ECONOMICS (ECON)

Courses

ECON 1078 (3) Mathematical Tools for Economists 1
Teaches mathematical skills and logical thinking for use in economics. Topics include algebra, graphs, functions, and probability. Includes many "real world" examples and some illustrative computer assignments.
Additional Information: Arts Sci Core Curr: Quant Reasn Mathemat Skills
Arts Sci Gen Ed: Quantitative Reasoning Math
Departmental Category: Quantitative Economics

ECON 1088 (3) Mathematical Tools for Economists 2
Continuation of ECON 1078. Teaches mathematical skills for use in economics. Topics include derivatives, optimization and integration. These skills are used on "real world" problems and illustrated with computer assignments. For more information about the math placement referred to in the "Enrollment Requirements", contact your academic advisor.
Equivalent - Duplicate Degree Credit Not Granted: APPM 1345 or APPM 1350 or MATH 1081 or MATH 1300 or MATH 1310 or MATH 1330
Requisites: Requires prerequisite course of ECON 1078 or MATH 1011 or MATH 1071 or MATH 1150 or MATH 1160 (minimum grade C-) or an ALEKS math exam taken in 2016 or earlier, or placement into pre-calculus based on your admission data and/or CU Boulder coursework.
Additional Information: Arts Sci Core Curr: Quant Reasn Mathemat Skills
Arts Sci Gen Ed: Quantitative Reasoning Math
Departmental Category: Quantitative Economics

ECON 2010 (4) Principles of Microeconomics
Examines basic concepts of microeconomics or the behavior and the interactions of individuals, firms and government. Topics include determining economic problems, how consumers and businesses make decisions, how markets work, and how they fail and how government actions affect markets.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Theory and History of Economic Thought
MAPS Course: Social Science

ECON 2020 (4) Principles of Macroeconomics
Provides an overview of the economy, examining the flows of resources and outputs and the factors determining the levels of income and prices. Explores policy problems of inflation, unemployment and economic growth.
Requisites: Requires prerequisite course of ECON 2010 (minimum grade C-).
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Theory and History of Economic Thought
MAPS Course: Social Science

ECON 3070 (4) Intermediate Microeconomic Theory
Explores theory and application of models of consumer choice, firm and market organization, and general equilibrium. Extensions include intertemporal decisions, decisions under uncertainty, externalities, and strategic interaction.
Requisites: Requires prerequisite courses of ECON 2010 and ECON 1088 or MATH 1081 or MATH 1300 or MATH 1310 or MATH 1330 or APPM 1350 or FNCE 2010 (all min grade C-) or APPM 1350 or FNCE 2010 (all min grade C-) and market organization, and general equilibrium. Extensions include intertemporal decisions, decisions under uncertainty, externalities, and strategic interaction.
Requisites: Requires prerequisite course of ECON 2010 and ECON 1088
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Theory and History of Economic Thought

ECON 3080 (3) Intermediate Macroeconomic Theory
Introduces theories of aggregate economic activity including the determination of income, employment, and prices; economic growth; and fluctuations. Macroeconomic policies are explored in both closed and open economy models. ECON 3070 ECON and 3080 may be taken in any order; there is no recommended sequence.
Requisites: Requires prerequisite course of ECON 2020 and (ECON 1088 or APPM 1350 or FNCE 2010 or MATH 1081 or MATH 1300 or MATH 1310) (all min grade C-) and market organization, and general equilibrium. Extensions include intertemporal decisions, decisions under uncertainty, externalities, and strategic interaction.
Requisites: Requires prerequisite courses of ECON 2010 and ECON 2020 (all minimum grade C-).
ECON minors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: International Trade and Finance

ECON 3535 (3) Natural Resource Economics
Integrates economic analysis with life science aspects of natural resource systems to develop social policies for use of natural resources. Studies economists' approaches to resources policy analysis and applies them to energy, forestry, fisheries, mineral and water systems. Credit given in this course is not included in the calculation of an economics major GPA.
Equivalent - Duplicate Degree Credit Not Granted: ECON 4535
Requisites: Requires prerequisite course of ECON 2010 (minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics

ECON 3545 (3) Environmental Economics
Examines policy problems of inflation, unemployment and economic growth. Credit given in this course is not included in the calculation of an economics major GPA.
Equivalent - Duplicate Degree Credit Not Granted: ECON 4545
Requisites: Requires prerequisite course of ECON 2010 (minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics

ECON 4423 (3) International Economic Theory and Policy
Examines national and supranational policies that affect the international economy, with attention to trade barriers, economic nationalism and regionalism, international political economy, exchange market intervention, and international transmission of economic perturbations. Credit given in this course is not included in the calculation of an economics major GPA.
Equivalent - Duplicate Degree Credit Not Granted: ECON 4423
Requisites: Requires prerequisite courses of ECON 2010 and ECON 2020 (all minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: International Trade and Finance

ECON 4535 (3) Environmental Economics
Integrates economic analysis with life science aspects of natural resource systems to develop social policies for use of natural resources. Studies economists' approaches to resources policy analysis and applies them to energy, forestry, fisheries, mineral and water systems. Credit given in this course is not included in the calculation of an economics major GPA.
Equivalent - Duplicate Degree Credit Not Granted: ECON 4535
Requisites: Requires prerequisite course of ECON 2010 (minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics

ECON 4545 (3) Environmental Economics
Examines policy problems of inflation, unemployment and economic growth. Credit given in this course is not included in the calculation of an economics major GPA.
Equivalent - Duplicate Degree Credit Not Granted: ECON 4545
Requisites: Requires prerequisite course of ECON 2010 (minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics

ECON 4545 (3) Environmental Economics
Examines national and supranational policies that affect the international economy, with attention to trade barriers, economic nationalism and regionalism, international political economy, exchange market intervention, and international transmission of economic perturbations. Credit given in this course is not included in the calculation of an economics major GPA.
Equivalent - Duplicate Degree Credit Not Granted: ECON 4545
Requisites: Requires prerequisite course of ECON 2010 (minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics

ECON 4545 (3) Environmental Economics
Examines policy problems of inflation, unemployment and economic growth. Credit given in this course is not included in the calculation of an economics major GPA.
Equivalent - Duplicate Degree Credit Not Granted: ECON 4545
Requisites: Requires prerequisite course of ECON 2010 (minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Core Curr: Contemporary Societies
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics

ECON 4545 (3) Environmental Economics
Examines national and supranational policies that affect the international economy, with attention to trade barriers, economic nationalism and regionalism, international political economy, exchange market intervention, and international transmission of economic perturbations. Credit given in this course is not included in the calculation of an economics major GPA.
ECON 3616 (3) Employment, Wages and the Future of Work
Examines how automation, globalization and information technology are changing which jobs get done, by whom and how much they pay. Illustrates how basic labor supply and demand theory helps predict the impact of technological progress on occupational composition, income inequality and the nature of work itself. These theoretical tools also guide our search for appropriate public policy responses. Credit given in this course is not included in the calculation of an economics major GPA.
Requisites: Requires a prerequisite course of ECON 2010 (minimum grade C-). Economic (ECON) majors are excluded from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Labor and Human Resources

ECON 3784 (3) Economic Development and Policy
Introductory course in Economic Development, designed for non-majors. Students are introduced to the major issues in development economics. Explores empirical, theoretical and policy issues in economic development. Emphasis is placed on the controversial issues in this literature, requiring students to explore competing, and often conflicting, perspectives of these issues.
Requisites: Requires prerequisite courses of ECON 2010 and ECON 2020 (all minimum grade C-). Economic (ECON) majors are restricted from taking this course. ECON minors are allowed to enrolled.
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Economic Development

ECON 3818 (4) Introduction to Statistics with Computer Applications
Introduces statistical methods and their applications in quantitative economic analysis.
Requisites: Requires prerequisite courses of ECON 2010 and 2020 and either ECON 1088 or MATH 1081 or MATH 1300 or MATH 1310 or MATH 1330 or APPM 1350 or FNCE 1010 (all minimum grade C-). Restricted to students with 22-180 units completed.
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Quantitative Economics

ECON 4050 (3) Market Design
Develops foundations for the modern market design practices. Economists are increasingly involved in studying and designing practical market mechanisms. Includes topics such as designing efficient matching markets (students to schools, doctors to hospitals), designing auction mechanisms (Google, Facebook, government) and designing market platforms (eBay, Amazon).
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Theory and History of Economic Thought

ECON 4060 (3) Choice Theory and Economic Ethics: Good, Bad and Happiness
Critiques how economists model and judge behavior. How we judge is contrasted with other moral philosophies. Economists assume individuals behave in their own best interests. What does this mean and is it true? Looks at research from psychology and neuroscience. Quizzes and a multi-step research paper, designed for students who love to question, research, write and rewrite.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-). Restricted to students with 57-180 credits (Junior or Senior).
Recommended: Prerequisite ECON 3080.
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Theory and History of Economic Thought

ECON 4070 (3) Topics in Microeconomics
Studies utility maximization under uncertainty, risk, game theory, moral hazard, and adverse selection. Applications include insurance markets and the theory of contracts.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Theory and History of Economic Thought

ECON 4111 (3) Money and Banking Systems
Discusses money, financial institutions and the monetary-financial system in a modern economy.
Requisites: Requires prerequisite course of ECON 3080 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Money and Banking

ECON 4211 (3) Public Economics: the Economics of the Government Sector
Focuses on taxation and public expenditures. Topics include economic rationale for government action, economic theory of government behavior, and effects of government policies on allocation of resources and distribution of income.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Public Economics

ECON 4221 (3) Political and Public Choice Economics
Explores decision-making in non-traditional market settings, specifically political market settings, using economic models. We investigate policy outcomes as the product of interactions among individuals in political markets, and analyze how governmental decisions are the result of rational optimizing behavior, even if they do not lead to policies that maximize national welfare.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Public Economics

ECON 4231 (3) Applied Economic Analysis and Public Policy
Applies economic analysis to current issues of public policy. Reviews basic public finance and economic justifications for government action. Examines structure and procedures of Colorado State Legislature. Chooses current legislative issues, reviews relevant economic literature and applies implications through briefing papers and testimony at legislative hearings. Explores the challenges of integrating informed economic analysis into legislative process.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Public Economics
ECON 4242 (3) Urban Economics: The Economics of Cities
Considers the economic forces which drive households and jobs to congregate in metropolitan areas. It then considers the forces within the city which determine how the established cities "look" - how rents vary with location, the distribution of jobs and households within a city, urban sprawl, and the sorting of households between neighborhoods. Finally it considers some government policies relating to land use and housing.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEM 3010 or CSCI 3022 or CSCI 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Urban and Regional Economics

ECON 4292 (3) Migration, Immigrant Adaptation, and Development
Examines historical and current patterns of migration with an emphasis in international movement. Looks at leading migration theories related to both origin- and destination-based explanations while critically looking at the role of development as a potential cause and consequence of population movement. Finally, covers some aspects of immigrants' social and economic adaptation to their host society.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Urban and Regional Economics

ECON 4309 (3) Economics Honors Seminar 1
For information consult the department's director of honors. Open only to qualified seniors.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3080 and ECON 3818 (all minimum grade C-). Restricted to students with 57-180 credits (Juniors or Seniors).
Additional Information: Arts Sciences Honors Course
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Independent Study and Other Courses

ECON 4339 (3) Economics Honors Seminar 2
For information consult the department's director of honors. This course does not count toward major requirements.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3080 and ECON 3818 (all minimum grade C-). Restricted to students with 57-180 credits (Juniors or Seniors).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Independent Study and Other Courses

ECON 4413 (3) Migration, Immigrant Adaptation, and Development
Examines historical and current patterns of migration with an emphasis in international movement. Looks at leading migration theories related to both origin- and destination-based explanations while critically looking at the role of development as a potential cause and consequence of population movement. Finally, covers some aspects of immigrants' social and economic adaptation to their host society.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Independent Study and Other Courses

ECON 4309 (3) Economics Honors Seminar 1
For information consult the department's director of honors. Open only to qualified seniors.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3080 and ECON 3818 (all minimum grade C-). Restricted to students with 57-180 credits (Juniors or Seniors).
Additional Information: Arts Sciences Honors Course
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Independent Study and Other Courses

ECON 4413 (3) International Trade
Focuses on theories of international trade and its impacts on economic welfare. Analyzes commercial policy, including tariffs, non-tariff barriers, retaliation, regional integration, and factor migration.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: International Trade and Finance

ECON 4423 (3) International Finance
Covers balance of payments; foreign exchange market, income, trade, and capital flows; asset markets adjustment mechanisms; stabilization policies in an open economy; and problems of international monetary systems.
Requisites: Requires prerequisite course of ECON 3080 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: International Trade and Finance

ECON 4504 (3) The New Institutional Economics: Institutions, Contracts and Economic Outcomes
Understand the conceptual tool kit of the New Institutional Economics. The concepts include transaction costs, property rights, credible commitment, and most importantly the roles of formal and informal institutions. We will examine the impact of institutions on contracting and organizations. The goal is to understand how the underlying institutions determine the degree to which societies improve their economic performance.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3080, and (ECON 3818 or STAT 4520 or APPM 4570 or CHEM 3010 or CSCI 3022 or CVEN 3227 or MATH 4520) (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Economic History

ECON 4514 (3) Economic History of Europe
Covers evolution of modern economic growth and development in Europe, emphasizing institutional change.
Requisites: Requires prerequisite course of ECON 3070 or ECON 3080 (minimum grade C-).
Additional Information: Arts Sci Core Curr: Historical Context
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Economic History

ECON 4524 (3) Economic History of the United States
Evolution of modern economic growth and development in the U.S. from colonial times to the present emphasizing institutional change.
Requisites: Requires prerequisite courses of ECON 3070 or ECON 3080 (all minimum grade C-).
Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Economic History

ECON 4534 (3) Chinese Economic History in Comparative Perspective
Surveys the economic history of China in a comparative perspective, to understand the history of economic development in China in terms of existing economic theories of growth. The approximate timeline is from the 18th century to the 20th century.
Requisites: Requires prerequisite courses of ECON 3070 or ECON 3080 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Economic History

ECON 4535 (3) Natural Resource Economics
Analysis of problems associated with socially optimal use of renewable and nonrenewable natural resources over time. Problems of common property resources, irreversible forms of development, and preservation of natural areas.
Equivalent - Duplicate Degree Credit Not Granted: ECON 3535
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics

ECON 4545 (3) Environmental Economics
Examines the effects of economic growth on the environment; application of economic theory of external diseconomies, cost-benefit analysis, program budgeting, and welfare economics to problems of the physical environment.
Equivalent - Duplicate Degree Credit Not Granted: ECON 3545
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Natural Resources and Environmental Economics
ECON 4555 (3) Transportation Economics and Policy
Provides an overview of the characteristics and structure of transportation markets including aggregate demand, vehicle and mode choice, surface freight and air travel. Explores market failures in the transportation sector including market power and externalities such as pollution, congestion and accidents as well as policies aimed at addressing these issues.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3222 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences Departmental Category: Natural Resources and Environmental Economics

ECON 4616 (3) Labor Economics
Examines the influence of markets, unions, and government on labor allocation and remuneration. Analyzes human capital, discrimination, mobility and migration, productivity, unemployment, and inflation. Compares outcomes under competition with those in a world marked by shared market power and bargaining.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences Departmental Category: Labor and Human Resources

ECON 4626 (3) The Economics of Inequality and Discrimination
Examines the unique insights available through economic analysis regarding the causes, mechanisms, and consequences of inequality and discrimination. Examines the extent of inequality, the varieties and extents of discrimination, and explores the economic models that suggest explanations.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C).

ECON 4646 (3) Topics in Health Economics
Growth in health expenditures worldwide over the past three decades has led to an increase in research in health economics and its importance in public policy in developed and developing countries. The purpose of this course is to encourage students to read, think, and do research on issues in health economics. This course will cover issues that are pertinent to the US, other developed and developing countries. It will cover the basics of health economics such as health production functions and the role for government as well as touching on topical issues such as health care reform.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C).
Recommended: Prerequisites ECON 3818 or CSCI 3022.
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences Departmental Category: Labor and Human Resources

ECON 4655 (3) Industrial Organization and Regulation
Explores neoclassical theory of the firm, the determinants of industrial structure, and the purposes and institutions of public policy to control or maintain a competitive environment.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences Departmental Category: Industrial Organization

ECON 4667 (3) Economics of Entrepreneurship
Introduces economic analysis of entrepreneurship, its financing, performance and public policy issues. We will investigate in depth the business of venture capital and start-ups. Aims to understand both academic and practical implications from the burgeoning literature on economics of entrepreneurship and private equity.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 (all minimum grade C).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences Departmental Category: Industrial Organization

ECON 4717 (3) Economics of Entrepreneurship
Introduces economic analysis of entrepreneurship, its financing, performance and public policy issues. We will investigate in depth the business of venture capital and start-ups. Aims to understand both academic and practical implications from the burgeoning literature on economics of entrepreneurship and private equity.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 (all minimum grade C).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences Departmental Category: Industrial Organization

ECON 4747 (3) Topics in Economic Development, History and Political Economy
Sustained economic growth is a relatively recent economic phenomenon that came about due to the Industrial Revolution and as a result of which the standards of living improved dramatically in the Anglo-Saxon West since the 18th century. However, global inequality has also risen to unprecedented levels because other parts of the world still significantly lag the West in economic, social and political terms. In this class, we shall study the comparative development paths of Anglo-Saxon Europe and the Middle East. In doing so, we shall primarily focus on an expansive list of influential and relevant articles published and the four books required for the class.
Requisites: Requires prerequisite course of ECON 3070 or ECON 3080 (minimum grade C).

ECON 4748 (3) Economic Development
Explores empirical, theoretical, and policy issues in economic development. Examines topics with reference to the developing countries: income distribution and poverty, demographic change, labor force employment and migration, human capital, physical capital, natural resources and the environment, industrial structure, international trade, and finance.
Requisites: Requires prerequisite course of ECON 3070 or ECON 3080 (minimum grade C).

ECON 4794 (3) Economic Growth
Introduces theories explaining why differences in standards of living among countries are so large. Examines a variety of data on historical experiences of economic growth. Surveys recent research on why some countries are so rich and some are so poor, and why some countries grow so quickly and others grow so slowly.
Requisites: Requires prerequisite course of ECON 3070 or ECON 3080 (minimum grade C).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences Departmental Category: Economic Development
ECON 4797 (3) Antitrust and Regulation
Explores two major branches of Industrial Organization—antitrust and regulation. Focus is on developing qualitative and quantitative skills for the legal-economic analysis of issues and problems across a variety of industries. Case studies are used to illustrate concepts, including mergers, collusive agreements, monopoly, and networks. Individual and group projects help develop advocacy and public speaking skills.
Requisites: Requires prerequisite course of ECON 3070 (minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Industrial Organization

ECON 4808 (3) Introduction to Mathematical Economics
Introduces the use of mathematics in economics. Topics include vectors and matrices, differential calculus, and optimization theory with economic applications.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Quantitative Economics

ECON 4818 (3) Introduction to Econometrics
Provides an introduction to econometrics and practice. Develops the multiple regression model and problems encountered in its application in lecture and individual applied projects.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Quantitative Economics

ECON 4838 (3) Microcomputer Applications in Economics
Teaches basic concepts in Java programming applied to economic models. Development of Web pages and dynamic modeling will be introduced. Students will gain a foundation that can be applied to creating advanced applications relating to analysis of statistical data and custom projects.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Quantitative Economics

ECON 4848 (3) Applied Econometrics
Introduces students to the practice of applied regression analysis. Summarizes and reviews the regression technique, explores U.S. census data sources, introduces an advanced statistical software package and provides structured exercises in regression analysis of census data. Concludes with independent research projects analyzing social and economic issues using regression analysis and census data.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Quantitative Economics

ECON 4858 (3) Financial Econometrics
Introduces statistical models, estimation and testing procedures used in analyzing financial data for advanced undergraduates. Topics include the modeling of returns, portfolio theory, the capital asset pricing model, options pricing and fixed income securities.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Recommended: Prerequisite ECON 4818.
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Quantitative Economics

ECON 4868 (3) Simulation Modeling in Microeconomics
Computer simulation modeling translates theory into computer code to examine questions numerically; for example, the effects of taxes or emissions permits on welfare and income distribution. We use GAMS (general algebraic modeling system); a version may be downloaded for free. Students must have access to a computer (not needed in the classroom).
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Quantitative Economics

ECON 4897 (3) Economics of Organizations
Introduces students to the economic analysis of relationship between firms and incentives within firms. The first part covers classical theories of firm boundaries and contractual relationship between firms. The second part focuses on compensation and incentive issues within firms.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3818 or STAT 4520 or APPM 4570 or CHEN 3010 or CSCI 3022 or CVEN 3227 or MATH 4520 (all minimum grade C-).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Industrial Organization

ECON 4909 (3-4) Independent Study
Department enforced prerequisites: completion of at least 12 hours of ECON classes and a minimum GPA of 3.00. Department consent required.
Repeatable: Repeatable for up to 9.00 total credit hours. Allows multiple enrollment in term.
Requisites: Requires prerequisite courses of ECON 2010 and ECON 2020 and ECON 3070 or ECON 3080 (all minimum grade C-).
Additional Information: Departmental Category: Independent Study and Other Courses

ECON 4929 (3) Special Topics In Economics
This course number is assigned to upper-level Economics electives that become available on an incidental basis. Refer to the Economics Department for a detailed description of current content. Formerly ECON 4999.
Repeatable: Repeatable for up to 6.00 total credit hours.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3080 (all minimum grade C-). Restricted to students with 57-180 credits (Juniors or Seniors).
Additional Information: Arts Sci Gen Ed: Distribution-Social Sciences
Departmental Category: Independent Study and Other Courses
Departmental Category: Asia Content
ECON 4939 (2-6) Internship/Seminar
Offers students the opportunity to integrate theoretical concepts of economics with practical experience in economics-related institutions. The theoretical portion arises from seminars and readings, the practical from activities in organizations related to the economics field. A maximum of 3 credit hours counts toward major requirements. Department consent required.
Requisites: Requires prerequisite courses of ECON 3070 and ECON 3080 and ECON 3818 (all minimum grade C-). Restricted to students with 57-180 credits (Junior or Senior) Economic (ECON) majors or minors only.
Grading Basis: Letter Grade
Additional Information: Departmental Category: Independent Study and Other Courses

ECON 7010 (3) Microeconomic Theory 1
Analyzes recent and contemporary literature on fundamentals of economic theory. Considers value theory with particular emphasis on methodology, theory of demand, theory of the firm, game theory, theory of distribution, general equilibrium theory, and welfare economics. Instructor consent required.
Additional Information: Departmental Category: Theory and History of Economic Thought

ECON 7020 (3) Macroeconomic Theory 1
Discusses behavior of consumption, investment, employment, production, and interest rates in the context of dynamic optimization models. Also considers government, economic growth, and business cycles. Instructor consent required.
Additional Information: Departmental Category: Theory and History of Economic Thought

ECON 7030 (3) Microeconomic Theory 2
Continuation of ECON 7010. Instructor consent required.
Additional Information: Departmental Category: Theory and History of Economic Thought

ECON 7040 (3) Macroeconomic Theory 2
Continuation of ECON 7020. Instructor consent required.
Additional Information: Departmental Category: Theory and History of Economic Thought

ECON 7050 (3) Advanced Economic Theory
Discusses advanced topics in game theory and general equilibrium. Department enforced prerequisites: ECON 7010 and ECON 7030 and ECON 7818 and ECON 7828.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Theory and History of Economic Thought

ECON 7818 (3) Mathematics for Economists
Provides the mathematical foundation for Ph.D. level statistical inference in economic research. The primary topics of the course are probability theory and mathematical statistics including hypothesis testing and classical estimation with an emphasis on the method of maximum likelihood. Instructor consent required.
Additional Information: Departmental Category: Quantitative Economics

ECON 7828 (3) Econometrics
Continuation of ECON 7818. Topics include regression analysis and extensions of the linear regression model to generalized least squares, time series data, and systems of equations. Instructor consent required.
Additional Information: Departmental Category: Quantitative Economics

ECON 8010 (3) Economics of Risk and Time
Focuses on new techniques for analyzing behavior in relation to risk and time.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Theory and History of Economic Thought

ECON 8020 (3) Business Cycle Theory and Monetary and Fiscal Policy
Discusses monetary and non-monetary theories of business cycles in the light of empirical evidence and what those theories imply for monetary and fiscal policy. Emphasizes a deep understanding of the mechanisms within models, their comparative statics and comparative dynamics and the importance of, and evidence for, difference parameter values within business cycle models.
Requisites: Restricted to graduate students only.

ECON 8029 (3) Economics Research Methods Workshop 1
Assists students starting their doctoral thesis by discussing methodology and evaluation of economic research. Presents and discusses student research proposals.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Independent Study and Other Courses

ECON 8211 (3) Public Economics: Fundamental Principles
Presents the fundamental principles of public goods, externalities, public choice, excess burden, optimal taxation, and tax incidence.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Public Economics

ECON 8219 (3) Economics Research Methods Workshop 2
Continuation of ECON 8209. Assists students starting their doctoral thesis by discussing relevant economic research. Presents and discusses research papers.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Independent Study and Other Courses

ECON 8221 (3) Public Economics: Topics in Public Expenditures and Taxation
Explores advanced topics in public economics such as decentralization, state and local government, program analysis, taxation, international tax issues, political economy issues, and market failure.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Public Economics

ECON 8231 (3) Local Public Economics
Examines subnational governments and systems of governments, the effects of inter-governmental competition, appropriate tax and expenditure responsibilities, and variations in governing institutions. Covers congestible public goods, Tiebout mechanisms, and tax capitalization.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Public Economics

ECON 8413 (3) Seminar: International Trade Theory
Covers theories of comparative advantage, including the classical, factor-proportions, fixed-factor, and noncompetitive markets models. Examines trade policy including trade barriers, market distortions, strategic policy, regional integration, political economy, and factor migration.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: International Trade and Finance
ECON 8423 (3) Seminar: International Finance
Highlights foreign exchange markets, past and current international monetary mechanisms, and processes of adjustment. Examines the role of international financial markets for the behavior of consumption, investment, saving, and production. Also considers international transmission of business cycles.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: International Trade and Finance

ECON 8433 (3) International Economics III
Explores advanced quantitative topics in international economics and focuses on data, estimation, calibration, and solutions of several classes of models in international trade. The seminar is a part of the graduate sequence in International Economics and complements the course on International Trade Theory.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: International Trade and Finance

ECON 8534 (3) Economic History of North America
Examines North America's past from the perspective of economics. Topics include growth and welfare in the colonial period; staple products, agricultural development, and the emerging industrialism in the antebellum period; transformation of the North American economy to 1914; the interwar years and the Great Depression; and economic integration since 1945.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Economic History

ECON 8535 (3) Environmental Economics I
Considers the allocation of society's scarce environmental resources and government attempts to achieve more efficient and equitable allocations. It is a course in applied welfare economics with an emphasis on market failure and valuation.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Natural Resources and Environmental Economics

ECON 8545 (3) Environmental Economics II
Provides advanced study of recent advances in environmental economics and explores opportunities for new research. Topics vary with interests of instructor and students.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Natural Resources and Environmental Economics

ECON 8676 (3) Seminar: Labor Economics 1
Focuses on the demand side of labor markets. Topics include standard static and dynamic models of labor demand, labor market discrimination, composition of compensation, labor hierarchies within enterprises, unionization, efficient contracts, and macroeconomics of labor markets.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Labor and Human Resources

ECON 8686 (3) Seminar: Labor Economics 2
Focuses on special topics in labor economics: dynamic theories of labor supply, employment, and unemployment; labor supply in a household framework; and labor market activity and income distribution. Explores both theoretical models and empirical tests in each area.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Labor and Human Resources

ECON 8747 (3) Industrial Organization Theory
Highlights economics of regulation of industry and markets, industry studies, and the application of lab methods to industrial organization.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Industrial Organization

ECON 8757 (3) Industrial Organization and Public Policy
Addresses the theory of interaction of firms within markets and industries, emphasizing importance of the number, relative size of firms, market institution, firm strategies and nature of consumer demand. Examines neoclassical and game theoretic models, empirical industry studies and laboratory tests of theoretical models and policies.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Industrial Organization

ECON 8764 (3) History of Economic Development
Covers in historical perspective the causes of economic development including why some areas develop faster than others and why development occurs more rapidly in some eras than others.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Economic History

ECON 8774 (3) Economic Development 1
Focuses on microeconomic issues surrounding economic development from a largely empirical perspective. This is one course in a two-semester sequence in development economics for Ph.D. students. Topics covered in the two sections will vary to keep up with the current research but this course will cover a variety of papers covering different research design and program evaluation methods on topical areas including but not limited to, human capital development and long-run effects, environment and health, labor markets and migration, social capital and networks, micro-credit, and women's empowerment.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Economic Development

ECON 8784 (3) Economic Development 2
Focuses on microeconomic issues surrounding economic development from a largely empirical perspective. This is one course in a two-semester sequence in development economics for PhD students. Topics covered in the two sections will vary to keep up with the current research but this course will cover a variety of papers covering different research design and program evaluation methods on topical areas including but not limited to, distribution of resources within households, environmental and natural resources, as well as migration and gender issues relevant for developing countries.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Economic Development

ECON 8828 (3) Seminar: Econometrics 1
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Quantitative Economics

ECON 8838 (3) Seminar: Econometrics 2
Teaches the advanced level of econometrics theory. Topics include asymptotic theory, maximum likelihood estimation, limited dependent variables analysis and other frontier areas of econometrics such as the method of moment estimation, semiparametric and nonparametric estimation procedure.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Quantitative Economics
ECON 8848 (3) Applied Microeconometrics
Presents a "user's guide" to conducting empirical research in applied microeconomics. Begins with a primer on an industry-standard econometric software package including programming techniques and data management. Introduces advanced econometric techniques including panel data methods, IV, matching models, regression discontinuity and limited dependent variables models. Concludes with a research project requiring a replication and/or extension of an existing published paper.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Quantitative Economics

ECON 8858 (3) Computational and Structural Estimation Methods
Teaches students to construct a variety of applied economic models, obtain parameter values through calibration or estimation techniques and uses the resulting models to conduct policy simulations.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Quantitative Economics

ECON 8909 (1-3) Independent Study
Repeatable: Repeatable for up to 7.00 total credit hours.
Additional Information: Departmental Category: Independent Study and Other Courses

ECON 8999 (1-10) Doctoral Dissertation
All doctoral students must register for not fewer than 30 hours of dissertation credit as part of the requirements for the degree. For a detailed discussion of doctoral dissertation credit, refer to the Graduate School section.
Repeatable: Repeatable for up to 30.00 total credit hours.
Requisites: Restricted to graduate students only.
Additional Information: Departmental Category: Independent Study and Other Courses