

ECONOMICS (EC)

EC 111 Principles of Microeconomics (3 credits)

Provides students with an understanding of fundamental economic principles and tools. Presents economic analysis with respect to demand, supply, market equilibrium, costs of production and resource pricing. Examines the market structures of pure competition, oligopoly, monopolistic competition and monopoly. Analyzes the markets for labor and capital.

Typically Offered: Fall and Spring

EC 112 Principles of Macroeconomics (3 credits)

Pre-Req: EC 111 and 3 credits of math

Analyzes the determinants of aggregate economic activity and the effects of government policies intended to achieve full employment, price stability and economic growth. Topics include inflation, unemployment, interest rates, fiscal policy and the public debt, monetary policy, the balance of payments, and exchange rates. Introduces the economic analysis of international trade, comparative advantage and selected current economic problems.

Typically Offered: Fall and Spring

EC 224 Intermediate Microeconomics (3 credits)

Pre-Req: EC 111, EC 112, and three credits of 100 level Math. *Pre or Co-Req:* (EMS 104 or EMS 105)

Examines price determination in the marketplace and the interactions among consumers, firms and government in the market process. The study of markets and the forces of supply and demand provides a sound basis for understanding pricing, production decisions, cost conditions, industry regulations and profitability. Consumer behavior and firm decision-making form the fundamental structure for the course of study. Among the topics covered are consumer choice, welfare effects of government policy, production technology, profitability, competitive market analysis, and market power and price discrimination. Analytical tools and economic modeling techniques are developed through the course. This is a required course for all Economics and Economics-Finance majors.

Typically Offered: Fall and Spring

EC 225 Intermediate Macroeconomics (3 credits)

Pre-Req: EC 111, EC 112, and three credits of 100 level Math. *Pre or Co-Req:* (EMS 104 or EMS 105)

Analyzes the environment in which business operates, including the influence of the government and Central Bank policies, recessions and expansions, inflation and growth in a business. Provides the tools to analyze the effects of various economic events on production, employment and prices. The course also introduces important debates in economics, such as supply side economics, the impact of a balanced budget amendment, and the role of the Federal Reserve in keeping inflation and unemployment low. Periodic writing or data assignments help students use the tools learned to analyze current events and policy discussions. This course is required for all Economics and Economics-Finance majors.

Typically Offered: Fall and Spring

EC 282 Introduction to Econometrics (3 credits)

Pre-Req: EC 111 & EC 112 & (GB 213 or ST 113).

Introduces students to the building and estimation of statistical models used to test economic theory. Familiarizes students with the sources of economic data and with the difficulties encountered in empirical testing of these models. The methods employed and problems encountered in testing economic theory are also applied to other areas such as finance and marketing. EC 282 is required for Business Economics majors and Quantitative Economics majors.

Typically Offered: Fall and Spring

EC 298 Experimental course in EC (3 credits)

Pre-Req: EC 111 and EC 112

Experimental courses explore curriculum development, with specific content intended for evolution into a permanent course. A topic may be offered twice before it becomes a permanent course. Students may repeat experimental courses with a different topic for credit.

Typically Offered: As needed

EC 299 Experimental Course in Econ (3 credits)

Pre-Req: EC 111, EC 112 and (GB 213 or ST 113)

Experimental courses explore curriculum development, with specific content intended for evolution into a permanent course. A topic may be offered twice before it becomes a permanent course. Students may repeat experimental courses with a different topic for credit .

Typically Offered: As needed

EC 311 International Economics (3 credits)

Pre-Req: EC 111 and EC 112

Presents the basis of international trade through both classical models and recent complementary trade theories. Analyzes the impact of trade, i.e., who gains and who loses, with implications regarding the politics of trade. Examines commercial policy, trade blocks, links with development, and consequent north-south conflicts. Shows the determination of exchange rates and the relationship with the U.S. balance of payments.

Typically Offered: Once a year

EC 317 The Economics of Race and Gender (3 credits)

Pre-Req: GB213 or ST 113 and at least one other EC course at the 200 level or higher

Economics is fundamentally about understanding the interactions between economic agents. These interactions between economic agents do not always lead to equity, with economic outcomes varying by race and gender. This course uses analytical tools common in applied microeconomics to critically examine economic outcomes by gender and race. Specifically, we will examine differences in the labor market, housing and credit markets, the U.S. criminal justice system, the healthcare industry, and education.

Typically Offered: Spring

EC 321 International Economic Growth and Development (3 credits)*Pre-Req: EC 111 and EC 112*

Analyzes the long-term performance of an economy in terms of the related concepts of growth and development. Examines alternative explanations for the growth record of developed economies as well as their prospects for continued growth. Presents an overview of the economic performance of less developed countries and examines critical aspects of development such as capital accumulation, technological change, population growth, labor and manpower issues, agriculture and trade. Examines development policies in the areas of inflation and planning, and considers issues related to economic ties between developed and developing economies.

*Typically Offered: Once a year***EC 329 Economic Modeling of Policy Evaluation (3 credits)***Pre-reqs: EC 111 and (GB 213 or ST 113)*

Policy and program evaluation is important for evidence-based decision-making. The focus of this class is on learning analytical and statistical tools for program evaluation using microeconomic data. This course will develop your analytical skills to be able to interpret the findings presented in evaluation studies and understand the intuition behind the most common quantitative program evaluation tools. We will learn about the possibilities and limitations of applying evaluation tools to a range of public policy areas, and we will study how these techniques have been applied in the study of various policies and programs around the world.

*Typically Offered: Once a year***EC 331 Modern Economic Systems (3 credits)***Pre-Req: EC 111 and EC 112*

Describes and analyzes the different approaches to organizing economic systems in the latter half of the 20th century, e.g., modern capitalism, modern socialism, command systems and mixed variants. Contrasts the differing roles played by government in the regulation and direction of the economy. Notable attention is paid to the differences in the use of fiscal, monetary, incomes and international trade policies to affect economic activity. Countries representing major differences in approaches include the United States, United Kingdom, France, Germany, Japan, China, Hungary, Russia and others.

*Typically Offered: Once a year***EC 333 Economics of the European Union (3 credits)***Pre-Req: EC 111 and EC 112*

Economics of the European Union gives students a broad-based, multi-faceted introduction to how the EU operates and its role both within Europe and beyond. The impact of the EU has been growing through its regulations, laws, spending programs and international treaties. This is a survey course covering a wide range of topics including the formation of the EU, European politics, budgets, education, labor markets, immigration, demography, trade, the Euro, and EU expansion. There is a special focus on analyzing current crises within the EU and forging connections across topics throughout the course. Counts as an Arts and Sciences elective.

*Typically Offered: Once a year***EC 341 Urban and Regional Economics (3 credits)***Pre-Req: EC 111 and EC 112*

Analyzes the economic forces determining where cities develop and grow. Studies the location decision of firms and how land and housing prices are determined in a regional economy. Examines the role and effects of city government on the metropolitan economy. Discusses urban problems such as poverty, discrimination, housing, pollution and crime. Problem-solving, economic analysis, and analytical writing are emphasized in the course.

*Typically Offered: Every two or more years***EC 343 Health Economics (3 credits)***Pre-Req: EC 111 and EC 112*

Uses economic tools to understand various issues and problems pertaining to health and medical care. Examines in considerable detail the structure, conduct and performance of health insurance, physician, hospital and pharmaceutical industries. Discusses the role, design and effects of the Medicare and Medicaid programs and alternative delivery systems such as Health Maintenance and Preferred Provider organizations on the functioning of healthcare markets.

*Typically Offered: Once a year***EC 346 Environmental Economics (3 credits)***Pre-Req: EC 111 and EC 112*

Uses a modular approach to investigate the economics of environmental issues and policy solutions. Economic modeling is used to illustrate how environmental damage can be viewed as a market failure. Using this approach, analytical tools are developed to evaluate environmental policy solutions such as direct regulation, pollution taxes, abatement subsidies and the trading of emissions rights. In addition to analyzing environmental policy, the course examines the importance of environmental issues to the corporate sector and the ways in which businesses are responding both to new regulations and consumer awareness of environmental risks.

*Typically Offered: Every two or more years***EC 351 Contemporary Economic Issues (3 credits)***Pre-Req: EC 111 and EC 112*

Applies the principles of economics to critically analyze current economic problems and issues. Treats such problems as poverty, population, pollution, health, economic welfare, American business in an evolving global environment, ecology, income redistribution programs, agricultural policy, economic discrimination, foreign trade, and balance of payment problems.

*Typically Offered: Every two or more years***EC 362 Development of Economic Thought (3 credits)***Pre-Req: EC 111 and EC 112*

Examines the development of economic thinking with regard to topics such as value, production, distribution, employment and inflation. Outlines the progression of ideas from the classical school through Marxism and neoclassical thinking to the Keynesian revolution of this century. Examines the post-Keynesian direction of economics and provides an overview of recent theoretical developments in the context of past approaches. Traces the development of economic concepts in the context of economic conditions of the period and concludes with a discussion of the current direction of economic thought.

Typically Offered: Every two or more years

EC 370 Behavioral and Experimental Economics (3 credits)*Pre-Req: EC 111 and EC 112*

This course introduces the complementary fields of experimental economics and behavioral economics. Behavioral economics adds insights from psychology to the economic model of behavior. In so doing, it looks beyond the standard neoclassical model of how people and firms make decisions, examining ways in which behavior is not consistent with strict rational self-interested decision-making. This includes irrational behavior such as overvaluing losses and failing to exert the effort needed to find the exact choice that maximizes personal payoffs. It also includes social preferences, where people care about the payoffs of others and not just their own out of concerns for fairness or altruism. Frequently, students will review how standard economic theory predicts people will behave in a given situation, and compare that to how people actually behave.

*Typically Offered: Once a year***EC 373 Technology, Innovation and Economic Performance (3 credits)***Pre-Req: EC 111 and EC 112*

This course explores the economic aspects of innovation and technology, focusing on their implications for economic performance and competitiveness of firms, industries, regions and countries. Microeconomic aspects of innovation are covered, including topics such as types of innovation, the role of R&D, patents, and characteristics of firms most likely to innovate. Business applications are demonstrated through case studies of industries. At the macroeconomic level, interrelationships among technology, innovation and economic growth are analyzed. Factors underlying the ability of regions (such as Silicon Valley and along Route 128) and of countries (such as Ireland, India and China) to succeed or fail in generating technology-based firms and in high-tech economic growth and development are explored.

*Typically Offered: Once a year***EC 374 Industrial Organization and Markets (3 credits)***Pre-Req: EC 111 & EC 112*

Investigates the interdependence of market structure, strategic firm behavior and industry performance, and those relationships. Market structure is analyzed through the study of scale economies, merger activities and entry barriers. Various competitive strategies are examined, such as advertising, price discrimination and technological innovation. Industry case studies are used to provide a contemporary, real-world context for the economic analysis.

*Typically Offered: Every two or more years***EC 375 The Economics of Sports (3 credits)***Pre-Req: EC 111 & (GB 213 or ST 113).*

This course allows students to develop a detailed economic understanding of the professional and amateur sports industry. Relying on economic principles and well-developed economic models, the course material analyzes a variety of current-day issues facing the sports industry. Topics include: competitive balance issues, such as, revenue sharing, salary caps, and luxury taxes; government's role in the sports industry; and player issues, such as, racial and wage discrimination, free agency and superstar effects.

*Typically Offered: Once a year***EC 376 Economics of Regulation and Antitrust (3 credits)***Pre-Req: EC 111 & EC 112*

Examines the relationship between government business policy and business response. Considers the various ways in which government attempts to alter business behavior through the use of industry regulation, antitrust legislation, and social regulation such as consumer protection, environmental protection and occupational safety laws. Discusses the intent of various laws to see that firms behave in socially desirable ways and examines the degree to which the laws have been successful in achieving these results.

*Typically Offered: Every two or more years***EC 377 Economics of Information Technology (3 credits)***Pre-Req: EC 111 and EC 112*

This course will look at a broad array of issues raised by the revolution in information technology. Included will be macroeconomic topics such as whether information technology really created a "new economy," the effect of information technology on productivity, and what can we learn from the dot-com boom and bust. The structure of the information technology sector will be analyzed by looking at several of its unique features and considering their effects. A considerable portion of the course will be taken up with the issues of pricing information goods and services. In addition, economic policy with respect to competition, intellectual property issues and taxation will be examined.

*Typically Offered: Every two or more years***EC 379 Game Theory in Economics (3 credits)***Pre-Req: (EC 111, EC 112 or equivalent) and any 100-level Math course. Credit for this courses may not be earned for students who previously earned credit or currently enrolled in MA 309.*

Game theory is a set of tools designed to study multiple strategic agents in many different environments. The scenarios involve interactions where the payoff of one agent, Agent A, depends on both Agent A's actions and the actions taken by other agents in the "game." The objective in this course is to introduce students to the basic game theory concepts and apply these tools to more fully understand economic interactions. This course explores game theoretic topics such as pure- and mixed-strategy Nash equilibria of strategic-form games with perfect information, Nash and subgame-perfect equilibria for extensive-form games with perfect information, perfect Bayesian equilibria for games with imperfect information, Nash equilibrium of extensive-form games with imperfect information, equilibria concepts of finitely and infinitely repeated games, and bargaining games.

*Typically Offered: Every two or more years***EC 382 Time Series Analysis (3 credits)***Pre-Req: EC 111 & EC 112 & (GB 213 or ST 113).*

Time-series are data following one unit of observation (a firm, a sector, a country) over a period of time. EC382 is a course in the use of time-series analysis in Economics, Finance and Business. Students will develop and apply a range of methods that can describe time-series patterns and generate useful forecasts, including, time series decomposition, autocorrelation and partial autocorrelation functions, moving average and smoothing of time series, linear regression, moving average and autoregressive models, vector auto-regression models, and vector error-correction models. Applications of these techniques will include managing business operations, financial analysis, and economic forecasting, earnings projections, recessions, and inflation.

Typically Offered: Once a year

EC 398 Experimental Course in Ec (3 credits)

Pre-Req: EC 111, EC 112, and at least 51 completed and in progress credits
Experimental courses explore curriculum development, with specific content intended for evolution into a permanent course. A topic may be offered twice before it becomes a permanent course. Students may repeat experimental courses with a different topic for credit.

Typically Offered: As needed

EC 401 Directed Study in Economics (3 credits)

Permits superior students to study special topics. (Allows repetition for credit.)

Typically Offered: As needed

EC 402 Seminar in Economics (3 credits)

Pre-Req: EC 111, EC 112, and instructor permission

Makes it possible for small groups of advanced students to work on selected topics. (Allows repetition for credit.)

Typically Offered: Once a year

EC 403 Special Topics in Economics (3 credits)

Pre-Req: EC 111 & EC 112

Explores a specific topic or issue in Economics. May be repeated for credit with a different topic.

Typically Offered: As needed

EC 420 Managerial Economics Internship (3 credits)

Pre-Req: Instructor permission

The internship provide students with an opportunity to apply the principles of economics while working in business or government. The internship experience enables the student to understand the relationship between academic experience and business practice prior to graduation. Such a work experience is helpful in defining career goals and adjusting academic programs to prepare to meet those objectives. Additional benefits include building self-confidence, learning to work with others in a goal-related atmosphere, and establishing contacts for possible employment upon graduation.

Typically Offered: Once a year

EC 421 Internship in Economics (3 credits)

Typically Offered: Once a year

EC 425 Quantitative Methods in Economics and Business (3 credits)

Pre-Req: MA 131 and (Pre- or Co-Req: EC 224 or EC 225)

This course covers the main mathematical tools used in economics, finance and quantitative business decision making. The main aspect of the course will be focused on teaching and solving optimization problems faced in modern economics and business studies. Topics include constrained and unconstrained optimization, contemporary and practical techniques of calculus and probability in economic evaluation and business decision making. All topics in this course are taught using currently available, efficient tools and packages of Economics. This course is particularly recommended for students intending to study advanced economics, finance theory, and graduate business courses. Offering only in the Fall semester.

Typically Offered: Fall

EC 431 Research in Business Economics (3 credits)

Pre-Req: EC 224 and EC 282, at least 81 completed and in progress credits, and (Business Economics major, Economic-Finance major, or department chair permission)

This capstone course is designed to introduce students to the fundamentals of economic research. The primary objective of the course is for students to prepare an independent, comprehensive research project. Through this project, students will be exposed to the entire economics research process: identifying an interesting, focused research question that can feasibly be answered; finding, reviewing, and understanding prior economic literature that is related to this question; reviewing economic theory that is closely related to the question and identifying testable implications of the theory, finding data needed to answer the question, and employing the proper econometric techniques needed to confront any challenges the nature of the data may present. In particular, students will learn several econometric techniques that can be used to show causal effects, rather than just correlations. Finally, students will learn how to clearly present the results of their analysis orally.

Typically Offered: Fall and Spring

EC 441 Monetary Economics (3 credits)

Business Related Elective - Communication Intensive

Pre-Req: FI 305, FI 306, EC 225 and at least 81 credits earned or in progress.

This course will take an especially close look at how monetary policy impacts the major financial markets, particularly the bond market. After examining the impact of monetary policy on the domestic economy, we will shift our analysis to the international arena. This will include an evaluation of the impact of money on both spot and forward exchange rates, and the relative merits of fixed and flexible exchange rate systems will also be examined. This analysis will then be applied to various real-world cases, such as the EMU, currency boards and exchange rate crises. The final section of the course will focus on some of the major issues faced by U.S. monetary policymakers. The course will examine the tools, targets and goals of Federal Reserve policy, with particular emphasis on some of the current debates of U.S. monetary policy.

Typically Offered: Fall and Spring

EC 444 Faculty-led Study Abroad Course (3 credits)

Pass/Fail option not available for this course.

Faculty-led international courses are 3-credit intensive study abroad experiences offered during semester breaks, usually 10 to 15 days in length during January break, Spring break (as part of a Spring semester course), or in May after exams. The professor leads his/her students on an immersive learning experience in a region of the world where the professor has expertise, offering students the opportunity to combine cultural activities with business, NGO, or other relevant site visits. Students benefit from personal interactions with companies and organizations they would not encounter as a tourist. The intensive format allows students to study abroad without missing a semester at Bentley.

Please visit <https://www.bentley.edu/offices/international-education> to learn more.

Typically Offered: As needed

EC 454 College Fed Challenge (3 credits)

Pre-Req: EC 111, EC 112, and instructor permission. EC 225 is preferred but not required

The intent of EC454 is to expose selected students to a rigorous exploration of advanced macroeconomic and monetary economics concepts, with a special emphasis on the conduct of monetary policy by the Federal Reserve. During the semester, students will read chosen articles, write policy briefings and make policy oriented presentations. All aspects of the course will emphasize teamwork. The culminating experience of the course will be participation in the College Fed Challenge (CFC). The CFC is a prestigious competition sponsored by the Boston Federal Reserve System. Teams from area colleges make presentations to a panel of judges made up of economists from the Boston Fed.

Typically Offered: Fall

EC 483 Applied Econometrics (3 credits)

Pre-Req: EC 282 or MA 252

Econometrics plays an important role in data analytics – it is an essential tool in the assessment of business strategy and practice, in policy evaluation, and in understanding causal effects in the social sciences. During the first course in the Econometrics sequence students were introduced to some of the essentials of econometric methodology and applications. This course will extend students' knowledge by covering micro-econometric tools applied to complex data series, including methods used to analyze panel data (pooling of cross-sectional and time-series data), methods used to model discrete or limited outcome variables, and methods used to estimate causal relationships in real-world settings. Offered only in the Spring semester.

Typically Offered: Spring