

# Economics (ECO)

**Note:** ECO 201 and ECO 202 are a course sequence of basic economic principles and their applications aimed to develop an analytic framework for interpreting economic events, trends, institutions, and public policies. The two semesters are conceived as a year course; the recommended sequence is ECO 201, ECO 202.

**Advanced Economic Courses:** prerequisites for advanced courses are ECO 201 and ECO 202 unless otherwise stated. For ECO 311, ECO 315, and ECO 317 a grade of at least a "C" in all prerequisite courses or permission of the instructor is required.

## **ECO 131. Equality, Poverty, and Opportunity: Economic Perspectives. (3)**

Introduction to economic perspectives on inequality in the United States, particularly the relationship between inequality and population diversity. The role of the market and of public policy in generating, transmitting, and ameliorating inequality. Dimensions of inequality include earning inequality, poverty, and unequal access to education and health care. Dimensions of diversity include race, ethnicity, gender, age, socioeconomic class, immigration status, and sexual orientation. IC, IIC. PA-2A, PA-4A, SI-02. CAS-C.

## **ECO 177. Independent Studies. (0-6; maximum 10)**

### **ECO 201. Principles of Microeconomics. (3)**

Nature and scope of microeconomics, including the role of the market in resource allocation, the role of competition, market forces, the forces governing the distribution of income, and the role of foreign trade in economic welfare. IIC. PA-2A. CAS-C.

### **ECO 202. Principles of Macroeconomics. (3)**

Analysis of the determinants of output, prices, employment, and interest rates. Includes long run behavior of the economy, business cycle theory, monetary system, stabilization policy, and international finance. IIC. PA-2A. CAS-C.

## **ECO 277. Independent Studies. (0-6; maximum 10)**

### **ECO 301. Money and Banking. (3)**

Nature of money and its role in the functioning of a modern monetary economy; the institutional framework of the U.S. monetary system; and aims, potentialities, and limitations of monetary policy. Prerequisites: ECO 201 and ECO 202.

### **ECO 311. Examining Economic Data and Models. (3)**

Introduction to the use of linear regression techniques for examining economic data and evaluating economic models. Topics may include hypothesis testing, dummy variables, forecasting, and limited dependent variable models. Sources of economic data are explored. Applications to topics in economics are stressed. CAS-C, CAS-Q, CAS-QL, CAS-W.

Prerequisites: earn a grade of at least a C in ECO 201, ECO 202, and ISA 125 or STA 125 or STA 261 or STA 301 or STA 368, and MTH 151 or MTH 141; or permission of the instructor.

### **ECO 315. Intermediate Microeconomic Theory. (3)**

Analysis of the theory of consumer behavior and theory of the firm. Emphasis on logic of rational choice, model building, and economic efficiency. Other topics may include general equilibrium analysis, decision making under uncertainty, and applications of game theory in understanding strategic behavior in imperfect competition. CAS-C, CAS-W.

Prerequisites: earn a grade of at least a C in ECO 201, and 202, and MTH 151 or 153 or 141; or permission of the instructor.

### **ECO 317. Intermediate Macroeconomic Theory. (3)**

National income, as a measure of economic activity, including examination of theories of consumption and investment spending, monetary demand and supply, and implications of alternative models for level and stability of output, employment and prices, and economic growth. CAS-C, CAS-W.

Prerequisites: earn a grade of at least a C in ECO 201, 202, and MTH 141 or 151 or 153; or permission of instructor.

### **ECO 320. Special Topics in Economics. (2-3; maximum 9)**

Examination of special topics in theoretical or applied economics not treated in the existing economics curriculum. Specific topics and hours to be determined by instructor.

### **ECO 331. Public Sector Economics. (3)**

Discussion of the rationale for government expenditures and taxation and how they affect resource allocation, efficiency, and equity in the distribution of income. Other topics may include the role of voters, special interests and government bureaucracy in determining government policy, other current tax and expenditure issues.

Prerequisites: ECO 201 and ECO 202.

### **ECO 332. Health Economics. (3)**

Investigation of the markets for health care and related sectors of the economy with attention to institutions and data for the U.S. health care sector. Emphasizes the presence of moral hazard and asymmetric information in various health care markets. Topics may include proposals for reform, malpractice, drug regulation, Medicare and Medicaid, problems of access to care for the uninsured, and cross country comparisons.

Prerequisite: ECO 201.

### **ECO 340. Internship. (0-20)**

Available to Farmer School of Business (FSB) majors and minors. Available for 0 credit hour during spring, summer and fall terms. Available for 1 credit hour during summer terms only. For one hour of credit, student must secure a sponsoring FSB faculty member within his/her major or minor to supervise the internship and accompanying required internship reflection paper. ECO 340 is not available during winter term. Students are to work through their respective academic departments to enroll in the course. Credit/no credit only. Note: FSB students may earn a maximum 2 credit hours toward graduation for ACC/BLS/BUS/ECO/ESP/FIN/ISA/MGT/MKT 340.

Prerequisite: 55 earned hours and permission of department.

### **ECO 344. International Economic Relations. (3)**

Comparative advantage as basis for gains from specialization and trade examined in some detail. Supply and demand analysis used to study the effects of barriers to trade (tariffs, quotas, etc.). Study of monetary aspects of international economic relations, including: alternative forms of international monetary organization, balance of payments, exchange rates, and mechanisms of balance of payments adjustment.

Prerequisites: ECO 201 and ECO 202.

### **ECO 347. Economic Development. (3)**

Analysis of current problems of developing countries in Asia, Africa, and Latin America. Emphasis on the role of economic theory in devising policies to achieve improvements in the level and distribution of economic welfare in these countries.

Prerequisites: ECO 201 and ECO 202.

**ECO 356. Poverty and Income Distribution. (3)**

Traces the levels of, changes in, and differing perspectives on poverty and inequality globally. Explores the causes, consequences, and policy responses to poverty and inequality. The course will explore the origins and continuing effect of global and national political, social, and economic institutions on welfare. The effect of forces such as trade, migration, and global capital flows will be examined. IC. PA-4C. CAS-C.

Prerequisites: ECO 201 and ECO 202.

**ECO 373. Economic Growth. (3)**

Investigates the sources of economic growth within a country and the factors that affect relative growth across countries. The course addresses issues of income convergence and the role of policy in determining the long-run rate of growth.

Prerequisites: ECO 201 and ECO 202.

**ECO 377. Independent Studies. (0-6; maximum 10)****ECO 405. Economics of Strategy. (3)**

Uses microeconomic models to apply concepts from the FSB core areas to solve problems and make decisions that managers of firms may face daily. Class time is allocated to the development of economic models that integrate the core areas, problem solving to apply the models in typical business settings, and the analysis of cases. Gives students opportunity to present as a team an analysis of cases using skills and concepts from the core courses. Prerequisite: available only to students with senior standing who have completed the common core of business courses; students who have not completed all of these courses must have permission of the instructor to enroll. SC.

Prerequisites: ECO 201 and ECO 202.

**ECO 406/ECO 506. Environmental Economics. (3)**

Economic analysis of environmental quality. Strategies for collective environmental action. Benefit-cost analysis. Economic growth and environmental quality.

Prerequisites: ECO 201 and ECO 202.

**ECO 411/ECO 511. Advanced Empirical Methods. (3)**

Examination of the use of estimation techniques for analyzing economic data and evaluating economic models. Topics may include properties of estimators, hypothesis testing, serial correlation and heteroscedasticity, and simultaneous equations. Applications to topics in economics are stressed.

Prerequisites: ECO 311 and ECO 315.

**ECO 414/ECO 514. Mathematical Economics. (3)**

Development of mathematical techniques essential for understanding economic theory and performing economic research. Topics include calculus of several variables; linear algebra; classical, nonlinear, and convex programming; comparative statics; and dynamic programming.

Prerequisite: ECO 315 and one of the following: MTH 222, 231, or 251 or permission of instructor.

**ECO 415/ECO 515. Topics in Microeconomics. (3; maximum 6)**

In this course students apply advanced economic theory, and statistical analysis to study applied problems faced by economic agents such as firms and government agencies.

Prerequisites: ECO 315 and ECO 411/ECO 511 (MA students must have prerequisite coursework of ECO 511 and ECO 615) or by permission of instructor.

Co-requisite: MA students have ECO 671 as a co-requisite.

**ECO 417/ECO 517. Topics in Macroeconomics. (3)**

In this course students apply advanced economic theory, and statistical analysis to study applied problems related to growth, fiscal policy, and monetary policy.

Prerequisites: ECO 317, ECO 311, ECO 414/ECO 514 (MA students must have prerequisite coursework of ECO 511 and ECO 617) or by permission of instructor.

Co-requisite: MA students have ECO 672 as co-requisite.

**ECO 418/ECO 518. Monetary Theory and Policy. (3)**

Study of the behavior of financial institutions and their respective roles in transmission of monetary policy. Elements of monetary theory including quantity theory of money and its restatements, theory of interest, and inflation.

Prerequisite: ECO 317.

**ECO 419. Business Cycles. (3)**

Analysis of the causes and effects of economic fluctuations; topics include economic indicators, economic theories of business cycles, and a survey of macroeconomic patterns in the United States.

Prerequisite: ECO 317.

**ECO 420. Seminar on Economic Problems. (1-3; maximum 9)**

Selected topics in economics.

Prerequisite: permission of instructor.

**ECO 431/ECO 531. Antitrust and Damages. (3)**

Antitrust law attempts to maintain and promote competition. This course examines economic issues related to anticompetitive conduct and antitrust law. The course will examine how the United States conducts reviews of mergers. It will also examine common business practices to determine whether that practice has met the economics standards to be considered anticompetitive. Quantitative techniques used to examine mergers, define relevant antitrust markets, assess the effect of a business practice on competition, as well as estimating damages if a firm is found to violate antitrust laws may be covered.

Course materials will be drawn from various sources, such as scholarly articles and court rulings. CAS-C.

Prerequisite: ECO 315.

**ECO 441. International Trade and Commercial Policy. (3)**

Examination of underlying causes of international trade, determinants of trade, effects of trade on income, relationship between trade and international factor movements, and theory and practice of restrictions on trade.

Prerequisite: ECO 315.

**ECO 442/ECO 542. International Monetary Relations. (3)**

Monetary aspects of international economic relations. Alternative forms of international monetary organization, balance of payments, exchange rates, and mechanism of balance of payments adjustment.

Prerequisite: ECO 317 or permission of instructor.

**ECO 451/ECO 551. Economic History. (3)**

Primarily American economic history as studied from the point of view of economic theory and quantitative methods. Qualitative determinants of long-run economic growth and structural change investigated.

Prerequisite: ECO 315 and 317, or permission of instructor.

**ECO 461/ECO 561. Industrial Organization and Public Policy. (3)**

Effects of structure, conduct, and performance of imperfectly competitive firms upon social welfare. Includes social costs of imperfect competition, determinants of market structure, mergers, barriers to entry, advertising, and research and development.

Prerequisite: ECO 315 or 603.

**ECO 462. Economics of Compensation. (3)**

Survey of the economics of human resources. Topics may include rationale for and effects of alternative forms of compensation and contracting; theory and measurement of discrimination against minorities and women; and causes and consequences of unionism. Prerequisite: ECO 315.

**ECO 465. Game Theory with Economic Applications. (3)**

Topics from the field of game theory applied to numerous economic problems. Equilibrium concepts are derived to determine the outcome of economic agents pursuing individual self-interest in a "non-cooperative" environment. Specific tools included: multi-person decision trees, expected utility theory, Bayes Theorem, and several classes of games. Economic applications may include: wage bargaining, strategic trade policy, adverse selection and credit rationing, strikes, cartel enforcement, insurance, patents, and product variety.

Prerequisite: ECO 315.

**ECO 477. Independent Studies. (0-6; maximum 10)****ECO 480. Independent Reading. (1-6)**

Seminar leading to a qualifying written report for graduation with departmental honors.

Prerequisite: approval of honors coordinator (see current class schedule).

**ECO 482. Independent Reading. (3)**

Seminar leading to a qualifying written report for graduation with departmental honors.

Prerequisite: approval of honors coordinator (see current class schedule).

**ECO 615. Advanced Microeconomic Theory. (3)**

Exposition of the general principles and analytical tools of microeconomic theory. Includes theory of consumer choice, production and cost, pricing in various market structures, distribution theory, general equilibrium analysis, and welfare economics.

Prerequisite: ECO 315 or 603.

**ECO 616. Microeconomic Analysis for Managerial Decisions. (3)**

Focuses on microeconomic analysis of consumers, firms, and market organization. Topics may include analysis of antitrust and regulatory issues.

**ECO 617. Advanced Macroeconomic Theory. (3)**

Development of an aggregative model of output, employment, interest rates, and prices. Analysis of the effect of government policy on these variables. Implications of alternative specifications of the model are also examined.

Prerequisite: ECO 317 or equivalent.

**ECO 618. Game Theory and Decisions. (1.5)**

Covers topics and methods from the field of game theory and applies them to microeconomic decision problems.

Prerequisite: ECO 201.

**ECO 640. Internship. (0-12; maximum 12)****ECO 671. Topics in Applied Econometrics. (3)**

Topics include simultaneous equations bias, omitted variable problems, estimation with limited dependent variables, differences-in-differences models, quantile regressions, event studies in finance and the Fama-French model.

**ECO 672. Applied Time Series Analysis. (3)**

Topics include autoregressive and moving average models, unit root topics, co-integration, autoregressive conditional heteroscedasticity, and applications to financial economics and other applied areas of economics.

**ECO 677. Independent Studies. (0-6; maximum 10)****ECO 685. Economic Research Methods. (3)**

Consideration of alternative economic methodologies; selection and specification of critical hypotheses; model construction; sources of data; model verification, evaluation, and revision.

Prerequisite: graduate standing in economics.

**ECO 690. Master's Research. (1-12)**

In-depth research paper written with supervision of at least two members of graduate faculty.

**ECO 700. Research For Masters Thesis. (1-10)****ECO 704. Non-Thesis Project. (0-12; maximum 12)**