Economics (ECON)

Courses

ECON 1. Introduction to Economics. 4 Units.
An analysis of the problems society faces in organizing itself to provide goods and services. How decisions of government, business, and the individual relate to current economic problems such as unemployment, inflation, poverty, and environmental pollution.

Restriction: Non-Economics majors only. ECON 1 may not be taken for credit if taken concurrently or after ECON 20A or ECON 20B.

ECON 11. The Internet and Public Policy. 4 Units.
How the Internet works. Current public policy issues concerning the Internet. Introductory economics. Communications law. Interactions between information technology, economics, and law. Case studies about Internet and communications policy.

Same as I&C SCI 11.

ECON 12. Federal Reserve: Past, Present, and Future. 4 Units.
Studies central banking in the United States from colonial times to the present. Focuses on the past, present, and future of the Federal Reserve and precursors to that system, which was established in 1913.

ECON 13. Global Economy. 4 Units.
Acquaints students with the fundamental patterns of the global economy. Emphasizes the historical roots and political implications of economic choices.

Same as INTL ST 13.

Restriction: International Studies, Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 15A. Probability and Statistics in Economics I. 4 Units.
An introduction to probability, statistics, and econometrics. Emphasis on a thorough understanding of the probabilistic basis of statistical inference. Examples from economics. MGMT 7 may not be used to substitute for ECON 15A-ECON 15B.

Prerequisite: MATH 2A and MATH 2B and MATH 4.

Restriction: No credit for MGMT 7 if taken after ECON 15A and ECON 15B. Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 15B. Probability and Statistics in Economics II. 4 Units.
An introduction to probability, statistics, and econometrics. Emphasis on a thorough understanding of the probabilistic basis of statistical inference. Examples from economics. MGMT 7 may not be used to substitute for ECON 15A-ECON 15B.

Prerequisite: MATH 2A and MATH 2B and MATH 4.

Restriction: No credit for MGMT 7 if taken after ECON 15A OR 15B. Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 17. An Economic Approach to Religion. 4 Units.
Introduction to how basic economic concepts such as demand, supply, consumption, production, competition, free-ridding, innovation, regulation, and rent-seeking can be applied to understand observed religious behavior.

Same as REL STD 17.
ECON 20A. Basic Economics I. 4 Units.
The fundamentals of microeconomics. The behavior of firms and consumers: markets, supply/demand, utility maximization, resource allocation, and efficiency. Course may be offered online.
Overlaps with ECON 23.

ECON 20B. Basic Economics II. 4 Units.
The fundamentals of macroeconomics. Government behavior: monetary and fiscal policy, inflation, and unemployment. Effective fall 2006, the content of Economics 20B is macroeconomics. This course cannot be taken to repeat Economics 20B taken prior to fall 2006. Course may be offered online.
Prerequisite: ECON 20A or ECON 13.

ECON 23. Basic Economics for Engineers. 4 Units.
The fundamentals of microeconomics. The behavior of firms and consumers: markets, supply/demand, utility maximization, resource allocation, and efficiency.
Overlaps with ECON 20A.

ECON 25. The Economics of Accounting Decisions. 4 Units.
Introduction to accounting concepts and principles, including the accounting model and accounting style, transaction analysis, and preparation of financial statements. An analysis of the similarities and differences between accounting and economic concepts (e.g., value, profits).
Prerequisite: ECON 20A.
Overlaps with MGMT 30A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 26A. Managerial Accounting. 4 Units.
An introduction to the fundamentals of management accounting, including the study of terms and concepts, comparisons of different costing systems, analysis of cost-volume profit relationships, preparation of information for planning, control, and evaluation of performance, and decision analysis.
Prerequisite: MATH 2A and MATH 2B and MATH 4.
Overlaps with MGMT 30B.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 100A. Intermediate Economics I. 4 Units.
Determinants of supply and demand; operation of competitive and monopolistic markets; imperfections of the market system, explanations of unemployment, inflation, recessions; public policy for macroeconomic problems.
Prerequisite: ECON 20A and ECON 20B and MATH 2A and MATH 2B.
Overlaps with ECON 105A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 100B. Intermediate Economic II. 4 Units.
Determinants of supply and demand; operation of competitive and monopolistic markets; imperfections of the market system, explanations of unemployment, inflation, recessions; public policy for macroeconomic problems.
Prerequisite: ECON 100A.
Overlaps with ECON 105B.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.
ECON 100C. Intermediate Economic III. 4 Units.
Determinants of supply and demand; operation of competitive and monopolistic markets; imperfections of the market system, explanations of unemployment, inflation, recessions; public policy for macroeconomic problems.

Prerequisite: ECON 100B.

Overlaps with ECON 105C.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 105A. Intermediate Quantitative Economics I . 4 Units.
An advanced and mathematical version of ECON 100A for students in the Quantitative Economics major.

Prerequisite: ECON 20A and ECON 20B and MATH 2A and MATH 2B and MATH 3A and MATH 4.

Overlaps with ECON 100A.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 105B. Intermediate Quantitative Economics II . 4 Units.
An advanced and mathematical version of ECON 100B for students in the Quantitative Economics major.

Prerequisite: ECON 105A.

Overlaps with ECON 100B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 105C. Intermediate Quantitative Economics III . 4 Units.
An advanced and mathematical version of ECON 100C for students in the Quantitative Economics major.

Prerequisite: ECON 105B.

Overlaps with ECON 100C.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 107. Economics of Asymmetric Information. 4 Units.
Focuses on the effects of asymmetric information in the markets for traditional economic goods and resources, such as labor, insurance, used cars, credit, and in auctions and bargaining problems. Prerequisite:.

Prerequisite: ECON 100A or ECON 105A.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 109. Special Topics in Economic Theory. 4 Units.
Studies in selected areas of Economics. Topics addressed vary each quarter.

Prerequisite: Prerequisites vary.

Repeatability: May be repeated for credit unlimited times.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 115. Behavioral Economics. 4 Units.
Studies the behavioral and psychological biases in economics settings. Both individual decisions and games are discussed.

Prerequisite: ECON 20A and ECON 20B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 116A. Game Theory I. 4 Units.
Extensive form games with perfect information, and coalitional games. The key solution concepts are Nash Equilibrium, Backward Induction, and the Core. Substantive examples include public good production, oligopoly, electoral competition, auctions, holdup, market entry, and voting.

Prerequisite: ECON 15A and ECON 15B and (ECON 100A or ECON 105A).

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.
ECON 116B. Game Theory II. 4 Units.
Two-quarter sequence on game theory. Bayesian games, extensive form games with imperfect information, zero-sum games.

Prerequisite: ECON 116A.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 117. Experimental Economics . 4 Units.
Students will learn what constitutes proper experimental design and what laboratory experiments teach us about human behavior and the economy. Students will participate in a sample experiment, evaluate the results, and discuss experiment design and larger issues.

Prerequisite: ECON 15B and ECON 100B.

ECON 122A. Applied Econometrics I. 4 Units.
Introduction to econometrics emphasizing practical applications in microeconomics and macroeconomics.

Prerequisite: ECON 15A and (ECON 15B or MATH 130B or MATH 133A or MATH 131C or STATS 120C) and ECON 20B.

Overlaps with ECON 123A, ECON 123B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 122B. Applied Econometrics II. 4 Units.
Introduction to econometrics emphasizing practical applications in microeconomics and macroeconomics.

Prerequisite: ECON 122A.

Overlaps with ECON 123B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 122CW. Data Analysis Writing. 4 Units.
Research writing course in econometrics focusing on individual research projects. Students employ econometric analysis to address an economic question in a 20-page paper and present their findings to the class in a short presentation.

Prerequisite: ECON 15A and ECON 15B and ECON 122A and ECON 122B. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

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ECON 123A. Econometrics I. 4 Units.
Specification, estimation, and testing of econometric models. Applications in various areas of microeconomics and macroeconomics.

Prerequisite: (MATH 2A and MATH 2B and MATH 4) or (MATH 3A and STATS 120A and STATS 120B and (STATS 120C or MATH 131C)) and ((ECON 100A and ECON 100B and ECON 100C) or (ECON 105A and ECON 105B and ECON 105C)).

Overlaps with ECON 122A, ECON 122B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 123B. Econometrics II. 4 Units.
Specification, estimation, and testing of econometric models. Applications in various areas of microeconomics and macroeconomics.

Prerequisite: ECON 123A

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 123C. Econometrics III. 4 Units.
Seminar course in which students do an original econometric research project.

Prerequisite: ECON 123B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.
ECON 123CW. Econometrics III. 4 Units.
Seminar course in which students do an original econometric research project.

Prerequisite: ECON 123B. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 124. Advances in Econometrics I. 4 Units.
Aims to supplement the training in econometrics for students who have completed either Economics 122A-B or 123A-B-C by covering chapters in the two texts used in these sequences which were not covered.

Prerequisite: (ECON 122A and ECON 122B) or (ECON 123A and ECON 123B).

ECON 125. Business Forecasting. 4 Units.
Students learn how to produce forecasts of the behavior of economic (and other) variables. The techniques examined are linear regression, nonlinear regression, and nonparametric kernel regression, AR, MA, ARMA, ARIMA, and Box-Jenkins.

Prerequisite: ECON 15A and ECON 15B and ECON 20A and ECON 20B.

Overlaps with MGMT 180.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 129. Special Topics in Quantitative Methods. 4 Units.
Studies in selected areas of Quantitative Methods. Topics addressed vary each quarter.

Repeatability: Unlimited as topics vary.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 131A. The Economics of Risk and Uncertainty. 4 Units.
The theory of insurance and joint-ownership of risky enterprises; optimal procedures for the allocation of uncertain payoffs.

Prerequisite: ECON 15A and ECON 15B and ((ECON 100A and ECON 100B) or (ECON 105A and ECON 105B) or (MATH 131A and MATH 131B and STATS 120A and STATS 120B and STATS 120C) or (MATH 130B or MATH 133A or MATH 131C)).

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 132A. Introduction to Financial Investments. 4 Units.
Modern theories of investment and their application to the study of financial markets. The relation between risk and return, diversification, asset pricing, efficient markets hypothesis, and the market valuation of stocks, bonds, options, and futures.

Prerequisite: (ECON 15A and ECON 15B and ECON 122A and ECON 100A and ECON 100B and ECON 100C) or (ECON 105A and ECON 105B and ECON 105C) or (MATH 131A and MATH 131B and STATS 120A and STATS 120B and STATS 120C) or (MATH 130B or MATH 133A or MATH 131C).

Prerequisite or corequisite: ECON 100C or ECON 105C.

Overlaps with MGMT 141.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 134A. Corporate Finance. 4 Units.
Provides an overview of the modern theory and practice of corporate finance and focuses on two fundamental financial decisions; investment as well as financing. Beginning with discounted cash flow analysis, basic theory will be applied to the valuation of stocks.

Prerequisite: ((ECON 100A and ECON 100B and ECON 100C) or (ECON 105A and ECON 105B and ECON 105C)) and MATH 131A and MATH 131B and STATS 120A and STATS 120B and STATS 120C.

Overlaps with MGMT 109.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.
ECON 135. Mathematics of Finance. 4 Units.
After reviewing tools from probability, statistics, and elementary differential and partial differential equations, concepts such as hedging, arbitrage, Puts, Calls, the design of portfolios, the derivation and solution of the Black-Scholes, and other equations are discussed.
Prerequisite: MATH 3A.
Same as MATH 176.
Restriction: Mathematics, Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 139. Special Topics in Financial Economics. 4 Units.
Studies in selected areas of Financial Economics. Topics addressed vary each quarter.
Prerequisite: Prerequisites vary.
Repeatability: Unlimited as topics vary.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 140. Managerial Economics. 4 Units.
A collection of concepts and methods for effective decision making. Explores how the tools of microeconomics, including game theory and industrial organization theory, can be used to make better managerial decisions, particularly those involving allocation of resources within firms.
Prerequisite: ECON 100A and ECON 100B.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 141B. Public Economics II. 4 Units.
Theory of public goods, externalities, voting models, analysis of bureaucracy, the Tiebout model, income redistribution, intergovernmental grants.
Prerequisite: (ECON 100A and ECON 100B) or ECON 105A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 142A. Industrial Organization I. 4 Units.
The theory of market structure. Imperfect markets, government policies and industry performance.
Prerequisite: (ECON 15A and ECON 15B and ECON 100A and ECON 100B) or (ECON 105A and ECON 105B).
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 142B. Industrial Organization II. 4 Units.
Regulation and antitrust theory and performance in industries.
Prerequisite: (ECON 15A and ECON 15B and ECON 100A and ECON 100B) or (ECON 105A and ECON 105B).
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 142CW. Industrial Organization III. 4 Units.
Research in industrial organization. Satisfies the honors research requirement.
Prerequisite: ECON 15A and ECON 15B and ECON 122A. Satisfactory completion of the Lower-Division Writing requirement.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 143. Energy Economics. 4 Units.
The economics of markets for oil, natural gas, electricity, renewable energy and their interactions with each other and the rest of the economy. Effects of government intervention, policy measures, economic policy issues arising between energy use and the environment.
Prerequisite: (ECON 100A and ECON 100B and ECON 100C) or ECON 105A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.
ECON 144A. Urban Economics I. 4 Units.
Why cities exist, economics of urban land-use, housing demand and tenure choice, traffic congestion.
Prerequisite: ECON 20A and ECON 20B and ECON 15A and ECON 15B. Recommended: ECON 100A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 144B. Urban Economics II. 4 Units.
Housing policy analysis, urban public goods and services, crime, pollution, urban amenities.
Prerequisite: ECON 20A and ECON 20B. Recommended: ECON 100A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 144CW. Urban Economics III. 4 Units.
Allows students to apply knowledge of urban economics in the conduct of individual research.
Prerequisite: ECON 20A and ECON 20B. Recommended: ECON 100A. Satisfactory completion of the Lower-Division Writing requirement.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 145. Health Economics. 4 Units.
Considers why some people are healthier than others, why health outcomes differ across countries, the problems of moral hazard and of adverse selection that appear in health insurance, and how hospitals and physicians behave.
Prerequisite: ECON 100A.

ECON 145E. Economics of the Environment. 4 Units.
Surveys economic aspects of natural resources, pollution, population, and the environment. Examines the causes of pollution; analysis of public policies regarding these problems. Emphasis on microeconomic aspects of environmental problems.
Prerequisite: ECON 15A and ECON 15B and ECON 122A and ((ECON 100A and ECON 100B) or ECON 105A).
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 145FW. Economics of the Environment II. 4 Units.
Applications of the tools covered in ECON 145E to such topics as global warming, destruction of the ozone layer, and emissions trading. Emphasis on independent research papers. Syllabus and classes include writing technique.
Prerequisite: ECON 145E and ECON 15A and ECON 15B. Satisfactory completion of the Lower-Division Writing requirement.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 145L. Economics of Law. 4 Units.
Examination of several economic concepts which are useful in understanding legal rules: externalities, the assignment of property rights, and Coase's theorem. Examples are drawn from the fields of pollution control, no-fault insurance, medical malpractice, and product liability.
Prerequisite: (ECON 100A and ECON 100B) or ECON 105A. Prerequisite or corequisite: ECON 100B.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 147A. Corporate Governance. 4 Units.
Studies topics in the internal organization of firms, including rent seeking, incentive contracts, principal-agent problems, internal labor markets, contests, and herd behavior.
Prerequisite: ECON 100A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.
ECON 147B. Economics of Strategy. 4 Units.
Uses of tools of economics, game theory in particular, to develop an understanding of business decision making. Deals with questions such as how the firm decides what kind of business to be in, how large should it be, and others.
Prerequisite: (ECON 100A and ECON 100B and ECON 100C) or ECON 105A.
Overlaps with MGMT 110, MGMT 168.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 148. Business Decisions. 4 Units.
Surveys normative and descriptive models of decision-making behavior, with an emphasis on organizational and policy contexts. Topics include rational choice theory, biases and heuristics, framing effects, and overconfidence. Management fads, panics, and herd behavior are also discussed.
Prerequisite: (ANTHRO 10A and ANTHRO 10B and ANTHRO 10C) or (SOCIOL 10A and SOCIOL 10B and SOCIOL 10C) or (SOC SCI 10A and SOC SCI 10B and SOC SCI 10C) or (MATH 2A and MATH 2B and (STATS 7 or MGMT 7)).
Same as SOCIOL 138.
Restriction: Sociology majors have first consideration for enrollment.

ECON 149. Special Topics in Economics of Public and Private Organizations. 4 Units.
Studies in selected areas of Economics of Public and Private Organizations. Topics addressed vary each quarter.

ECON 149W. Special Topics in Economics of Public and Private Organizations. 4 Units.
Studies in selected areas of Economics of Public and Private Organizations. Topics addressed vary each quarter.
Prerequisite: Satisfactory completion of the Lower-Division Writing requirement.
Repeatability: Unlimited as topics vary.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 151A. Labor Economics and Human Resources I. 4 Units.
Labor demand, labor supply, human capital, personnel economics, and other topics.
Prerequisite: ECON 15A and ECON 15B and ECON 100A and ECON 100B.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 151B. Labor Economics and Human Resources II. 4 Units.
Labor market discrimination, compensating wage differentials, immigration, and other topics.
Prerequisite: ECON 151A.
Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 152A. Economic Anthropology. 4 Units.
Economic systems in comparative perspective: production, distribution, and consumption in market and non-market societies; agricultural development in the third world.
Prerequisite: One course in general science, anthropology, economics, geography, or sociology.
Same as ANTHRO 125A.
Restriction: Economics, Quantitative Economics, Business Economics, and Anthropology majors have first consideration for enrollment.
ECON 153W. Political Institutions, Legal Systems, and Economic Development. 4 Units.
Studies a variety of empirical papers analyzing how institutions affect economic development. The topics include cross-country studies of institutions as well as narrower topics such as corruption, regulation of entry, political connections, and pork barrel politics.

Prerequisite: ECON 15A and ECON 15B and ECON 100A and ECON 100B and ECON 100C and ECON 122A. Satisfactory completion of the lower-division writing requirement.

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ECON 154. Voting and Political Manipulation. 4 Units.
Introduction to social choice and cooperative games. Topics include majority rule, types of voting methods, apportionment and proportional representation, agenda manipulation, coalition formation, voting power, political consequences of electoral laws.

Same as INTL ST 156A, SOC SCI 121T, POL SCI 151H.

Restriction: International Studies, Political Science, Social Science and Economics majors have first consideration for enrollment.

ECON 157. Economic Development. 4 Units.
Considers the process of economic development across the globe and why some countries are rich and others poor. Discusses the major problems facing developing countries, such as population growth, education, capital formation, environmental protection, and international trade.

Prerequisite: ECON 20A and ECON 20B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 158. Economics of Education. 4 Units.
Arms students with tools, concepts, and evidence that can be used to analyze complex policy questions in education, enabling students to arrive at their own reasoned judgments about how to improve education.

Prerequisite: ECON 15A and ECON 100A.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 158W. Economics of Education. 4 Units.
Arms students with tools, concepts, and evidence that can be used to analyze complex policy questions in education, enabling students to arrive at their own reasoned judgments about how to improve education.

Prerequisite: ECON 15A and ECON 100A. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

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ECON 159. Special Topics in Economics in Human Resources. 4 Units.
Studies in selected areas of Economics in Human Resources. Topics addressed vary each quarter.

Repeatability: Unlimited as topics vary.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 161A. Money and Banking. 4 Units.
Basic elements of money and banking: institutional features and economics of financial markets and, in particular, the U.S. banking system; determinants of interest rates; the Federal Reserve and its role in money supply; effects of money on output and inflation.

Prerequisite: (ECON 100A and ECON 100B) or (ECON 105A and ECON 105B). Prerequisite or corequisite: ECON 100C OR ECON 105C.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 161B. International Money. 4 Units.
Open economy macroeconomics and determination of exchange rates. Asset-market approach to the balance of payments. Internal and external balance in the economy. Macroeconomic policies under fixed and floating exchange rates. The international monetary system and institutions.

Prerequisite: ECON 100A and ECON 100B. Prerequisite or corequisite: ECON 100C.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.
ECON 161D. Advanced Money and Banking. 4 Units.
Studies business cycles in the United States during the last century. The first portion of the course reviews the theoretical models employed to study economic fluctuations and empirical methods used to measure fluctuations.

Prerequisite: ECON 15A and ECON 15B and ((ECON 100A and ECON 100B and ECON 100C) OR (ECON 105A and ECON 105B and ECON 105C)).

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 162. Poverty, Growth, and Development. 4 Units.
Examines India as a case study for each of the topics studied: growth experience of India along with its poverty eradication record and aspects of poverty and the policies that have been undertaken to tackle poverty.

Prerequisite: ECON 15A and ECON 15B and ECON 100A and ECON 100B and ECON 100C.

ECON 164. American Economic History from Colonization to the Present. 4 Units.
Examines how the American economy evolved from colonization to the post-war era. Topics include relations with foreign countries, the emergence of manufacturing and big business, railroads, slavery, war, the Great Depression, the rise of fiscal and monetary policies.

Prerequisite: ECON 20A and ECON 20B.

ECON 164A. The Industrial Revolution in Western Europe. 4 Units.
How do economists explain the process of economic development during the past three centuries? How has the process of industrialization affected living standards? In focusing on these questions, students will learn how to apply economic theory and quantitative methods.

Prerequisite: ((ECON 100A and ECON 100B and ECON 100C) or (ECON 105A and ECON 105B and ECON 105C)) and ECON 122A and ECON 122B.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 164AW. The Industrial Revolution in Western Europe. 4 Units.
How do economists explain the process of economic development during the past three centuries? Has the process of industrialization affected living standards? Focusing on these questions, students will learn how to apply economic theory and quantitative methods.

Corequisite: ECON 100C.
Prerequisite: ECON 100C or ECON 105C. Prerequisite or corequisite: ECON 100C. Satisfactory completion of the Lower-Division Writing requirement.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

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ECON 165. Economics of International Business . 4 Units.
Students learn to understand and analyze the principal economic issues in the international business arena. Covers topics such as trade theory, foreign direct investment, foreign exchange market, and strategy of international business.

Prerequisite: ECON 100C.

ECON 167. International Trade and Commercial Policy. 4 Units.
Determination of trade flows and the relative prices. Gains from trade, the terms of trade, and income distribution. Imperfect competition and international trade. The effect of tariffs, export subsidies, and import quotas. The effects of free and restricted trade.

Prerequisite: ECON 100A or ECON 105A.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 169. Special Topics in Development Economics. 4 Units.
Studies in selected areas of Development Economics. Topics addressed vary each quarter.

Prerequisite: Prerequisites vary.

Repeatability: Unlimited as topics vary.

Restriction: Economics, Quantitative Economics, and Business Economics majors have first consideration for enrollment.

ECON 190. Senior Thesis. 4 Units.
Students work with faculty to complete their honors thesis.

Repeatability: May be taken for credit 3 times.
ECON 190BW. Economics Honors Colloquium II. 4 Units.
Colloquium required for honors students in Economics, Quantitative Economics, and Business Economics. Introduces students to independent research. Helps students plan a research program. Students complete their thesis.
Prerequisite: Satisfactory completion of the Lower-Division Writing requirement. Must be enrolled in the honors program in Economics.

ECON H190A. Economics Honors Colloquium I. 4 Units.
Colloquium required for honors students in economics, quantitative economics, and business economics. Introduces students to independent research. Helps students plan a research program. Prepares students for thesis writing.
Prerequisite: Satisfactory completion of the Lower-Division Writing requirement. Must be enrolled in the honors program in economics.

ECON 192. Tutoring in Economics. 2 Units.
Enrollment limited to participants in the Economics Peer Tutoring Program. No more than eight units earned in this course may be counted toward the 180 units required for graduation. Satisfies no degree requirement other than contribution to the 180-unit total.
Repeatability: May be taken for credit 4 times.

ECON 197. Field Study. 4 Units.
Not listed in Catalogue.
Repeatability: Unlimited as topics vary.
Restriction: Authorization required or Enrollment by add card only

ECON 198. Directed Group Study. 4 Units.
Not listed in Catalogue.
Repeatability: Unlimited as topics vary.
Restriction: Authorization required or Enrollment by add card only

ECON 199. Independent Study. 1-5 Units.
Independent research with Economics faculty.
Repeatability: May be repeated for credit unlimited times.

ECON 200A. Graduate Colloquium for Economics I. 2 Units.
Weekly reports and colloquia by faculty, students, and visitors. Supplemented by class discussion of these presentations and other material on current research methodology.
Repeatability: May be repeated for credit unlimited times.
Restriction: Economics graduate students only.

ECON 200B. Graduate Colloquium for Economics II. 2 Units.
Weekly reports and colloquia by faculty, students, and visitors. Supplemented by class discussion of these presentations and other material on current research methodology.
Prerequisite: ECON 200A.
Repeatability: May be repeated for credit unlimited times.
Restriction: Economics graduate students only.

ECON 200C. Graduate Colloquium for Economics III. 2 Units.
Weekly reports and colloquia by faculty, students, and visitors. Supplemented by class discussion of these presentations and other material on current research methodology.
Prerequisite: ECON 200B.
Repeatability: May be repeated for credit unlimited times.
Restriction: Economics graduate students only.
ECON 202. Probability and Statistics. 4 Units.
Provides lectures on probability theory and the beginning of mathematical statistics (continued in ECON 220A-ECON 221A) necessary to prepare students for the required econometrics sequence. Topics include probability, distributions, mathematical expectation, sampling, and point estimation.

Restriction: Graduate students only.

ECON 203A. Mathematics for Economists. 4 Units.
Gives students the mathematical background required for graduate work in economics. Topics covered include multivariate calculus, differential equations, and linear algebra.

Restriction: Graduate students only.

ECON 205A. Research Writing in Economics. 4 Units.
For Economics graduate students who are writing their required research paper in an applied field. How to write an original paper in economics. Guidance for specific papers.

Restriction: Economics graduate students only.

ECON 206. How to Write a Paper. 2 Units.
A course on writing. Also discusses how to make an oral presentation, how to go about doing research, and how academic journals operate. Grade based on two written assignments in which student edits and revises a paper.

ECON 210A. Microeconomic Theory I. 4 Units.
Theoretical microeconomics. Emphasis on the meaning and empirical interpretation of theoretical models. Topics include theory of the firm, theory of the market, theory of the consumer, duality theory, application to econometrics, general equilibrium and welfare economics, uncertainty, game theory.

Restriction: Graduate students only.

ECON 210B. Microeconomic Theory II. 4 Units.
Theoretical microeconomics. Emphasis on the meaning and empirical interpretation of theoretical models. Topics include theory of the firm, theory of the market, theory of the consumer, duality theory, application to econometrics, general equilibrium and welfare economics, uncertainty, game theory.

Prerequisite: ECON 210A.

Restriction: Graduate students only.

ECON 210C. Microeconomic Theory III. 4 Units.
Theoretical microeconomics. Emphasis on the meaning and empirical interpretation of theoretical models. Topics include theory of the firm, theory of the market, theory of the consumer, duality theory, application to econometrics, general equilibrium and welfare economics, uncertainty, game theory.

Prerequisite: ECON 210B.

Restriction: Graduate students only.

ECON 210D. Macroeconomic Theory I. 4 Units.
Advanced macroeconomic theory including alternative macroeconomic models, microeconomic foundations of macroeconomics, investment and growth theory, inflation and unemployment, rational expectations and macroeconomic policy, wealth effects, crowding out and fiscal policy, money and interest, open economy models.

Restriction: Graduate students only.

ECON 210E. Macroeconomic Theory II. 4 Units.
Advanced macroeconomic theory including alternative macroeconomic models, microeconomic foundations of macroeconomics, investment and growth theory, inflation and unemployment, rational expectations and macroeconomic policy, wealth effects, crowding out and fiscal policy, money and interest, open economy models.

Corequisite: ECON 211L.
Prerequisite: ECON 210D.

Restriction: Graduate students only.
ECON 210F. Macroeconomic Theory III. 4 Units.
Advanced macroeconomic theory including alternative macroeconomic models, microeconomic foundations of macroeconomics, investment and growth theory, inflation and unemployment, rational expectations and macroeconomic policy, wealth effects, crowding out and fiscal policy, money and interest, open economy models.

Prerequisite: ECON 210E.
Restriction: Graduate students only.

ECON 211L. Macroeconomics Theory II Lab. 2 Units.
Overview of stochastic processes; introduction to dynamic programming; two equilibrium concepts; Ricardian equivalence; real business cycle model; complete versus incomplete markets; asset pricing and the equity premium puzzle.

Corequisite: ECON 210E.
Grading Option: Satisfactory/unsatisfactory only.
Restriction: Graduate students only.

ECON 219. Special Topics in Economic Theory. 2-4 Units.
Studies in selected areas of Economic Theory. Topics addressed vary each quarter.

Prerequisite: Prerequisites vary.
Repeatability: Unlimited as topics vary.

ECON 220A. Statistics & Econometrics I. 4 Units.
Covers probability mathematical statistics necessary to prepare students for econometric study and empirical work. Topics include probability theory, distributions, sampling, and classical point estimation. A likelihood perspective is emphasized.

Restriction: Grad students only or Consent of instructor to enroll

ECON 220B. Statistics & Econometrics II. 4 Units.
Begins with Bayesian point estimation. Then covers interval estimation and hypothesis testing from both classical and Bayesian perspectives, followed by a general discussion of prediction. Finally, all these techniques are applied to the standard linear regression model under ideal conditions, and Generalized Least Squares (GLS) is introduced.

Prerequisite: ECON 220A
Restriction: Prerequisite required and (Grad students only or Consent of instructor to enroll)

ECON 220C. Statistics & Econometrics III. 4 Units.
Begins by relaxing the ideal conditions of the standard regression model. Potential topics include kernel density estimation, instrumental variables (IV), two stage least squares (2SLS), panel data models, and simulation-based Bayesian methods, including Gibbs sampling, the bootstrap, econometric time series, discrete choice and count models, sample selection, and duration models. Covers both Bayesian and classical asymptotic methods.

Prerequisite: ECON 220B and SOC SCI 213A
Restriction: Prerequisite required and Grad students only

ECON 221A. Statistics and Econometrics Laboratory I. 2 Units.
Discussion of problems in statistics and econometrics, and their relationships to statistical and econometrics theory. Instruction in the use of computers for applied econometric work.

Corequisite: ECON 220A.

ECON 221B. Statistics and Econometrics Laboratory II. 2 Units.
Discussion of problems in statistics and econometrics, and their relationships to statistical and econometrics theory. Instruction in the use of computers for applied econometric work.

Corequisite: ECON 220B.

ECON 221C. Statistics and Econometrics Laboratory III. 2 Units.
Discussion of problems in statistics and econometrics, and their relationships to statistical and econometrics theory. Instruction in the use of computers for applied econometric work.

Corequisite: ECON 220C.
ECON 222. Replication and Applied Economics Writing. 4 Units.
Before the course begins, students choose a published empirical economics article and obtain the necessary data to replicate it. Students will replicate and extend the economic analysis and write a paper describing their work.
Prerequisite: ECON 220A and ECON 220B and ECON 220C.

ECON 223A. Discrete Choice Econometrics. 4 Units.
Specification, estimation, and testing of discrete choice models, with emphasis on cross-sectional and panel data models and applications. Students use computer packages to apply models and techniques to real data.
Prerequisite: ECON 220A and ECON 220B and ECON 220C.

ECON 224A. Time Series Econometrics. 4 Units.
Econometric analysis of time series data. Moving average and autoregressive series, regression analysis, Box-Jenkins techniques, computational methods, and causality conditions.
Prerequisite: ECON 220A and ECON 220B and ECON 220C.

ECON 229. Special Topics in Social Dynamics Seminar. 4 Units.
Studies in selected areas of Social Dynamics. Topics addressed vary each quarter.
Prerequisite: Prerequisites vary.
Repeatability: Unlimited as topics vary.

ECON 231A. Institutions in Historical Perspective I. 4 Units.
Investigates economic and political institutions across the world and throughout history. Focuses on institutions such as property rights, political regimes, regulations, legal systems, corporate organization, and social norms.
Prerequisite: ECON 210A and ECON 210B and ECON 210C and ECON 210D and ECON 210E and ECON 210F.

ECON 231B. Institutions in Historical Perspective II. 4 Units.
Investigates economic and political institutions across the world and throughout history. Focuses on institutions such as property rights, political regimes, regulations, legal systems, corporate organization, and social norms.
Prerequisite: ECON 210A and ECON 210B and ECON 210C and ECON 210D and ECON 210E and ECON 210F.

ECON 232. Business Cycles in Historical Perspective. 4 Units.
Investigates business cycles in the United States and worldwide during the last two centuries. Topics include causes and consequences of business fluctuations, monetary and fiscal policy, models of fluctuations, and empirical macroeconomics.
Prerequisite: ECON 210A and ECON 210B and ECON 210C and ECON 210D and ECON 210E and ECON 210F.

ECON 233. European Economic History. 4 Units.
Prerequisite: ECON 210A and ECON 210B and ECON 210C and ECON 210D and ECON 210E and ECON 210F.

ECON 234. American Economic History. 4 Units.
Focuses on American economic history from colonization onwards. Topics include the development of legal systems, transport systems, financial markets, industrialization, migration, immigration, technological change, and the consequences of slavery.
Prerequisite: ECON 210A and ECON 210B and ECON 210C and ECON 210D and ECON 210E and ECON 210F.

ECON 239. Special Topics in Financial Economics. 2-4 Units.
Studies in selected areas of Financial Economics. Topics addressed vary each quarter.
Prerequisite: Prerequisites vary.
Repeatability: Unlimited as topics vary.
ECON 241A. Industrial Organization I. 4 Units.
Prerequisite: ECON 100B and ECON 203A.
Restriction: Graduate students only.

ECON 241B. Industrial Organization II. 4 Units.
Prerequisite: ECON 241A and ECON 100B and ECON 203A.
Restriction: Graduate students only.

ECON 241C. Industrial Organization III. 4 Units.
Continuation of the graduate Industrial Organization (IO) sequence. Students are expected to have started a field paper in IO during the earlier quarters, and will finish a completed draft of it during this quarter.
Prerequisite: ECON 241B and ECON 100B and ECON 203A.
Restriction: Graduate students only.

ECON 243A. Game Theory. 4 Units.
A formal introduction to non-cooperative game theory. Topics include properties of Nash Equilibrium and equilibrium refinements, games with imperfect information, and games with incomplete information.
Prerequisite: ECON 210A and ECON 210B and ECON 210C.
Restriction: Graduate students only.

ECON 243B. Advanced Game Theory. 4 Units.
Provides advanced instruction in game theory. The topics covered will be (i) the theory of repeated games and (ii) evolutionary game theory. Applications include bargaining, collusion, reputation, social norms, and the evolution of preferences via natural selection and cultural transmission.
Prerequisite: ECON 243A.
Restriction: Graduate students only.

ECON 245. Empirical Methods in Applied Microeconomics. 4 Units.
Focuses on the empirical methods used in modern applied microeconomics. Teaches methods that can be applied to produce original research in applied fields using cross-sectional and panel data. Applications will be drawn heavily from labor, public, health and development economics.

ECON 249. Special Topics in Microeconomics. 2-4 Units.
Studies in selected areas of Microeconomics. Topics addressed vary each quarter.
Prerequisite: Prerequisites vary.
Repeatability: May be repeated for credit unlimited times.

ECON 251A. Labor Economics I. 4 Units.
Analysis of the relationships between education and the labor market (human capital theory), between resources devoted to education and the return to education (the education production function) and between education and labor market inequality (the theory of skill-biased technical change).
Prerequisite: ECON 203A.
Restriction: Graduate students only.

ECON 251B. Labor Economics II. 4 Units.
Analysis of core topics in labor economics, with an emphasis on empirical methods. Topics may include minimum wages, discrimination, gender, aging and retirement, labor market networks, personnel economics, and employment policy.
Prerequisite: ECON 203A.
Restriction: Graduate students only.
ECON 251C. Labor Economics III. 4 Units.
Discussion of treatment effect/program evaluation in labor economics, emphasizing identification. Classical labor topics, including human capital, technology, wages, labor supply, and migration are discussed in the context of causal inference. A unified framework is used in analyzing identification strategies.

Prerequisite: ECON 203A.
Restriction: Graduate students only.

ECON 255. Microeconomics and Public Policy. 4 Units.
Introduces the fundamental principles of microeconomics that are required for applied policy analysis. Provides students with an intuitive understanding of the microeconomic approach, and familiarizes them with concepts used in applied public policy analysis.

Repeatability: May be taken for credit 2 times.
Same as PUB POL 240.
Restriction: Graduate students only.

ECON 259. Special Topics in Labor Economics. 2-4 Units.
Studies in selected areas of Labor Economics. Topics addressed vary each quarter.

Prerequisite: Prerequisites vary.
Repeatability: Unlimited as topics vary.

ECON 260A. Monetary Economics I. 4 Units.
Focuses on the derivation and estimation of state-of-the-art Dynamic Stochastic General Equilibrium (DSGE) models, with particular emphasis on models useful for monetary policy.

ECON 260B. Monetary Economics II. 4 Units.
Surveys recent issues on monetary policy in uncertain environments. Examines settings where both the policy makers and the private sector are uncertain of future outcomes or the underlying economic structure.

ECON 261A. International Trade I. 4 Units.
Covers theoretical models, empirical methods, and policy issues in international trade. Following the conventional treatment of the Richardian model, the Heckscher-Ohlin model and the specific factors model, new trade models which incorporate scale economics and imperfect competition will be discussed.

Prerequisite: ECON 210A and ECON 210B.

ECON 261B. International Trade II. 4 Units.
Covers theoretical models, empirical methods, and policy issues in international trade. Following the conventional treatment of the Richardian model, the Heckscher-Ohlin model and the specific factors model, new trade models which incorporate scale economics and imperfect competition will be discussed.

Prerequisite: ECON 261A and ECON 210A and ECON 210B.

ECON 263A. Advanced Macroeconomics I. 4 Units.
Students build Dynamic Stochastic General Equilibrium (DSGE) macroeconomic models from microeconomic foundations. This approach emphasizes intertemporal optimization by firms and households and typically incorporates nominal rigidities such as sluggish price and/or wage adjustment.

ECON 263B. Advanced Macroeconomics II. 4 Units.
Extensively studies policy in dynamic models. Topics: rule versus discretionary-based policy and its implications for macroeconomic stability and multiple equilibria; the design of optimal monetary policy; economic policy with model uncertainty and when the economic model is unknown.

Prerequisite: ECON 263A.

ECON 269. Special Topics in Macroeconomics. 2-4 Units.
Studies in selected areas of Macroeconomics. Topics addressed vary each quarter.

Prerequisite: Prerequisites vary.
Repeatability: Unlimited as topics vary.
ECON 270A. Political Economy I. 4 Units.
Political Economy lies at the intersection of economics and political science. Course studies effects of politics on the economy and uses tools derived from economics to understand the behavior of governments and of citizens when they deal with politics.

Same as POL SCI 270A.
Restriction: Graduate students only.

ECON 270B. Political Economy II. 4 Units.
Political Economy lies at the intersection of economics and political science. Course studies effects of politics on the economy and uses tools derived from economics to understand the behavior of governments and of citizens when they deal with politics.

Prerequisite: POL SCI 270A.
Same as POL SCI 270B.
Restriction: Graduate students only.

ECON 270C. Political Economy III. 4 Units.
Political Economy lies at the intersection of economics and political science. Course studies effects of politics on the economy and uses tools derived from economics to understand the behavior of governments and of citizens when they deal with politics.

Prerequisite: POL SCI 270B.
Same as POL SCI 270C.
Restriction: Graduate students only.

ECON 272A. Public Economics I. 4 Units.
Covers welfare economics and the theory of optimal taxation. Also presents applications of the theory, including measurement of the distortionary cost of taxation and principles of environmental policy (instrument choice and the debate on the double dividend of environmental taxation).

Prerequisite: ECON 210A and ECON 210B and ECON 210C.

ECON 272B. Public Economics II. 4 Units.
Covers the theory of public goods and models of decentralized provision of such goods, including voluntary provision, voting, bureaucratic provision, and preference revelation mechanisms.

Prerequisite: ECON 210A and ECON 210B and ECON 210C.

ECON 272C. Public Economics III. 4 Units.
Covers two broad categories of government expenditure policies, redistribution programs and social insurance, from a theoretical and empirical perspective as well as the effects on individuals of the income tax system.

Prerequisite: ECON 210A and ECON 210B and ECON 210C.

ECON 279. Special Topics in Political Economy. 2-4 Units.
Studies in selected areas of Political Economy. Topics addressed vary each quarter.

Prerequisite: Prerequisites vary.
Repeatability: Unlimited as topics vary.

ECON 281A. Urban Economics I. 4 Units.
Economic reasons for the existence of cities, analysis of urban spatial structure, urban sprawl, Third World urbanization, hedonic price analysis, housing tenure choice.

Prerequisite: ECON 210A.

ECON 281B. Urban Economics II. 4 Units.
Housing in the portfolio, land-use controls, rent control, homelessness, neighborhood effects, urban quality-of-life measurement, and subcenters.

Prerequisite: ECON 210A.
ECON 282A. Transportation Economics I. 4 Units.
Applies microeconomic concepts of demand, costs, pricing, investment, and project evaluation to analyze transportation activities. Empirical studies include travel demand using discrete models, and cost functions.

Restriction: Graduate students only.

ECON 282B. Transportation Economics II. 4 Units.
Policy analysis in presence of road transport externalities (such as environmental spill-overs), imperfect instruments, and other economic distortions such as imperfectly priced networks and imperfect competition. Connections of transportation economics with environmental economics, public finance, spatial economics and industrial organization.

Prerequisite: ECON 282A.

Restriction: Graduate students only.

ECON 285A. Colloquium for Transportation Science I. 2 Units.
Selected perspectives on transportation based on the study of human behavior. Organized by Interdisciplinary Program in Transportation Science. Research presentations by faculty, students, and visitors supplemented by class discussion.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

ECON 285B. Colloquium for Transportation Science II. 2 Units.
Selected perspectives on transportation based on the study of human behavior. Organized by Interdisciplinary Program in Transportation Science. Research presentations by faculty, students, and visitors supplemented by class discussion.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

ECON 285C. Colloquium for Transportation Science III. 2 Units.
Selected perspectives on transportation based on the study of human behavior. Organized by Interdisciplinary Program in Transportation Science. Research presentations by faculty, students, and visitors supplemented by class discussion.

Grading Option: Satisfactory/unsatisfactory only.

Repeatability: May be repeated for credit unlimited times.

Restriction: Graduate students only.

ECON 289. Special Topics in Urban and Transportation Economics. 2-4 Units.
Studies in selected areas of Urban and Transportation Economics. Topics addressed vary each quarter.

Prerequisite: Prerequisites vary.

Repeatability: May be repeated for credit unlimited times.

ECON 290. Dissertation Research. 2-12 Units.
Dissertation research with Economics faculty.

Repeatability: May be repeated for credit unlimited times.

ECON 299. Independent Study. 2-4 Units.
Independent research with Economics faculty.

Repeatability: May be repeated for credit unlimited times.