ECONOMICS

Introduction and Educational Objectives

Economics uses the idea of optimizing behavior to provide a unified framework for studying human action. The economics curriculum is designed to give students an understanding of economic theory and its application to a wide range of problems. The program provides excellent preparation for careers in business, government, and international agencies. It is particularly recommended for students planning graduate study or professional training in fields such as law, business, international studies, public administration, and economics.

A student pursuing the Economics major will select one of two possible tracks: Political Economy (the People and Society track) or Quantitative Economics (the Science, Technology, Mathematics, and Engineering track).

Members of the Department are prepared to counsel students in the selection of courses and in other matters relating to the preparation for careers. Economics may be the major area of specialization of a candidate for the Master of Arts (http://bulletin.miami.edu/graduate-academic-programs/business/specialized-master-degrees/economics-ma) and Doctor of Philosophy (http://bulletin.miami.edu/graduate-academic-programs/business/doctoral/economics-phd) degrees. Consult the Graduate Academic Programs section of the Bulletin for the general requirements of these programs.

ECO 211. Economic Principles and Problems. 3 Credit Hours.
Fundamental course devoted to development and application of basic analytical tools and principles required for an understanding of major economic problems and policy alternatives available for their solution. Particular emphasis on microeconomic analysis. Topics include the study of markets under varying conditions of competition, including market deficiencies such as pollution, prices, and resource allocation distribution of income, including poverty problems, the economics of the firm and the government, and international economic relations.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

ECO 212. Economic Principles and Problems. 3 Credit Hours.
Continuation of ECO 211. Course emphasis is placed on macroeconomic analysis. Areas covered include national income and employment analysis, money and banking, economic growth, and comparison of different economic systems, including the problems of developing the less developed world.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

ECO 300. Microeconomic Theory And Applications. 3 Credit Hours.
Prerequisites: ECO 211, ECO 212, MAS 110, or MTH 130 or MTH 141 or higher.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

ECO 301. Macro Economic Theory. 3 Credit Hours.
Intermediate level analysis of the measurement, determination, and control of aggregate economic activity.
Prerequisites: ECO 211, ECO 212, MAS 110, or MTH 130 or MTH 141 or higher.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

ECO 302. Micro Economic Theory. 3 Credit Hours.
Intermediate level analysis of the role of price in resource allocation in markets of varying degrees of competition, as well as in the determination of wages, rent, interest, profits, and public policy.
Pre-Requisite: ECO 211 And ECO 212 And MTH 141 Or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

ECO 303. Macro Economic Theory. 3 Credit Hours.
Intermediate level analysis of the measurement, determination, and control of aggregate economic activity.
Prerequisites: ECO 211, ECO 212, MAS 110 or MTH 130 or MTH 141 or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

ECO 307. Public Finance and Fiscal Policy. 3 Credit Hours.
The role of local, state, and federal government in attaining an efficient allocation of resources and an equitable distribution of income. Emphasis on criteria for the selection and evaluation of public expenditure and tax programs including the problems of coordinating federal, state, and local finance. Special attention is given to current policy issues.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

ECO 311. Labor Economics (I). 3 Credit Hours.
Course surveys the structure and functioning of labor markets. Topics include determinants of labor supply and labor demand, economics of wage differentials, economic impact of labor unions, discrimination in labor markets, and the labor market effects of various government policies such as payroll and income taxes, educational subsidies, and minimum wage laws. The central goal of the course is to provide the student with a framework for analyzing diverse issues related to the labor sector of the economy.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.
ECO 345. Environmental Economics. 3 Credit Hours.
This course determines the appropriate way to regulate economic activity so as to achieve an optimal balance between competing environmental and economic goals. Economic reasoning is used to evaluate causes and consequences of environmental problems. The course rigorously evaluates various types of environmental regulation, including "cap-and-trade," command and control mandates, and pollution taxes. Other specific topics include public goods, externalities, cost-benefit analysis, non-market valuation, and international trade and development and the environment.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 351. Economics of Developing Countries. 3 Credit Hours.
Factors underlying economic development, measures of and goals for development, principles applicable to problems of development, the role of markets and planning in development, social, cultural, and political factors affecting economic development, and comparative rates of progress in different countries.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

ECO 371. Latin America and The Global Economy. 3 Credit Hours.
An analysis of the historical growth of major Latin American countries, with emphasis on the post World War II period. Topics include industrialization, foreign investment, international trade and regional integration, agrarian reform, inflation, and development strategies and planning within the context of Latin America.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 379. Economics of Poverty. 3 Credit Hours.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.

ECO 386. Health Economics. 3 Credit Hours.
The course applies the tools of microeconomic analysis to the health care sector. It examines how models of demand and supply apply to the health care sector in general, and in particular to the health insurance, the hospital, the physicians, and the pharmaceutical sectors. By examining the actors and issues in this market, students are able to discuss policy issues from an economic perspective.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

ECO 403. Contemporary Issues in Monetary Economics. 3 Credit Hours.
Analysis of the role of money in economic affairs. Topics include the determinants of the money supply and interest rates, money and prices, money and stability, and growth. Emphasis is placed on current problems and policies.
Requisite: Must be in School of Business or Economics major or minor in the School of Arts & Sciences.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 420. Economic Growth. 3 Credit Hours.
Course covers selected topics in economic growth. Topics include stylized facts associated with economic growth, the theoretical study of economic growth, and empirical test of those theories. Course work is supplemented by case studies of individual countries, particularly developing countries.
Requisite: Must be in School of Business or Economics major or minor in the School of Arts & Sciences.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

ECO 430. Applied Econometrics. 3 Credit Hours.
This course introduces basic econometric techniques for analyzing economic data. The goal is to make students sophisticated consumers and skilled producers of empirical analysis, which will be attained by extensive work on a variety of real-world data like students' test scores, CEO wages, mortgage applications, cigarette demand, stock market capitalization, inflation, GDP and interest rates. Learning how to use econometric analysis software is an integral part of the course.
Prerequisite: ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

ECO 441. International Trade Theory. 3 Credit Hours.
Study of the principles of comparative advantage and the gains from international trade. Analysis of tariffs, quotas, and protectionism is included.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 442. International Monetary Economics. 3 Credit Hours.
Analysis of models of the exchange rate, the balance of payments, and monetary policy in an open economy.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

ECO 443. Economic Analysis of Energy and Commodity Markets. 3 Credit Hours.
This course explores the principles of energy economics, commodity markets and advanced macroeconomics. It discusses the main trends in energy production and consumption, the methods of analysis in energy and commodity markets, and the main challenges in the energy sector. The analysis of oil prices and the economics of oil exporting countries is emphasized.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

ECO 444. Game Theory in Economic Applications. 3 Credit Hours.
This course is an introduction to the techniques and questions of modern microeconomics. The course will expose you to the techniques of game theory, the workhorse of modern microeconomics, and will apply those techniques to the analysis of a variety of economics situations and institutions.
MTH 141 Or higher.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.
ECO 445. Global Economics: Trade and Currencies. 3 Credit Hours.
In this course, students are exposed to two fundamental topics which are prordial to the understanding of any economic, political and/or social circumstance in any given country at any given time: (1) The evolution and meaning of the business cycle and capitalism, and (2) The effect of international trade and currencies. These two themes have sparked debates for centuries as they have great implications in the development of countries. Also, this course challenges students' critical thinking and analytical skills with a wide range of controversial readings on these two topics. This course is divided into four sections. The first one introduces students to the idea of the business cycle. The second section aims at explaining how capitalism was born and how it has evolved in the 19th and 20th centuries. Then, the course centers on explaining capitalism today and presents criticisms. And finally, students analyze how the business cycle and capitalism has unfolded and affected certain countries in Latin America.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 460. Industrial Organization. 3 Credit Hours.
This course shows how microeconomic theory can be used to understand the diverse practices encountered in real-world markets between the extreme cases of perfect competition and monopoly. Topics to be covered include strategic pricing behavior, collusion, advertising and information, vertical integration, vertical restraints, regulation and a review of empirical literature.
Requisite: ECO 300 OR ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

ECO 496. Directed Studies in Economics. 1-3 Credit Hours.
Supervised readings, individual research project, or independent investigation of selected non-STEM related problems in the discipline.
Offered only by special arrangement with supervising faculty member, who approves topic and evaluation process at time of registration.
Components: THI.
Grading: GRD.
Typically Offered: Fall & Spring.

ECO 497. Directed Studies in Economics. 1-3 Credit Hours.
Supervised readings, individual research project or independent investigation of selected STEM-related problems in the discipline.
Offered only by special arrangement with supervising faculty member, who approves topic and evaluation process at time of registration.
Components: THI.
Grading: GRD.
Typically Offered: Fall & Spring.

ECO 498. Special Topics in Economics. 3 Credit Hours.
Special topics in selected non-STEM areas of [the department name].
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

ECO 499. Special Topics in Economics. 3 Credit Hours.
Special topics in selected STEM areas of Economics.
Prerequisite: ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

ECO 510. Mathematical Economics And Applications. 3 Credit Hours.
The course will focus on specific applications of microeconomic theory, which may vary each semester. Topics may include choice under uncertainty, game-theoretic models of insurance markets, principal-agents problems, and basic auction theory. The discussion of each application will be preceded by a discussion of the mathematical tools required. The mathematics topics covered may include basic theory of sets and functions, concave / convex functions and their role in optimization, expectations, conditional probability, Bayes rule, and order statistics.
Prerequisites: ECO 302, MAS 202 or MTH 224.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 511. Labor Economics (II). 3 Credit Hours.
A theoretical and empirical analysis of how labor markets operate. A survey of the literature, problems, and methodology of modern labor economics. Human capital analysis, the wage structure, job search and job-matching models, time-allocation models, the economic impact of labor unions, labor market discrimination, the determinants of labor demand and supply, and the factors affecting government policy relating to the labor sector is also included.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

ECO 512. Mathematical Economics (II). 3 Credit Hours.
Economics 512 will be sequential to the introductory Mathematical Economics I (ECO 510). Topics include integral calculus, differential equations, difference equations, Kuhn-Tucker conditions, solutions to general equilibrium systems, optimization under uncertainty, and an introduction to dynamic optimization. Applications of mathematical techniques to economic analysis will be stressed.
Prerequisite: ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

ECO 520. Econometrics. 3 Credit Hours.
Statistical methods of estimating and testing mathematical model of economic relationships.
Prerequisite: ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 521. Graduate Macroeconomic Theory. 3 Credit Hours.
The primary objective of this course is to introduce the student to the mathematical presentation of the major Classical, Neo-classical, Keynesian, and Neo-Keynesian macroeconomic models.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.
ECO 532. History of Economic Thought. 3 Credit Hours.
Historical development of economic doctrines and theory. Topics and individuals discussed include mercantilism, physiocracy, Adam Smith, Thomas Malthus, David Ricardo, J. S. Mill, Karl Marx, marginal analysis, Alfred Marshall, and J. M. Keynes. Special emphasis is placed on the effect of historical insights upon the contemporary core of economic theory.
Prerequisite: ECO 300. Or ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

ECO 533. Advanced Microeconomic Theory. 3 Credit Hours.
An introduction to the mathematical approach to microeconomic theory. Topics include consumer/household behavior, the theory of the firm, resource allocation, welfare economics, and uncertainty theory.
Prerequisite: ECO 302.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

ECO 555. Economics Honors Research Project. 3.00 Credit Hours.
Research project to fulfill requirements for Departmental Honors in Economics.
Components: THI.
Grading: SUS.
Typically Offered: Offered by Announcement Only.