academic honor code report.
- h. Misrepresentation in seeking financial aid or University benefits.
- i. Unlawful possession, use, distribution, or sale of any narcotic or dangerous drug as defined by the statutes of the State of North Carolina and/or University policies.
- j. Theft of, or unwarranted damage to, University property or property of any member of the University community.
- k. Failure to comply with Housing regulations.
- l. Failure to comply with the lawful directives of University employees acting within the scope of their duties; including those directives issued by a University administrator to ensure the safety and well-being of students.
- m. Entry into, or use of, any building, facility, or room or other University property or grounds without authorized approval. This also includes the unauthorized possession or use of University keys, lock combinations, or other access codes.
- n. Participation in illegal gambling activities on University-owned or -controlled property or at a function identified with the University.
- o. Possession, or consumption, of alcoholic beverages in contradiction of state law and/or University policy.
- p. Entering or attempting to enter any event without proper credentials for admission (e.g., ticket, identification card, or invitation).
- q. Failure to make satisfactory settlement for any debts to the University.
- r. Failure to comply with University traffic rules and regulations.

The School shall have the authority to hold students accountable under this Code of Conduct for certain off-campus behaviors (i.e., behavior that does not occur on University premises or in the context of a University, School, or student organization sponsored event or activity) that adversely affects a substantial University or School interest. In determining whether the conduct adversely affects a substantial University or School interest, the following shall be considered:

- a. Whether the conduct constitutes or would constitute a serious criminal offense, regardless of the existence of any criminal proceedings.
- b. Whether the conduct indicates that the student presented or may present a danger or threat to the health or safety of himself, herself, or others.
- c. Whether the conduct demonstrates a pattern of behavior that impairs the University's or School's ability to fulfill its mission.

## Professional Integrity

Professional integrity for divinity students is defined by the standards of integrity common to all professions and is further specified by those virtues of character required by Christian ministry. A person of integrity acts in a way that is congruent with what is professed in words and intended in thought, displays especially the virtues of truth and fairness, exhibits a consistent character over time, and takes responsibility for his or her actions.

## Adjudicating Student Conduct Code Violations

Alleged breaches in non-academic student conduct and/or professional integrity should be reported in a timely manner to the assistant dean of admissions and student services, who will conduct a preliminary investigation. Failure to report alleged breaches in a timely manner could impede the school's ability to investigate or substantiate the allegations. The assistant dean of admissions and student services may consult with the associate dean of academic affairs. If further investigation is required, the assistant dean of admissions and student services, in collaboration with the associate dean of academic affairs, may then appoint an ad hoc committee consisting of two faculty members and chaired by an additional faculty member. If such a committee is appointed, the assistant dean of admissions and student services will inform the accused student in writing of the allegations against the accused, the name(s) of those who reported the charges, and the date, time, and place of the hearing on these charges. If further investigation is not required, the person reporting the alleged breach will be notified of that fact in writing.

The accused will be allowed reasonable time to prepare a response and will be granted the privilege of an adviser to be chosen by the student from the School of Divinity faculty. The adviser shall assist the student in the process. In all hearings, the accused will have the right to be present at all times during the hearing except when the committee retires to deliberate and makes its decision. Evidence shall be admitted without regard to the rules of evidence in courts of law. The accused student may present evidence to the committee.

All materials and information related to the case should be confidentially submitted to the assistant dean of admissions and student services. Any verbal reports related to the case will be documented in writing by the assistant dean of admissions and student services. A written summary report of the findings will be provided by the assistant dean



of admissions and student services to the accused student, the ad hoc faculty committee, the associate dean of academic affairs, and the dean of the School of Divinity.

After a thorough review of the case, the committee will decide whether the accused has violated the code of conduct. A majority vote of the committee will suffice for a finding of responsibility. If the person is found to have violated the student code of conduct, the committee may decide on one or more of the following actions or such other action as the committee deems appropriate:

- a. A written reprimand;
- b. Denial of specified University privileges;
- c. Payment of restitution;
- d. Educational or service sanctions, including community service;
- e. Disciplinary probation;
- f. Imposition of reasonable terms and conditions on continued student status;
- g. Removal from a course in progress;
- h. Enrollment restrictions on a course or program;
- i. Suspension; or
- j. Expulsion.

## Appeal of Decisions Regarding Conduct Violations

Complainants and accused students may file a written request with the assistant dean of admissions and student services of the School of Divinity within fourteen calendar days of the notification to the student. In the letter to the assistant dean of admissions and student services, the student must indicate the reasons for the appeal and supply any relevant documents supporting the appeal. Grounds for an appeal include:

- Sufficiency of the evidence to support the decision;
- Appropriateness of the sanction;
- Germane new evidence not available at the time of the hearing that could significantly impact the outcome; and/or
- Procedural errors that significantly impact the outcome.

After reviewing the request for appeal, the assistant dean of admissions and student services may deny the request for an appeal, may render a new decision in the case, or may increase or decrease the severity of the action taken. The assistant dean of admissions and student services will render a final decision on the appeal and inform the student of this decision in writing. Records will be kept of the outcome of the proceedings and kept in the student's file.

## Administrative Withdrawal Policy

- Procedure for Administrative Withdrawal
- Evaluation
- Informal Hearing
- Appeal Process
- Emergency Suspension
- Conditions for Reenrollment

The Board of Trustees has empowered the president with the authority to suspend students from the University in "cases of clear and present danger to lives and property and in instances of violence to persons."

Such suspensions are to be reviewed by the regular judicial bodies within 14 school days.

A student may be subject to administrative withdrawal from the University when, in the judgment of the director of the Student Health Service, the director of the counseling center, or the Assistant Dean of Admissions and Student Services, and with the concurrence of the Office of the Vice President for Campus Life, the student:

- A. Engages, or threatens to engage, in behavior that poses a significant danger of causing imminent physical or psychological harm to self or others, or
- B. Directly and substantially impedes the activities of members of the University community, including other students, University employees, and visitors.

The standard and procedures to be followed are on file in the Offices of the Vice President, Student Affairs, and the Assistant Dean of Admissions and Student Services.

## Procedure for Administrative Withdrawal

When the assistant dean of student services and the associate dean of academic affairs, or a designee, based on a student's conduct, actions or statements, has reasonable cause to believe that the student meets one or more of the criteria for administrative withdrawal, either the director or dean may initiate an assessment of the student's ability to safely participate in the University's program.

The assistant dean of student services and the associate dean of academic affairs may initiate this assessment by first meeting with the student to:

1. Review available information concerning the behavior and/or incidents which have caused concern,
2. Provide the student with a copy of the Administrative Withdrawal Policy and Procedure and discuss its contents with the student,
3. Provide the student an opportunity to explain the behavior, and
4. Discuss options available to the student, including counseling, voluntary withdrawal and evaluation for involuntary withdrawal. If the student agrees to withdraw voluntarily from the University and waives any right to any further procedures available under this policy, the student will be given a grade of W for all courses, will be advised in writing of any conditions necessary prior to reenrollment, and will be referred for appropriate mental health services. If the student refuses to withdraw voluntarily from the University, and there continues to be reasonable cause to believe the student meets one or more of the criteria for administrative withdrawal, the assistant dean of student services or the associate dean of academic affairs may require the student to be evaluated by an appropriate mental health professional.

## Evaluation

The director of student services and associate dean of academic affairs may refer the student for a mandatory evaluation by an appropriate mental health professional. The mental health professional may be selected by the University, so long as there is no cost to the student for the evaluation. A written copy of the involuntary referral shall be provided to the student. The evaluation must be completed within five school days after the date the referral letter is provided to the student. Prior to the evaluation, the student will be required to sign a written

authorization authorizing the exchange of relevant information among the mental health professional(s) and the University. Upon completion of the evaluation, copies of the evaluation report will be provided to the associate dean and the student.

The mental health professional making the evaluation shall make an individualized and objective assessment of the student's ability to safely participate in WFU's program, based on a reasonable professional judgment relying on the most current medical knowledge and/or the best available objective evidence. This assessment shall include a determination of the nature, duration, and severity of the risk posed by the student to the health or safety of the student or others, the probability that the potentially threatening injury will actually occur, and whether reasonable modifications of policies, practices, or procedures will sufficiently mitigate the risk. The mental health professional will, with appropriate authorization, share a recommendation with the director of student services or the associate dean of academic affairs who will take this recommendation into consideration in determining whether the student should be involuntarily withdrawn from the University. A copy of the mental health professional's recommendation will be provided to the student, unless, in the opinion of the mental health professional, it would be damaging to the student to do so. If the evaluation results in a determination by the mental health professional that the student's continued attendance presents no significant risk to the health or safety of the student or others, and no significant threat to property, to the lawful activities of others, or to the educational processes and orderly operations of the University, no further action shall be taken to withdraw the student from the University.

If the evaluation results in a determination that the continued attendance of the student presents a significant risk to the health or safety of the student or others, such that there is a high probability of substantial harm, or a significant threat to property, to the lawful activities of others, or to the educational processes and orderly operations of the University, the student may be administratively withdrawn from the University. In such an event, the student shall be informed in writing of the withdrawal, of the student's right to a hearing, of the student's right to appeal the decision of the hearing officer, and of any conditions necessary for reenrollment.

## Informal Hearing

A student who has been administratively withdrawn may request an informal hearing before a hearing officer appointed by the associate dean of academic affairs by submitting a written request to be heard within two business days from receipt of the notice of the administrative withdrawal. A hearing will be set as soon as possible.

The student shall remain involuntarily suspended pending completion of the hearing.

The hearing shall be informal and non-adversarial. During the hearing, the student may present relevant information and may be advised by a School of Divinity faculty or staff member or a licensed health professional of the student's choice. The role of the adviser is limited to providing advice to the student.

At the conclusion of the hearing, the hearing officer shall decide whether to uphold the administrative withdrawal or whether to reconsider, and the student shall be provided written notice of the hearing officer's decision as soon as possible.

## Appeal Process

The student may appeal the hearing officer's decision to the dean, who shall review all information presented and make a final decision as to whether or not to uphold the involuntary withdrawal.

## Emergency Suspension

The University may take emergency action to suspend a student pending a final decision on whether the student will be administratively withdrawn, in situations in which:

- There is imminent danger of serious physical harm to the student or others,
- There is imminent danger of significant property damage,
- The student is unable or unwilling to meet with the associate dean of academic affairs,
- The student refuses to complete the mandatory evaluation; or
- The assistant dean of admissions and student services, the associate dean of academic affairs, or the dean of the School of Divinity determines such other exceptional circumstances exist that suspension is warranted.

In the event emergency action is taken to suspend the student on an interim basis, the student shall be given notice of the emergency suspension and an initial opportunity to address the circumstances on which the emergency suspension is based.

## Conditions for Reenrollment

Because the Administrative Withdrawal Policy applies to cases in which there is a concern about the safety of the student or others, the associate dean of academic affairs, the dean of the School of Divinity, or a designee may require a student who has been administratively withdrawn under this policy to be reevaluated before the student is readmitted in order to assure that the student presents no clear and present danger to lives and property.

## Students' Rights and Responsibilities

**Introduction:** Wake Forest University exists for the transmission of knowledge, the pursuit of truth, the development of students, and the well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. The School of Divinity is committed to providing an environment that will encourage divinity students to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. The School of Divinity is also dedicated to the principles of honor, mutual respect, and trust among the faculty and students. The common observance of professional ethics is basic to study and research.

**Rights:** The minimal standards of academic freedom outlined below are essential to any community of scholars. Any violation of these standards may be grounds for a student to initiate the grievance process.

**Freedom of access to higher education:** The facilities and services of the University should be open to all of its enrolled students, and the University should use its influence to secure equal access for all students to public facilities in the local community.

**Classroom and research environment:** Student performance will be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards.

**Protection of freedom of expression:** Students are free to take reasoned exception to the data or views offered in any course of study or research activity and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.

**Protection against improper academic evaluation:** Students have protection through orderly procedures against prejudiced or capricious academic evaluation. At the same time, they are responsible for maintaining standards of academic performance established for the program in which they are enrolled.

**Protection against improper disclosure:** Information about student views, beliefs, and political associations which professors acquire in the course of their work as instructors, advisers, and counselors is considered confidential. Protection against improper disclosure is a serious professional obligation. Judgments of ability and character may be provided under appropriate circumstances, always with the knowledge of consent of the student.

**Protection against harassment:** Students have protection through orderly procedures against physical (sexual, etc.) harassment and/or psychological abuse.

**Student records:** To minimize the risk of improper disclosure, access to academic and disciplinary records should be considered separately. Transcripts of academic records will contain only information about academic status. Information from disciplinary or counseling files will not be available to unauthorized persons on campus, or to any person off campus, without the written consent of the student involved, except where a judicial order of subpoena compels disclosure or health and safety emergency cases are involved. No records will be kept which reflect the political activities or beliefs of students. The dean of the School of Divinity should make provision for periodic review and possible destruction of non-current disciplinary records. Administrative staff and faculty members should respect confidential information that they acquire about students.

**Freedom of association:** Students bring to the campus a variety of interests previously acquired and develop many new interests as members of an academic community. They are free to organize and join associations to promote common interests.

**Freedom of inquiry and expression:** Students and their organizations are free to examine and discuss all questions of interest to them, and to express opinions publicly and privately. They are free to support causes by orderly means that do not disrupt the regular and essential operation of the University.

Students and their organizations will be allowed reasonable access to University facilities for academic purposes, organizational meetings, sponsored lectures, etc. Routine procedures required by the University for obtaining access to facilities are designed only to insure that there is orderly scheduling of a facility as well as adequate preparation for an event and that the occasion is conducted in a manner appropriate to an academic community. Students and their organizations are allowed to invite and hear any person of their choosing. The University's control of campus facilities cannot be used as a device of censorship.

**Student participation in University government:** As constituents of an academic community, students are free, individually and collectively, to express their views on issues of University policy and on matters of general interest to the student body.

**Off-campus freedom of students:** If activities of students result in violation of law, University officials should be prepared to apprise students of sources of legal counsel and may offer other assistance. Students who violate the law may incur penalties prescribed by civil authorities. Only where the University's interest as a community is clearly involved should the special authority of the University be asserted to consider off-campus violations. The student who incidentally violates University regulations in the course of his or her off-campus activity is subject to no greater penalty than would normally be imposed for such infractions on campus.

**Responsibilities:** The faculty expects students to be mature and responsible members of the community. Infractions of academic integrity include plagiarism, cheating on examinations, misrepresentation of the work of other scholars, and falsification or fabrication of data in reporting one's own research. These infractions, as well as acts that disrupt the educational environment and any violations of local or federal law that occur on the University campus or during University sponsored activities, can be grounds for disciplinary action, which may include dismissal from the University.

## Important Contacts

Contact	Phone Number
Safe Office; Assistance available to all students 24-hours	336.758.5285
University Title IX Coordinator (titleixcoordinator@wfu.edu)	336.758.7258
<b>Reynolda Campus Resources</b>	
Student Health Service; 24-hours when school is in session, excluding summer	336.758.5218
University Police	336.758.5911
University Chaplain; For emergencies after hours, contact Student Health Service	336.758.5210
University Counseling Center; For emergencies after hours, contact Student Health Service	336.758.5273
Office of the Dean of Student Services	336.758.5226
Residence Life and Housing	336.758.5185
Wake Forest Compliance Hotline	877.880.7888
Center for Learning, Access, and Student Success	336.758.5929
Office of Wellbeing	336.758.3089
Associate Dean for Student Affairs	336.716.4271
<b>Community Resources</b>	
Sexual Assault Response Program; 24 hour rape crisis service sponsored by Family Services	336.723.8125
Forsyth Medical Center Emergency Dept.	336.718.2293

Atrium Health WF Baptist Medical 336.716.9253  
Center Emergency Dept.  
Winston-Salem Police or Forsyth 911  
County Sheriff's Department

## Student Life

- Academic Coaching and Support Services
- Community Life
- Leadership Development and Career Services
- Housing and Meals
- School of Divinity Student Government
- Student Organizations
- Special Events

## Academic Coaching and Support Services

Wake Forest School of Divinity offers academic support to interested students through the **Academic Coaching and Support Services**, under the direction of the **Academic Program Coordinator**. Coaching is available to assist students with the academic skills necessary to be successful in graduate theological education at Wake Forest University.

Services include one-on-one coaching sessions and an array of resources to facilitate academic success. From refreshers on grammar and writing practices to advice on developing good study habits, the School of Divinity supports students in doing their best. The Academic Program Coordinator is available to help students with a variety of academic questions and concerns, including effective reading strategies, writing skills, research questions, time management coaching, and much more.

Academic coaching is free and available to every School of Divinity student. Resources are also available here (<https://divinity.wfu.edu/academics/academic-resources/academic-coaching-support/>).

## Community Life

**The School of Divinity recognizes that formation and education together create a learning community.** Interaction among students and faculty outside classrooms is integral to the School of Divinity experience. Ecumenical theological education embraces a commitment to community building and engagement: in classrooms, in worship, in study spaces, in surrounding communities of life and work, and in informal School of Divinity settings. Community life is celebrated and cultivated at the School of Divinity in three primary ways: communal worship, spiritual growth opportunities, and cultivation of common spaces for study, conversation, and relaxation.

Worship at the School of Divinity is multifaceted. Students have opportunities to worship together as part of the School of Divinity's weekly rhythms. A Worship Design Team made up of students, faculty, and staff curates each service through music, ritual, and proclamation. The services amplify the voices of an array of proclaimers, including guest clergy, faculty, and third-year students. Chapel services at the School of Divinity are a learning laboratory. They also offer a moment of sabbath in the midst of hectic days of classes and other responsibilities. The Worship with Wait program also provides worship programming throughout the year in collaboration with other University leaders and offices and often with partner congregations and religious leaders.

Highlights each year of University-wide worship events include the Moravian Christmas Lovefeast, an annual Service of Remembrance, and special services on other Holy Days. Students can also discover diverse worship opportunities throughout Winston-Salem and surrounding areas.

The School of Divinity recognizes the importance of community-wide opportunities for **spiritual nurture and growth**. Students have opportunities to experience worship, prayer, and meditation through an array of internship settings. Students also have seasonal opportunities to participate in retreats, group spiritual practices, and other events designed to explore and cultivate spiritual renewal and growth.

Community is formed as people gather in **common spaces** to learn, play, rest, share meals, and dialogue about important events in their lives. The School of Divinity provides a number of common spaces that allow for communal interaction and conversation. Students also discover common spaces across the Reynolda campus and in nearby Reynolda Gardens. Both the Office of Student Life and student organizations utilize campus common spaces to hold workshops, celebratory meals, and other events, and conversations about topics important to the community.

## Leadership Development and Career Services

**The School of Divinity is interested in preparing students to be public leaders in diverse ministry contexts.**

### Pathways in Ministry

Pathways in Ministry provides workshops and panel discussions to support students in their vocational discernment by exposing them to the many paths of engaging in professional ministry and to provide resources for personal and professional skill development so students may attain and thrive in life-giving ministry careers. These workshops include such offerings as: "Finding and Keeping the Perfect Job," "Building a Narrative Resume," "Prison and Jail Chaplaincy," "Career and Internship Fair," "Starting a Nonprofit," and "Bi-Vocational Ministry."

### Career Services

Career Services is the dimension of the School of Divinity that assists current students and recent alumni with finding vocational pathways for future employment. Career Services provides the following services:

- resources for students from vocational seminars and workshops to denominational connections to career counseling;
- opportunities for potential employers to network with students and find future employees;
- job postings from congregations, chaplaincy settings, nonprofit organizations, and other ministry agencies that are made available to students through email announcements and website postings.

Students and recent alumni are encouraged to utilize the resources of Career Services throughout and after their educational programs at the School of Divinity. More information on Leadership Development and Career Services, including job listings, can be found at <http://www.divinity.wfu.edu/career-services> (<http://www.divinity.wfu.edu/career-services/>).

## Housing and Meals

**The School of Divinity does not require that students live in University housing.** Most students prefer to make their own arrangements for



housing with the assistance of the Office of Admissions and Student Services in the School of Divinity. Options available range from individual rooms in University-owned properties adjacent to the campus to private apartments.

The Office of Residence Life and Housing, located in the University Services Building, serves as an information center for individuals who wish to advertise rooms, apartments, and houses for rent or sale. It also provides a place for students to list information if they are interested in finding a roommate to share expenses. Off-campus facilities listed with the Office of Residence Life and Housing are not screened. The University serves as an information source and does not assume responsibility for placement, lease agreements, or landlord-tenant relations.

School of Divinity students provide for their own meals. Community lunches are provided by the School of Divinity, area churches, and other groups once a week after chapel. Drink machines, microwave ovens, and refrigerators are available in the lower auditorium of the Divinity and Religious Studies Building.

Divinity students may elect to purchase one of the University's optional board plans. A cafeteria and a buffet service dining room are located in Reynolda Hall, and food courts offering fast food are located in the Benson University Center. For more information, contact:

ARAMARK Campus Dining Services  
Box 7393  
Winston-Salem, N.C., 27109

Visit [www.wakeforest.campusdish.com](http://www.wakeforest.campusdish.com) (<http://www.wakeforest.campusdish.com>) for more information.

## School of Divinity Student Government

**The Student Leadership Council (SLC) of the School of Divinity** is the constituted student governing body. The SLC gives voice to student concerns in the School of Divinity and in the broader University. Elected by the student body, representatives of the SLC coordinate special events, sponsor various organizations, and appoint students to the School of Divinity's standing committees.

The student government elects officers in the Spring of each academic year. The Student Leadership Committee (SLC) is the established liaison between faculty and students and has established a number of sub-committees to serve our School of Divinity community. The purposes of the SLC are:

- To present itself as a community of faith, under the Gospel of Jesus Christ, in witness and in fellowship.
- To provide students with programs, activities and services.
- To represent the Student Association before the School of Divinity's administration.

## Student Organizations

**The Office of Admissions and Student Services plans and coordinates the school's student life programs and events.** The office advises the Student Leadership Council and student organizations and student publications. Student organizations at the School of Divinity include:

## Akoni

Akoni provides a platform for students of African ancestry and for all Wake Forest students, faculty, and staff to explore theological education focused on the black religious experience, the Black Church as an expression of black religion, and the social, religious and political needs and concerns of the students and the black community.

## Beatitudes

The Beatitudes Society develops and sustains a national network of emerging Christian leaders who advocate for justice, compassion, and peace, reclaim a Christianity that welcomes all people, and articulates a Christianity that dares to speak and act for our fragile planet and our most vulnerable citizens. The Beatitudes Society Chapter at the School of Divinity is a community of students and faculty who gather for support, action, reflection, and prayer. The group gathers biweekly at a student's home for a simple meal and lectio divina. They provide resources and opportunities for small group studies and arrange activities advocating for or engaging in social justice.

## Commonplace

Commonplace seeks to deepen the knowledge, formation, and sense of community of those concerned with ideas of food, health, ecological justice, and faith. This student organization organizes hiking trips, shares meals, attends events off-campus, and serves together. We also sponsor community lunches periodically which are sourced locally.

## Kaleidoscope

The primary goal of Kaleidoscope is to serve as a safe and welcoming environment for lesbian, gay, bisexual, transgender, queer, questioning, intersex and allied students, faculty, and staff from all cultural, socio-economic, ethnic, and ecumenical backgrounds. Additionally, the group seeks to provide opportunities for all divinity school students, faculty, and staff to ask questions and dialogue with mutual respect so as to promote understanding of and engagement with LGBTQ matters.

## Mosaic

Mosaic seeks to share the experience of God through artistic expression. The group nurtures and facilitates spiritual growth and expression through artistic media and promotes the use of the arts in the worship, service, contemplative, and communal life of the divinity school, as well as the University and Winston-Salem community.

## Physical Wellness

The School of Divinity values whole body wellness. The Physical Wellness Club seeks to create a fun and positive means for students, faculty, and staff to be active, stay healthy, and build community. This organization offers events throughout the school year and furthers the already developed interest and participation in Wake Forest University Intramural Sports. Some of our opportunities include Flag Football, Soccer, Tennis, and Dodgeball Intramural teams, weekly yoga sessions, Zumba with the Deans, March Madness Bracket Challenge, and various study breaks during finals week.

## Women's Work

Women's Work is a fellowship of women who are passionate about womanhood, specifically in the ministry. It is a sacred space for women to share experiences as well as an opportunity for women to safely explore the power of their own voice. The group invites distinguished faculty

and community leaders to lead discussions around topics that help the women of the divinity school grow into ministerial identities. Women's Work welcomes the divinity school community of men to join in and hear the voices of these distinguished women throughout the semester.

More information about the Student Leadership Council and student organizations can be found online at <https://divinity.wfu.edu/student-life/student-organizations/>.

## Special Events

### The Mac Bryan Prophetic Preaching Series

Established in honor and memory of George McLeod "Mac" Bryan, Sr. ('41, MA '44) by George ('61) and Carol ('64) Williamson, long-time supporters of Wake Forest and early advocates for the importance of the School of Divinity. Bryan was professor of religion and taught at the University for thirty-seven years after joining the religion faculty in 1956. He introduced courses on feminism, religion and science, medical ethics, and black and liberation theology. He fought tirelessly for Civil Rights, pursued social reform, and was instrumental in helping to integrate Wake Forest College in the 1960s. Bryan wrote several books on social justice, including *These Few Also Paid a Price and Voices in the Wilderness*. The series brings preachers and speakers to campus who will inspire students to live and serve at the intersection of Christianity and social justice.

### The Margaret A. Steelman Lectures

Endowed in 1998 with a gift from Sanford L. Steelman, a distinguished biochemist from Hickory, NC, in honor of his wife Margaret A. Steelman. The endowment invites prominent lectures of Judeo-Christian theology to the divinity school each year. Past lecturers include distinguished speakers Susan R. Garrett of Louisville Presbyterian Theological Seminary, Marcus J. Borg, acclaimed author and theologian, William Schweiker, Edward L. Ryerson, distinguished service professor of theological ethics at the University of Chicago Divinity School.

### The Elizabeth and Robert Strickland Speaker Series on Religion

This speaker series was established in 2021 by Mrs. Elizabeth Strickland in memory of her late husband, Robert Strickland. A voracious reader with a deep commitment to spiritual inquiry and theological education, Mrs. Strickland wanted to underwrite this lecture series as part of her larger commitment to Wake Divinity to expose students and the larger community to leading religious intellectuals.

## Faculty

#### John E. Carter (2023)

Visiting Assistant Professor of Religion, Law, and Public Life  
MDiv, Wake Forest University School of Divinity; JD, Duke University; ThM, PhD, Boston College.

#### Jill Y. Crainshaw (1999)

Professor of Worship and Liturgical Theology  
BA, Wake Forest University; MDiv, Southeastern Baptist Theological Seminary; PhD, Union Theological Seminary/Presbyterian School of Christian Education.  
<https://divinity.wfu.edu/academics/faculty/jill-y-crainshaw/>

#### Elizabeth O'Donnell Gandolfo (2015)

Associate Dean of Academic Affairs and Earley Associate Professor of Catholic and Latin American Studies  
BA, Saint Joseph's University; MTS, University of Notre Dame; PhD, Emory University.  
<https://divinity.wfu.edu/academics/faculty/elizabeth-odonnell-gandolfo/>

#### Gary Gunderson (2012)

Professor of Faith and Health of the Public  
BA, Wake Forest University; MDiv, Emory University; SMin, Interdenominational Theological Center; DDiv, Chicago Theological Seminary.  
<https://divinity.wfu.edu/academics/faculty/gary-gunderson/>

#### Melanie L. Harris (2021)

Professor of Black Feminist Thought and Womanist Theology and Director of the Food, Health and Ecological WellBeing Program  
BA, Spelman College; MDiv, Iliff School of Theology; MA, PhD, Union Theological Seminary.  
<https://divinity.wfu.edu/academics/faculty/melanie-l-harris/>

#### Derek S. Hicks (2011)

Associate Professor of Religion and Culture  
BA, Grambling State University; MA, Dallas Theological Seminary; PhD, Rice University.  
<https://divinity.wfu.edu/academics/faculty/derek-s-hicks/>

#### Kevin Jung (2007)

Professor of Theological Ethics and Moral Philosophy  
BA, Seoul Theological University; MDiv, Princeton Theological Seminary; STM, Yale Divinity School; PhD, University of Chicago.  
<https://divinity.wfu.edu/academics/faculty/kevin-jung/>

#### C. Austin Rivera (2021)

Assistant Professor of Church History  
AB, University of Chicago; MDiv, Duke Divinity School; PhD, Yale University.  
<https://divinity.wfu.edu/academics/faculty/austin-rivera/>

#### Melva L. Sampson (2017)

Assistant Professor of Preaching and Practical Theology  
BA, Virginia Union University; MDiv, Emory University; MA, Howard University; PhD, Emory University.  
<https://divinity.wfu.edu/academics/faculty/melva-l-sampson/>

#### Katherine A. Shaner (2013)

Associate Professor of New Testament  
BA, Luther College; MDiv, Harvard Divinity School; Certificate of Studies, Lutheran School of Theology at Chicago; ThD, Harvard Divinity School.  
<https://divinity.wfu.edu/academics/faculty/katherine-a-shaner/>

#### Neal H. Walls (2002)

Associate Professor of Old Testament Interpretation  
AB, College of William and Mary; MA, University of Virginia; PhD, Johns Hopkins University.  
<https://divinity.wfu.edu/academics/faculty/neal-h-walls/>

#### Wynetta Wimberley (2023)

Assistant Teaching Professor of Practical Theology  
MDiv, ThM, Princeton Theological Seminary; ThD, Emory University.

## Emeritus Faculty

#### Bill J. Leonard (1999)

Founding Dean and Professor of Divinity Emeritus

BA, Texas Wesleyan University; MDiv, Southwestern Baptist Theological Seminary; PhD, Boston University.

<https://divinity.wfu.edu/academics/faculty/bill-j-leonard/>

## Senior Leadership

**Corey D. B. Walker**

**Interim Dean of the School of Divinity, Wake Forest Professor of the Humanities, Director of the Program in African American Studies**

BS, Norfolk State University; MDiv, Virginia Union University; MTS, Harvard University; PhD, The College of William and Mary.

**Elizabeth O'Donnell Gandolfo**

**Associate Dean of Academic Affairs, Earley Associate Professor of Catholic and Latin American Studies**

BA, Saint Joseph's University; MTS, University of Notre Dame; PhD, Emory University.

## Staff

**Anna Baker**

**Development Coordinator**

BS, NC State University

**Dionnia Brown**

**Associate Director, Office of Student Financial Aid**

BA, Wake Forest University; MEd, McKendree University

**Joshuah Brian Campbell**

**Director of Music and Arts; Director of University Gospel Choir**

BA, Harvard University; MDiv, Union Theological Seminary

**Diane Cox**

**Financial and Data Analyst, COMPASS Initiative Faith Coordinating Center**

BA, Wake Forest University

**Roger Epps**

**Multimedia Coordinator**

BS, Radford University

**Marisa Hancock-Hernández**

**Financial Aid Counselor**

BA, UNC-Chapel Hill; MS, Wake Forest University

**Anna Harris**

**Events Manager and Admissions Counselor**

AB, Utah State University

**Marcus Hawley**

**Educational Program Manager, COMPASS Initiative Faith Coordinating Center**

BA, Hampton University

**DeeDe Pinckney Holly**

**Director, Marketing, Communications, and Public Relations**

BA, Wake Forest University; MA, University of North Carolina at Greensboro; PhD, Regent University

**Brittani Hunt (MDiv '15)**

**Assistant Dean of Admissions and Student Services**

BBA, Tennessee State University; MDiv, Wake Forest University

**Shonda Jones**

**Principal Investigator, COMPASS Initiative Faith Coordinating Center**

**Executive Director, Academic Programs, School of Professional Studies**

BA, Texas Christian University; MDiv, Texas Christian University; EdD, University of Alabama

**Hannah McMahan King ('06, MDiv '09)**

**Assistant Dean of Development**

BA, Wake Forest University; MDiv, Wake Forest University

**Khelen Kuzmovich (MDiv '13)**

**Academic Program Coordinator, Integrative Student Services**

BA, Queens University of Charlotte; MDiv, Wake Forest University

**Allison Mathews**

**Executive Director, COMPASS Initiative Faith Coordinating Center**

BA, Howard University; PhD, UNC-Chapel Hill

**Demi McCoy (MDiv '17)**

**Creative Program Manager, COMPASS Initiative Faith Coordinating Center**

BA, Pepperdine University; MDiv, Wake Forest University

**Kaeley McMahan**

**Research and Instruction Librarian Arts, Religion, Divinity**

BA, Wheaton College; MA, Wake Forest University; MLIS, UNC-Greensboro

**Kathryn Morris**

**Executive Assistant to the Dean**

BS, University of Dayton; MA, University of Dayton

**Sally Ann Morris**

**Musician-in-Residence**

BM, St. Andrews Presbyterian College

**John Senior**

**Assistant Dean of Vocational Formation**

**Director of the Art of Ministry**

AB, Bowdoin College; MDiv, Harvard Divinity School; PhD, Emory University

**Shar Seyedin**

**Director, Finance and Administration**

BS, Pepperdine University; MBA, UNC-Greensboro

**Mary Ellen Walter**

**Assistant Registrar**

BA, UNC-Chapel Hill

# THE SCHOOL OF PROFESSIONAL STUDIES

## Mission

The mission of the SPS is to accelerate the professional growth of adult learners across their careers through accessible, flexible, and cutting edge educational experiences by leveraging our university's academic areas of excellence and external strategic partnerships.

## Vision

The vision of SPS is to be the premier educational institution of choice for working professionals and leading organizations in Charlotte, Winston-Salem, and beyond.

In alignment with the Wake Forest University motto of Pro Humanitate, our values include a commitment to 1) being student focused in service to the learning and career needs of working professionals; 2) continual improvement that includes agility and innovation for excellence in learning and operational efficiency; 3) equity, inclusiveness, and diversity - enlarging access and valuing all members of our community; 4) ethics and transparency - leading with integrity and honor and with open communications; and 5) collaboration with community - focus on community needs to drive program development and student success, as well as on organizational partnerships essential to our success.

For details about the School of Professional Studies' program and course descriptions, faculty listing, and student policies, please visit the School of Professional Studies website at [sps.wfu.edu](http://sps.wfu.edu) (<http://sps.wfu.edu/>).

## Academic Calendar

### Fall 2023

Date	Day	Event
August 28	Monday	Mini 1 Start
October 18	Wednesday	Mini 1 End
October 23	Monday	Mini 2 Start
December 13	Wednesday	Mini 2 End

### Spring 2024

Date	Day	Event
January 8	Monday	Mini 1 Start
February 28	Wednesday	Mini 1 End
March 4	Monday	Mini 2 Start
April 24	Wednesday	Mini 2 End

### Summer 2024

Date	Day	Event
April 29	Monday	Mini 1 Start
June 19	Wednesday	Mini 1 End
June 24	Monday	Mini 2 Start
August 14	Wednesday	Mini 2 End

## Programs

### Degree Programs

- Communications, Master
- Curriculum and Instruction, Master
- Digital Marketing, Master
- Educational Leadership, Master
- Financial Technology and Analytics, Master
- Health Administration, Master
- Health Informatics, Master
- Project Management, Master

### Certificates

- Agile Leadership, Certificate
- Digital Marketing & Analytics, Certificate
- Ethical and Inclusive Leadership, Certificate
- FinTech, Certificate
- Project Management, Certificate

## Degree Programs

### C

- Communications, Master
- Curriculum and Instruction, Master

### D

- Digital Marketing, Master

### E

- Educational Leadership, Master

### F

- Financial Technology and Analytics, Master

### H

- Health Administration, Master
- Health Informatics, Master

### P

- Project Management, Master

## Communications, Master

### Requirements

Code	Title	Hours
<b>Core Courses</b>		
CMS 710	Communications Today	3
CMS 712	Communications Research	3
CMS 714	Digital Communications Engagement	3
CMS 720	Crisis & Issues Communications	3
CMS 722	Strategic Communications	3
CMS 724	Public Relations	3



CMS 730	Communications Leadership, Organizational Culture & Ethics	3
CMS 732	Leading through Intercultural Communications	3
CMS 799	Consultative Project	3
<b>Select 1 Elective</b>		<b>3</b>
CMS 750	Champion Corporate Branding	
LDR 720	Negotiation and Conflict Management	
LDR 722	Leadership and Change Management	
LDR 724	Leading Business Communications	
LDR 726	Financial Management for Today's Leaders	
<b>Total Hours</b>		<b>30</b>

## Curriculum and Instruction, Master Requirements

Code	Title	Hours
<b>Core Courses</b>		
CUI 710	Curriculum and Instruction Fundamentals	3
CUI 724	Instructional Leadership	3
CUI 714	Assessment and Evaluation	3
CUI 712	Social Foundations of Education	3
CUI 722	Differentiated Instruction	3
CUI 720	Instructional Design and Digital Learning Technologies	3
CUI 726	Curriculum Mapping for DEI	3
EDL 714	Using Research and Data to Lead School Improvement	3
CUI 799	Capstone in Education	3
<b>Select 1 Elective</b>		<b>3</b>
EDL 710	Foundations of Educational Leadership	
EDL 722	Administration, Supervision, and Community	
PMP 710	Project Management Essentials	
LDR 722	Leadership and Change Management	
<b>Total Hours</b>		<b>30</b>

## Digital Marketing, Master Requirements

Code	Title	Hours
<b>Core Courses</b>		
DMG 710	Strategic Digital Marketing	3
DMG 712	Digital Marketing Research, Journey Mapping, and Consumer Analytics	3
DMG 720	Marketing Analytics and Data Visualization	3
DMG 724	Digital Design Thinking and the User Experience (UX)	3
DMG 722	Branding, Storytelling, and Writing Content for the Digital World	3
DMG 714	Leadership, Ethics, and the Legal Landscape of Digital Marketing	3
DMG 730	Digital Marketing Tools and Campaign Analytics: SEM, Display, and Retargeting	3

DMG 732	Social Media Marketing: SEO, Content and Influencers	3
DMG 799	Digital Campaign Project/Capstone	3
<b>Select 1 Elective</b>		<b>3</b>
PMP 710	Project Management Essentials	
DMG 751	Website, Visual Content, and Video Development	
DMG 752	Digital Consumer Psychology and Decision Making	
DMG 753	The Customer Journey: Website and eCommerce Marketing	
<b>Total Hours</b>		<b>30</b>

## Educational Leadership, Master Requirements

Code	Title	Hours
<b>Core Courses</b>		
EDL 710	Foundations of Educational Leadership	3
CUI 712	Social Foundations of Education	3
CUI 724	Instructional Leadership	3
EDL 714	Using Research and Data to Lead School Improvement	3
EDL 720	Education Law & Ethics	3
EDL 722	Administration, Supervision, and Community	3
EDL 724	Human Resources & School Finance	3
EDL 730	Internship: School Executive I (15 weeks)	3
<b>Select 1</b>		<b>3</b>
EDL 732	Internship: School Executive II (15 weeks)	
CUI 799	Capstone in Education	
<b>Select 1 Elective</b>		<b>3</b>
CUI 714	Assessment and Evaluation	
CUI 720	Instructional Design and Digital Learning Technologies	
CUI 722	Differentiated Instruction	
CUI 726	Curriculum Mapping for DEI	
<b>Total Hours</b>		<b>30</b>

## Financial Technology and Analytics, Master Requirements

Code	Title	Hours
<b>Core Courses</b>		
FTA 710	Financial Analytics	3
FTA 712	Data Management	3
FTA 714	Visual Analytics & Influencing	3
FTA 720	Financial Technology Today	3
FTA 722	Emerging Technologies	3
FTA 724	Machine Learning & Artificial Intelligence	3
FTA 730	Decision Making & Risk Management	3
FTA 732	Managing Disruption & Innovation	3

FTA 799	Capstone in Financial Technology & Analytics	3
<b>Select 1 Elective</b>		<b>3</b>
LDR 722	Leadership and Change Management	
DMG 720	Marketing Analytics and Data Visualization	
FTA 751	Financial Markets & Institutions	
FTA 752	Emerging Applications & Entrepreneurship	
<b>Total Hours</b>		<b>30</b>

## Health Administration, Master Requirements

Code	Title	Hours
<b>Required Courses</b>		
CMS 722	Strategic Communications	3
HAD 710	Principles of Health Systems Management	3
HAD 720	Health Information Management Systems	3
HAD 722	Healthcare Policy, Law, and Ethics	3
HAD 730	Strategic Planning and Decision Making for Healthcare Leaders	3
HAD 799	Capstone in Health Admin	3
HIF 712	Population Health & the American Healthcare System	3
HIF 732	Healthcare Leadership & Impact	3
HIF 734	Quality and Patient Safety Management in Healthcare	3
LDR 726	Financial Management for Today's Leaders	3
LDR 728	Human Resources Management and Organizational Development	3
Students will have the opportunity to enroll in one, 3-hour elective course of their choice across SPS offerings. Students will be advised to consider electives like DMG 710, FTA 730, and HIF 752		3
<b>Total Hours</b>		<b>36</b>

## Health Informatics, Master Requirements

Code	Title	Hours
<b>Core Courses</b>		
HIF 710	Health Informatics Today	3
HIF 712	Population Health & the American Healthcare System	3
HIF 714	Digital Health	3
HIF 720	Healthcare Data Analytics	3
HIF 722	Healthcare Databases	3
HIF 730	Health Information Regulation, Privacy, and Security	3
HIF 732	Healthcare Leadership & Impact	3
HIF 734	Quality and Patient Safety Management in Healthcare	3
HIF 799	Capstone in Health Informatics	3
<b>Select 1 Elective</b>		<b>3</b>
HIF 751	Telehealth Today and Tomorrow	

HIF 752	Artificial Intelligence (AI) in Health Informatics	
PMP 710	Project Management Essentials	
<b>Total Hours</b>		<b>30</b>

## Project Management, Master Requirements

Code	Title	Hours
<b>Core Courses</b>		
PMP 710	Project Management Essentials	3
PMP 712	Mastering the Project Life Cycle	3
PMP 730	Agile Fundamentals	3
PMP 714	Portfolio and Program Management	3
LDR 720	Negotiation and Conflict Management	3
PMP 732	Advanced Agile: Frameworks and Techniques	3
LDR 722	Leadership and Change Management	3
PMP 799	Capstone in Project Management	3
<b>Select 2 Electives</b>		<b>6</b>
PMP 750	Lean Six Sigma	
PMP 751	PMP Leadership Preparation	
PMP 752	ScrumMaster Leadership Preparation	
PMP 753	Leading Construction and Engineering Projects	
<b>Total Hours</b>		<b>30</b>

## Certificates

### A

- Agile Leadership, Certificate

### D

- Digital Marketing & Analytics, Certificate

### E

- Ethical and Inclusive Leadership, Certificate

### F

- FinTech, Certificate

### P

- Project Management, Certificate

## Agile Leadership, Certificate Requirements

Code	Title	Hours
PMP 730	Agile Fundamentals	3
PMP 732	Advanced Agile: Frameworks and Techniques	3
LDR 720	Negotiation and Conflict Management	3

LDR 722	Leadership and Change Management	3
Total Hours		12

## Digital Marketing & Analytics, Certificate

### Requirements

Code	Title	Hours
DMG 710	Strategic Digital Marketing	3
DMG 712	Digital Marketing Research, Journey Mapping, and Consumer Analytics	3
DMG 720	Marketing Analytics and Data Visualization	3
DMG 730	Digital Marketing Tools and Campaign Analytics: SEM, Display, and Retargeting	3
Total Hours		12

## Ethical and Inclusive Leadership, Certificate

### Requirements

Code	Title	Hours
EIL 710	Moral and Ethical Dimensions of Inclusive Leadership	3
EIL 712	Decision Making and Conflict Management	3
EIL 714	Shaping an Ethical and Inclusive Organization	3
Total Hours		9

## FinTech, Certificate

### Requirements

Code	Title	Hours
FTA 710	Financial Analytics	3
FTA 712	Data Management	3
FTA 720	Financial Technology Today	3
FTA 722	Emerging Technologies	3
Total Hours		12

## Project Management, Certificate

### Requirements

Code	Title	Hours
PMP 710	Project Management Essentials	3
PMP 712	Mastering the Project Life Cycle	3
PMP 730	Agile Fundamentals	3
LDR 722	Leadership and Change Management	3
Total Hours		12

## Courses A-Z

### C

- Communication (CMS)
- Curriculum & Instruction (CUI)

### D

- Digital Marketing (DMG)

### E

- Educational Leadership (EDL)
- Ethical and Inclusive Leadership (EIL)

### F

- Faith & Health Equity (FAH)
- Financial Tech & Analytics (FTA)

### H

- Health Administration (HAD)
- Health Informatics (HIF)

### L

- Leadership (LDR)

### P

- Project Management (PMP)

## Communication (CMS)

### CMS 710. Communications Today. (3 h)

Today's professionals encounter an increasingly complex organizational environment. The course introduces students to foundational concepts of the Information Economy, focusing on media's recent evolution and the impact of this digitization, including subsequent changes in the work environment and human interaction, 21st century literacies, and relevant theories to shed light on how to manage current and emerging social trends.

### CMS 712. Communications Research. (3 h)

Strategic communicators understand that data is an essential basis for well-planned strategies. This course provides the knowledge of research design and data interpretation, helping communications professionals become proficient consumers and ethical producers of research-based arguments.

### CMS 714. Digital Communications Engagement. (3 h)

In today's digital world, consumers of digital messaging are also producers of digital content. Today's professionals must not only keep up with the near-constant changes in media platforms but must use multiple channels to generate content and listen to users. This course helps build a foundation in current digital practices and emerging media technologies, including digital brand storytelling, content marketing strategy, social media marketing, influencer marketing, and search engine optimization (SEO).

**CMS 720. Crisis & Issues Communications. (3 h)**

Real and perceived threats can pose major challenges for organizations. These threats can range from attacks on an organization's reputation to managing the proliferation of misinformation communicated in both external and internal channels, inclusive of social media. This course provides the tools, approaches, and confidence to manage long-term challenges as part of crisis & issues management and public relations strategy.

**CMS 722. Strategic Communications. (3 h)**

Internal and external stakeholders expect greater transparency and responsiveness from organizational leaders today. This course emphasizes the practice of internal and external strategic communications through the analysis of case studies spanning corporate communications, public relations, marketing, and social media. This course examines real organizational challenges and students work to identify solutions.

**CMS 724. Public Relations. (3 h)**

Public relations (PR) professionals are increasingly tasked with building and maintaining multi-directional relationships with both internal and external key stakeholders. This course introduces practical approaches to communicating persuasively and building managing corporate reputation, driving awareness and affinity for the brand among a wide array of stakeholders.

**CMS 730. Communications Leadership, Organizational Culture & Ethics. (3 h)**

Most organizations have a mission or values statement. How many organizations are living it? This course helps identify leadership strategies for ensuring organizational strategies are aligned with organization mission and values and serve the broader goals of business and society. Learn more about the ESG framework and be able to apply it to communications initiatives, building trust and making a positive, authentic impact. Effective leaders communicate consistently and in alignment with organizational missions that represent the highest of ethical standards.

**CMS 732. Leading through Intercultural Communications. (3 h)**

It is necessary for communications leaders to develop intercultural awareness and build communications strategies that reflect diversity of thought, culture, and experience. Equitable practices foster trust and commitment to organizations and brands. Diverse workforces are more creative and innovative. Learn how to assess and design aligned, inclusive communications strategies.

**CMS 750. Champion Corporate Branding. (3 h)**

Companies with a strong brand purpose have stronger customer and employee loyalty. Is your company's brand strong? How can you start with the "why" of your brand rather than the "what" and "how" of a product line? In this course, you will learn to recognize strong brands and identify strategies for strengthening brand purpose.

**CMS 799. Consultative Project. (3 h)**

Learning is forged through application. This immersive course applies communications skills and knowledge through a hands-on consultative project. Students will develop a communications plan to solve a current real-world challenge for an existing company or organization.

## Curriculum & Instruction (CUI)

**CUI 710. Curriculum and Instruction Fundamentals. (3 h)**

Curriculum and Instruction including theories, design principles, and evaluation models. The course will investigate the interaction of curriculum implementation and models of instruction in respect to student learning as well as how that curriculum is shaped, including curriculum literacy - the major input variables to curriculum decision-making, implementations, and curriculum evaluation.

**CUI 712. Social Foundations of Education. (3 h)**

A critical examination of the political, social, and economic goals of schooling and their intersection with educational equality and student diversity through the lens of educational philosophy and positionality with a view to developing a culturally responsive multicultural pedagogical praxis that enhances student success.

**CUI 714. Assessment and Evaluation. (3 h)**

This course is designed to introduce students to the variety of assessment and evaluation techniques and their purpose, including how these techniques are used in instructional planning, decision-making, and curriculum development.

**CUI 720. Instructional Design and Digital Learning Technologies. (3 h)**

A comprehensive exploration of instructional design frameworks, including best practices with design, development, and evaluation of these frames. Students will get to practice working in traditional instructional design frameworks (ADDIE, Gagne's), more modern frameworks (Agile, SAM), along with collaborative frameworks (Co-Design, Design Justice). This course will provide an overview of the digital tools, techniques, opportunities and challenges associated with learning technologies and leading teams. The course will also introduce learning technology applications, provide tools to evaluate learning technology solutions and related multimedia learning design models, address digital accessibility, and engage in best instructional technology practices. The course provides the opportunity to explore various online learning tools and does not include in-depth training in any specific tool.

**CUI 722. Differentiated Instruction. (3 h)**

This course will focus on the practice of differentiating instruction as a way for educators to meet diverse learning needs and preferences without having to individualize instruction for every student. In this course, students learn how to differentiate five instructional elements—content, product, process, affect, and learning environment—according to students' interests, readiness, and learning profile. Using their classroom curriculum, they plan and implement differentiated lessons and align them to important learning goals, essential questions, and formative and summative assessments while ensuring that their instruction includes meaningful applications of knowledge. Students also learn how to draw on internal and external resources to support holistic learning processes.

**CUI 724. Instructional Leadership. (3 h)**

This course explores various strategies for instructional leadership, including coaching and mentoring, and their relationship to educational leadership and positive teaching and learning outcomes. The course will emphasize the skills to build productive relationships and effective mentoring among educators, and consensus-building among a course design team.



**CUI 726. Curriculum Mapping for DEI. (3 h)**

This course will focus on curriculum mapping, the practice of ensuring that teaching is structured in a meaningful and logical sequence to build knowledge and achieve desired curricular outcomes. This process includes charting and tracking academic program priorities and redundancies, and identifying educational gaps. Students will learn about long-term planning for vertical and comprehensive learning to proactively address learning gaps and misalignments. The course will also provide technical guides of a curriculum mapping process with a specific focus on diversity, equity, and inclusion, and outcomes.

**CUI 799. Capstone in Education. (3 h)**

Designed for all education students, this course aims to provide opportunities for students to gain real-world experience. Students will identify, analyze, and develop curricula or leadership theory and demonstrate effective practices by engaging one data point (i.e., student achievement). The capstone will also include examining the standards and exploring how to teach the standards. Additionally, students will have opportunities to put their knowledge into practice through professional shadowing and individual or group projects with key educational leaders.

## Digital Marketing (DMG)

**DMG 710. Strategic Digital Marketing. (3 h)**

This course covers fundamental principles and best practices of digital marketing strategies (e.g., positioning, pricing, etc.) and tactics (e.g., market research-derived segmentation and targeting, packaging, channel management, etc.). An emphasis is placed on marketing frameworks and concepts (e.g., marketing communications, brand management, marketing analytics, etc.). Cross-cultural awareness in digital marketing (e.g., the role of ethnicity and other demographic variables) will also be examined.

**DMG 712. Digital Marketing Research, Journey Mapping, and Consumer Analytics. (3 h)**

Robust knowledge of research methods is fundamental to the digital marketing discipline. This course teaches professionals how to use research techniques to deeply understand and focus on the needs and interests of the consumer in integrated campaigns.

**DMG 714. Leadership, Ethics, and the Legal Landscape of Digital Marketing. (3 h)**

This course covers the ethics of digital marketing and product liability, and it explores emerging issues related to the buying and selling of consumer data, the use of artificial intelligence (AI) to predict and influence human behavior, and other consumer privacy concerns.

**DMG 720. Marketing Analytics and Data Visualization. (3 h)**

This course covers best practices for gathering, interpreting, and presenting compelling digital data to inspire positive action.

**DMG 722. Branding, Storytelling, and Writing Content for the Digital World. (3 h)**

Many campaigns never make it to the market or fall flat in execution because a compelling “story” isn’t being told in them. This course integrates brand management principles and marketing frameworks to guide digital storytelling that effectively engages consumers and other stakeholders.

**DMG 724. Digital Design Thinking and the User Experience (UX). (3 h)**

This course focuses on user-centered design (UCD) and associated methodologies, including user research, digitally-enabled user experience (UX), interaction design, and usability testing.

**DMG 730. Digital Marketing Tools and Campaign Analytics: SEM, Display, and Retargeting. (3 h)**

Given the dynamic nature of the marketplace and rapidly shifting consumer interests and behaviors, it is critical to have a deep understanding of the digital tools that can be employed to track such shifts and to communicate with consumers in impactful ways.

**DMG 732. Social Media Marketing: SEO, Content and Influencers. (3 h)**

Many campaigns never make it to the market or fall flat in execution because a compelling “story” isn’t being told in them. This course integrates brand management principles and marketing frameworks to guide digital storytelling that effectively engages consumers and other stakeholders.

**DMG 751. Website, Visual Content, and Video Development. (3 h)**

Effective visual design and video production that leads to engaging user experiences require a unique set of skills and a deep understanding of consumer psychology. To help students enhance their ability to create effective designs and videos, this course will combine the highly creative and analytical sides of digital marketing in these domains.

**DMG 752. Digital Consumer Psychology and Decision Making. (3 h)**

This course will provide a deep dive into online and mobile consumer behavior and use an analytics-driven approach to explain why consumers look, pause, click, engage, and buy.

**DMG 753. The Customer Journey: Website and eCommerce Marketing. (3 h)**

In digital marketing, understanding the consumer journey is extremely important. To help students understand that journey and to design impactful digital pathways for it, this course will focus on website and eCommerce marketing strategies that increase customer demand and sales.

**DMG 799. Digital Campaign Project/Capstone. (3 h)**

This course will enable students to integrate the skills and knowledge that were developed in the other courses of the program to complete a digital marketing project for an organization.

## Educational Leadership (EDL)

**EDL 710. Foundations of Educational Leadership. (3 h)**

Students will be introduced to foundational concepts and challenges of educational leadership. The course will include a focus on school-level leadership and accountability, roles and responsibilities, and the principles of educational leadership. This course is a prerequisite for all other courses.

**EDL 714. Using Research and Data to Lead School Improvement. (3 h)**

This course focuses on using data to enhance equitable decision-making processes for comprehensive school improvement, including instruction, school culture, and community involvement. Emphasis in the course will include use of assessment and research data to identify school improvement needs and to design projects that respond to those needs.

**EDL 720. Education Law & Ethics. (3 h)**

This course explores legal and ethical responsibilities of the school leader and implications of federal, state, and local education policies, including statutes, regulations, and risks. Course topics will emphasize regulations and responsibilities in areas such as special education, confidentiality, liability, due process, search and seizure, employment matters, and church/state conflicts.

**EDL 722. Administration, Supervision, and Community. (3 h)**

This course introduces students to organizational theories, the politics of education, and building safe, supportive, and inclusive environments in schools and communities. Students will be reflective of various administrative and organizational theories and how these concepts inform their practice as school leaders. The course will also focus on distributive leadership, developing skills for team management, and collaborative analysis of community building.

**EDL 724. Human Resources & School Finance. (3 h)**

Students will be introduced to the management of an organization's workforce planning through the design and implementation of effective human resources policies and procedures, as well as financial implications. This content includes processes and systems related to performance management, talent management, diversity, and employee wellness.

**EDL 730. Internship: School Executive I (15 weeks). (3 h)**

This course, part 1 of two courses, provides a practical introduction to executive school leadership by engaging in activities with school leaders. These two courses are composed of a two-semester internship in a public school setting in order to give students opportunities to learn in the field. The student's internship will be supervised jointly by school-based administrators and SPS academic director and will include a reflective evaluation. P. Completion of 12 hours of SPS coursework, including EDL 710, and with permission of the academic director.

**EDL 732. Internship: School Executive II (15 weeks). (3 h)**

This course, part 2 of two courses, builds on the skills of executive school leadership by engaging in activities with school leaders. These two courses are composed of a two-semester internship in a public school setting in order to give students opportunities to learn in the field. The student's internship will be supervised jointly by school-based administrators and SPS academic director and will include a reflective evaluation. P. Completion of 12 hours of SPS coursework, including EDL 730, and with permission of the Academic Director.

## Ethical and Inclusive Leadership (EIL)

**EIL 710. Moral and Ethical Dimensions of Inclusive Leadership. (3 h)**

This course investigates current theories and knowledge about the moral and ethical dimensions of inclusive leadership, and explores related leadership strategies.

**EIL 712. Decision Making and Conflict Management. (3 h)**

Against a backdrop of major social, economic, and cultural transitions, leaders need a deeper understanding of ethical decision-making and effective conflict management. At the same time, leaders' decisions are often viewed from varied stakeholders' perspectives that are sometimes in tension with the leaders' views and aims. This course equips students with knowledge and skills for navigating complex (and sometimes contentious) organizational landscapes.

**EIL 714. Shaping an Ethical and Inclusive Organization. (3 h)**

What tools do leaders need to lead sustainable transformation in organizations? How do leaders implement strategies to enhance diversity, equity, and inclusion in their organizations? What leadership skills and qualities are important as leaders envision, implement, and assess organizational changes infused with inclusive ethical decision-making? This course explores these questions and equips learners to shape an ethical and inclusive organization.

## Faith & Health Equity (FAH)

**FAH 710. Faith & Health Equity: Integrative Paradigms. (3 h)**

This course is an exploration of current theory and knowledge about the intersection of faith and health.

**FAH 712. Social and Ecological Determinants of Health. (3 h)**

This course introduces students to social and ecological determinants of health, including issues related to health that consider behavioral, psychological and structural factors in population health beyond the healthcare system.

**FAH 714. Spirituality and Community Health. (3 h)**

This course explores how health equities can be cultivated at the intersections of spirituality and health. Students will consider how health systems function as loci for understanding brokenness and cultivating shalom in community. Students will also have opportunities as multi-disciplinary professional teams to imagine how to utilize course content in responding to case scenarios. By engaging case scenarios in consultation with community leaders, local data, and faith-based initiatives, students will cultivate skills as collaborative community change agents. In this course, students will: explore systemic issues at the intersection of spirituality and health, conduct multi-professional team analyses of community health, engage and lead collaboratively to respond to community needs.

## Financial Tech & Analytics (FTA)

**FTA 710. Financial Analytics. (3 h)**

A foundation for statistical techniques in business, economics, and finance as applied to management decision-making.

**FTA 712. Data Management. (3 h)**

An introduction to relational databases, data management, and data mining.

**FTA 714. Visual Analytics & Influencing. (3 h)**

A survey of data visualization methods, techniques, and tools to facilitate the understanding of complex data and models.

**FTA 720. Financial Technology Today. (3 h)**

An introduction to trends, innovations, and uncertainties in financial services.

**FTA 722. Emerging Technologies. (3 h)**

An overview of blockchain, cryptocurrencies, cybersecurity, robo-advising, lending and payment systems, and other emerging financial technologies. This course will be updated regularly to reflect the latest trends in the field.

**FTA 724. Machine Learning & Artificial Intelligence. (3 h)**

A survey of the foundations of machine learning, deep learning, and artificial intelligence. While learners will not engage in coding or the building of machine learning and AI tools, they will explore the application of these tools in finance.

**FTA 730. Decision Making & Risk Management. (3 h)**

A practical overview of making decisions in an uncertain business environment.

**FTA 732. Managing Disruption & Innovation. (3 h)**

An empowering course that highlights the forces of disruptive innovation in the finance industry.

**FTA 751. Financial Markets & Institutions. (3 h)**

An overview of the structure and functioning of US and international financial markets. Topics covered include banking theory, the roles of traditional and non-traditional financial intermediaries, the impact of securitization, international financial competition, financial system stability and financial regulation.

**FTA 752. Emerging Applications & Entrepreneurship. (3 h)**

A hands-on, case-study oriented immersion in how to build a business that involves financial technologies still on the horizon. Topics include opportunity identification, business model development, raising financing, building teams from the ground up, and nurturing new ventures. Learners will take an idea and explore how to successfully build a real product or service.

**FTA 799. Capstone in Financial Technology & Analytics. (3 h)**

An opportunity to integrate program content in a culminating experience that will enable an organization to advance its financial technology and analytical capabilities or enhance its fintech products/services.

## Health Administration (HAD)

**HAD 710. Principles of Health Systems Management. (3 h)**

This course will explore how to manage an organization's workforce through the design and implementation of effective human resources policies and procedures. Examples include processes and systems related to performance management, talent management, diversity, and employee wellness. Leadership and change management processes will be explored from a human resource, marketing, and customer-related perspective.

**HAD 720. Health Information Management Systems. (3 h)**

A comprehensive introduction to various principles, tools, and concepts used to manage information within a healthcare environment. The course will explore the planning, evaluation, assessment, and accountability of quality service provisions, including the use of health data visualization to gain healthcare insights for decision-making.

**HAD 722. Healthcare Policy, Law, and Ethics. (3 h)**

This course will provide in-depth coverage of healthcare compliance programs and laws, progressing from the basics of a compliance program to specific issues facing the healthcare industry. The course is structured to include both a "compliance" and "legal" component for each module. The compliance portion of the course will focus on the seven elements of an effective compliance program, while the legal portion will cover selected laws impacting healthcare compliance. For example, HIPAA, the Stark Law, the Anti-Kickback Statute, and the federal False Claims Act.

**HAD 730. Strategic Planning and Decision Making for Healthcare Leaders. (3 h)**

This course examines the principles and applications of strategic visionary thinking and change management within healthcare organizations. A structured approach to managing strategically is explored, while assessing key features of the organization environments and competitive situations. Students will explore approaches to engaging in new healthcare services, how to offer them, and the processes for ensuring successful implementation.

**HAD 799. Capstone in Health Admin. (3 h)**

This course aims to thread content learned throughout the program into a culminating capstone experience. Students are offered an opportunity to apply theory to practice in a shadowing or internship experience. The program requires students to complete a certain number of shadowing/ internship hours observing leaders in healthcare leading and managing health related issues. Ultimately the exposure assists students in transferring theory into practice.

## Health Informatics (HIF)

**HIF 710. Health Informatics Today. (3 h)**

A comprehensive overview of health informatics concepts, techniques, and emerging trends with a leadership lens.

**HIF 712. Population Health & the American Healthcare System. (3 h)**

Overview of healthcare delivery in the United States and Population Health.

**HIF 714. Digital Health. (3 h)**

The advancement of informatics in healthcare has allowed a convergence of digital technologies to improve overall quality, cost, health services outcomes, and patient experiences. This course will explore the theory, applied practice, and impact of current and emerging digital health technologies such as wearables, mobile health and Internet of Things, as well as electronic health records/clinical documentation systems for all demographics.

**HIF 720. Healthcare Data Analytics. (3 h)**

A comprehensive introduction to the current state of the science and practice of analytics in healthcare, including how to "tell the story" the numbers present. Core competency skills are achieved using a variety of learning methods to help students apply analytic techniques supporting data mining, visualization and data driven decision making.

**HIF 722. Healthcare Databases. (3 h)**

An introduction to the theory and application of database management systems.

**HIF 730. Health Information Regulation, Privacy, and Security. (3 h)**

A foundational exposure to legal and ethical issues related to health information privacy and security and the basic technological considerations to meet professional obligations in health informatics practice.

**HIF 732. Healthcare Leadership & Impact. (3 h)**

This course will explore leadership, organizational structure, effective team functioning and provide students with an understanding of the importance of developing high-quality relationships, the impact of motivation, power, and influence, and principles of corporate ethics, and health equity in healthcare. Students will identify and apply an understanding of how leadership principles and best practices impact the ability to manage a successful healthcare organization, project, or strategic imperative.

**HIF 734. Quality and Patient Safety Management in Healthcare. (3 h)**

This course covers the foundations for understanding and pursuing patient safety and quality of care outcomes within the current healthcare environment. Thoughtful consideration is given on how quality and safety from a global perspective can critically impact expectations within today's healthcare environment.

**HIF 751. Telehealth Today and Tomorrow. (3 h)**

This course will provide an overview of the tools, techniques, and challenges associated with telehealth from an informatics perspective.

**HIF 752. Artificial Intelligence (AI) in Health Informatics. (3 h)**

This course will review the foundations of artificial intelligence (AI) with applications to the prevention, detection, diagnosis, and prognosis of diseases.

**HIF 799. Capstone in Health Informatics. (3 h)**

This course provides students the opportunity to incorporate knowledge, competencies, and skills obtained throughout the health informatics graduate program into a culminating health related capstone project. The project will be based in evidence validating the need for change as well as potential solutions for improvement that centers on quality of care, health disparities, and/or delivery of health services.

## Leadership (LDR)

**LDR 720. Negotiation and Conflict Management. (3 h)**

This course explores the determinants of successful negotiations. A process-oriented approach is used, with an emphasis on the practical application of proven frameworks and theories. Relatedly, the course also delves deeply into the nature and common causes and causes of conflict that can derail projects, providing practical guidance for identifying and addressing the root causes of conflict.

**LDR 722. Leadership and Change Management. (3 h)**

The work of a leader is to manage change. This course emphasizes gaining the knowledge, skills, and tools necessary to successfully undertake change efforts. It explores the leadership principles, styles, frameworks, and skills required to guide, motivate, and direct teams. In this course, participants will develop the ability to prepare, support, and assist individuals, teams, and organizations in their pursuit of organizational change. Attention is given to stakeholder management and strategic partnering.

**LDR 724. Leading Business Communications. (3 h)**

To have impact, today's leaders must understand today's landscape and communicate their message to key stakeholders informally through social networks or formally through presentations.

**LDR 726. Financial Management for Today's Leaders. (3 h)**

Is there such a thing as "non financial" leadership today? Leading effectively in today's complex economy requires a confident understanding of the numbers side of the business. Communications professionals often read and interpret spreadsheets, numbers, and financial projections. Their work will become the internal and external messaging for the organization. This course provides critical financial competencies - the basics of cash flow and income, reading a balance sheet effectively, analyzing to ask the right questions, and presenting a strong business case.

**LDR 728. Human Resources Management and Organizational Development. (3 h)**

Students will be introduced to the management of an organization's workforce planning through the design and implementation of effective human resources policies and procedures. These include processes and systems related to performance management, talent management, diversity, and employee wellness. Students will also engage leadership and change management processes. This course emphasizes gaining the knowledge, leadership skills, and tools necessary to successfully undertake organizational change.

## Project Management (PMP)

**PMP 710. Project Management Essentials. (3 h)**

This course introduces the foundational concepts of project management (PM). It provides an overview of the PM life cycle as defined in the Project Management Body of Knowledge. Several PM knowledge areas such as risk, scope, schedule, quality, monitoring, and communication, among others, will be introduced. Distinctions between project, program, and portfolio management are explored. Achieving literacy in Microsoft Project software is an additional goal of the course.

**PMP 712. Mastering the Project Life Cycle. (3 h)**

This course pursues a comprehensive and in-depth exploration of the different phases of a project from initiation to closure, with an emphasis on the myriad of factors that contribute to successful project management (PM) throughout the life cycle. Students will leave with a set of best practices for effective PM in setup, planning, and execution. P - PMP 710.

**PMP 714. Portfolio and Program Management. (3 h)**

This course focuses on managing and coordinating multiple organizational projects. Students will develop the ability to build and manage a project portfolio, including consideration of project alignment, organizational goals, performance maximization, risk minimization, and program success. Particular attention is given to the differentiating aspects of program governance and compliance within organizational, industry, and legal requirements.

**PMP 730. Agile Fundamentals. (3 h)**

This course introduces the foundational concepts of Agile, which is an iterative approach to project management (PM). Agile is contrasted with other PM methodologies. An introductory consideration of scrum is provided, including Scrum events and artifacts, the anatomy of a sprint, the roles of Scrum Master and Scrum team members, as well as release planning.

**PMP 732. Advanced Agile: Frameworks and Techniques. (3 h)**

This course builds on the foundation established in the "Agile Fundamentals" course, placing an emphasis on building the practical skills necessary for leading agile projects in organizations. In addition to learning about predominant agile frameworks, the course emphasizes continuous improvement through retrospectives, lean-agile thinking, and the use of agile metrics. P - PMP 730.

**PMP 750. Lean Six Sigma. (3 h)**

Continuous improvement projects (CIPs) are typically vital contributors as companies pursue their goals. This course focuses on the essentials of Lean Management/Thinking and Six Sigma quality as the two dominating and complementing methodologies that are suited to the pursuit of operational excellence. The participants will learn about the basic philosophies and essential tools of these two concepts, with a focus on leveraging various improvement methods and becoming more effective with their project work.

**PMP 751. PMP Leadership Preparation. (3 h)**

The Project Management Professional (PMP) Leadership Preparation course is designed to prepare project managers to be exceptional project leaders for their organizations. Obtaining leading industry certification is important for many. This course provides the knowledge and skills aligned with the PMI PMP Exam Content Outline (ECO), including universal competencies for all project managers; predictive, agile, or hybrid.



**PMP 752. ScrumMaster Leadership Preparation. (3 h)**

This course will prepare students for the Professional ScrumMaster certification exam offered by [scrum.org](https://www.scrum.org). Detailed consideration is given to the Scrum framework and the key attributes of being an effective Scrum Master.

**PMP 753. Leading Construction and Engineering Projects. (3 h)**

This course will enable students to develop an in-depth knowledge of industry-specific subjects in construction and engineering design, planning, and safety. Students will gain a deep understanding of project estimation, construction ethics, and writing contracts as experienced within the construction and engineering contexts. Salient industry and organizational factors that impact the performance of construction and engineering projects will be emphasized.

**PMP 799. Capstone in Project Management. (3 h)**

This immersive hands-on course offers students the opportunity to apply the principles, best practices, techniques, and frameworks they have developed throughout their previous coursework to actual project management (PM) context in an organization of their choosing. Assessment of the current PM environment creates the basis for recommendations for furthering the intent of the project(s) under consideration.

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