# **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, QDA)

## 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 prerequisite override required. (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 prerequisite override required. (D)

# ECN 260. History of Economic Development. (3 h)

Examines various explanations for differences in economic development across countries in historical perspective. P-ECN 150 (D)

## 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 ancient times 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., the Economics B.S., or the Economics Minor. May be repeated for credit. Pass/Fail only. P-Prerequisite override required.

# 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-Prerequisite override required.

# 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-Prerequisite override required.

# 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 311. Advanced Research Methods. (1.5 h)

Provides fundamental skills needed for research in economics. Topics will include coding skills to read, extract, manage, combine, prepare, and analyze large data sets. Ideal for students wishing to work with professors as a research assistant, undertake independent research, or work with data in any setting. Emphasis will be placed on reproducibility and replicability of results. P-ECN 209 or ECN 215 or prerequisite override required.

# 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. (D)

# 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, EI)

#### 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. (D)

# 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 334. The Future of Work. (3 h)

A survey of macroeconomic trends affecting the workplace, including technological change and globalization, use of alternative work arrangements, and employer monopsony power. Focus on group discussion and empirical applications. P-ECN 207 or ECN 211. (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. (D)

## 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. (D)

#### 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. (D)

#### 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 353. Economics of Digitization. (3 h)

Examines the transformation of the economy enabled by digital technologies. Topics include piracy, e-commerce, two-sided networks and platforms, sharing economy, digital marketing, social media, privacy, and impacts on macroeconomy. Extensive reading and discussion of research literature. P—ECN 209 or ECN 215. (D)

# ECN 358. Economic Growth and Development. (3 h)

A study of the root causes of economic development, with particular attention to countries in the Global South, using economic theory and empirical evidence to study policy-relevant issues around human capital formation, firm productivity, financial constraints, social norms, violence, and poverty traps. P- ECN 205 or ECN 210 or prerequisite override required. (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. May be repeated for credit. P-Prerequisite override required.

# 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 prerequisite override required.

## ECN 399. Honors II. (1.5 h)

Completion of a senior research project. Required of candidates for departmental honors. P-ECN 398 and prerequisite override required.