

# ECONOMICS

**Chair:** Eric Tymoigne

**Administrative Assistant:** Tracy Robinette

Economics is the study of choice, and the Department of Economics offers courses that explore individual decision making (as workers, consumers, producers, citizens, investors) and how these decisions aggregate into economy-wide outcomes (employment, price levels, interest rates, balance of payments, government budgets). The department focuses on the modern mixed economy, with its combination of private enterprise, government taxes and expenditures, and other nongovernmental organizations. The decisions of individuals and organizations determine how much output an economy produces, how the output is produced, and who consumes the output. The courses in the department provide a solid theoretical foundation and apply the theory to practical problems faced by individuals, organizations, and governments.

## Resources for Nonmajors

The department offers introductory courses and elective courses that may be of interest to students majoring in other disciplines. Our two introductory courses, ECON 100 Principles of Economics and ECON 103 Statistics, are designed for both majors and nonmajors.

## The Major Program

The core curriculum begins with three introductory-level courses that provide an introduction to economic analysis and develop the tools required for more advanced work. Students interested in majoring in economics will ideally complete the first three introductory courses (ECON 100, ECON 103, and MATH 131), and declare economics as their major by the end of their second year.

The next step in the core curriculum is three courses in economic theory and empirical methods (ECON 301, ECON 302, and ECON 303). Economics is the study of choice, and students are encouraged to start with an analysis of individual choice in ECON 301 (offered in the fall) before studying aggregate choice in ECON 302 (offered in the spring). Econometrics (ECON 303) introduces statistical methods to apply economic theory to empirical data.

Students completing the six core theory and empirical methods courses are prepared to enroll in elective courses at the 300 and 400 levels. To complete the major, a student must complete at least 16 semester credits of economics electives, with 8 credits at the 300 and 400 levels. In addition, all students are required to complete one 400-level seminar course.

## Major Requirements

A minimum of 44 semester credits, distributed as follows:

### Core Courses, Introductory

- ECON 100 Principles of Economics
- ECON 103 Statistics (PSY 200, MATH 105, MATH 255 or POLS 201 may be used in place of ECON 103)
- MATH 131 Calculus I

### Core Courses, Economic Theory, and Empirical Methods

- ECON 301 Intermediate Microeconomic Theory
- ECON 302 Intermediate Macroeconomic Theory
- ECON 303 Econometrics

### Electives

- At least 16 semester credits of economics electives, of which at least 8 credits must be at the 300 or 400 level. ECON 444 Practicum does not meet the 400-level elective requirement.

### Seminar experience

- Take one course from the following:
 

ECON 401	Seminar in Microeconomics
ECON 402	Seminar in Macroeconomics
ECON 403	Seminar in Econometrics
ECON 404	Seminar in Mathematical Economics

Students intending to pursue graduate studies in economics or careers as research economists are strongly encouraged to take additional mathematics courses, particularly calculus, linear algebra, real analysis (discrete mathematics), differential equations, and advanced statistics.

## Minor Requirements

A minimum of 24 semester credits distributed as follows:

- ECON 100 Principles of Economics
- ECON 103 Statistics (PSY 200, MATH 105, MATH 255, or POLS 201 may be used in place of ECON 103)
- 16 credits of economics electives

At least 12 semester credits must be specific to the minor (may not be used in any other set of major or minor requirements).

## Honors

The department grants honors on graduation to economics majors who have produced exceptional work in the senior seminar and who meet all of the following criteria:

- Attain a cumulative GPA of 3.500 or higher.
- Attain a GPA of 3.750 or higher in all courses counted toward the major.

## Faculty

Cliff T. Bekar. Associate professor of economics. Economic history, industrial organization, game theory. PhD 2000, MA 1992, BA 1990 Simon Fraser University.

Moriah Bellenger Bostian. Professor of economics and department chair. Environmental and resource economics, econometrics. PhD 2010 Oregon State University. MS 2005 Auburn University. BS 2003 Florida State University.

Aine Seitz McCarthy. Associate professor of economics. Applied microeconomics, development economics, labor and demography,

economics of education. PhD 2016 University of Minnesota. BA 2006 Colby College.

Anna Miromanova. Assistant professor of economics. International trade, applied microeconomics, applied econometrics, development economics. PhD 2020, MS 2016 University of Oregon. MA 2015 Western Michigan University. SD 2012 Irkutsk State University, Irkutsk, Russia.

Éric Tymoigne. Associate professor of economics. Macroeconomics, money and banking, monetary theory. PhD 2006 University of Missouri at Kansas City. MA 2000 Université Paris-Dauphine. BA 1999 Université de Bretagne Occidentale à Brest.

## Courses

### ECON 100 Principles of Economics

Content: Introduction to the study of market economies.

Microeconomics, including supply and demand, production theory, market structure. Macroeconomics, including economic growth, inflation and unemployment, money and banking, monetary and fiscal policy. Government regulation and policy. Discrimination and poverty, imperfect competition, environmental problems, international competitiveness.

Prerequisites: None.

Usually offered: Annually, fall and spring semester.

Semester credits: 4.

### ECON 103 Statistics

Content: Theory and applications of statistics and probability used in the study of economics. Descriptive statistics, probability, random variables and their distributions, statistical inference. Applications of statistical inference ranging from estimating the mean from a univariate population to multiple regression analysis.

Prerequisites: QR 101 or equivalent.

Usually offered: Annually, fall and spring semester.

Semester credits: 4.

### ECON 203 Business and Economic Forecasting

Content: Modern quantitative techniques for business and economic forecasting with hands-on experiences in forecasting and evaluating forecasts. Time series visualization, decomposition, regression models, benchmark models, ARIMA models. Use of R, a free and popular language for quantitative analysis and statistical computing to conduct forecasting based on simulated and real data.

Prerequisites: ECON 103.

Usually offered: Annually, fall semester.

Semester credits: 4.

### ECON 215 Game Theory

Content: The tools of cooperative and noncooperative game theory. Modeling competitive situations, solution concepts such as Nash equilibrium and its refinements, signaling games, repeated games under different informational environments, bargaining models, issues of cooperation and reputation, evolutionary game theory. Application to economics and other disciplines. Emphasis on quantitative modeling and analytical approaches to strategic thinking.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Annually, fall and spring semester.

Semester credits: 4.

### ECON 220 The Financial System and the Economy

Content: The operation of the financial sector and its interrelationship with the productive sector. The central institutions of money and banks; the Federal Reserve System and its operation of monetary policy; financial crises. Keynesian, post-Keynesian, and monetarist theories and their policy implications.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Annually, fall semester.

Semester credits: 4.

### ECON 223 Economics of Globalization

Content: Recognizing, critically assessing, and engaging in discussions of global economic events. Exploration of the evolution of globalization and international integration. Focus on analysis of the concept of free trade, its advantages and disadvantages. International trade relations viewed through the prism of industrialized and developing nations; variety of international issues, such as environment protection, energy policy, international labor laws and markets, international cooperation, multinational corporations, migration, and inequality. Discussion of international monetary systems, foreign exchange markets, and the role of governments and central banks in shaping fiscal and monetary policies of industrialized and developing nations.

Prerequisites: ECON 100.

Usually offered: Alternate Years, spring semester.

Semester credits: 4.

### ECON 232 Economic Development

Content: Problems of less-developed countries and proposed solutions. Extent and nature of international poverty and inequality, national and international causes of underdevelopment, strategies for development.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Annually, fall semester.

Semester credits: 4.

### ECON 235 Labor Economics

Content: The operation and political economy of labor markets: current labor issues, employment and unemployment, supply of and demand for labor, employment wages and earnings under various market structures, discrimination, labor mobility, the role of trade unions, the nature of work.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Alternate Years, spring semester.

Semester credits: 4.

### ECON 244 Practicum

Content: Opportunities for well-prepared students to put academic concepts and techniques to work in the private or public sector. Specific activities vary; usually involve work with a public agency or private group. Credit-no credit. May be repeated for credit.

Prerequisites: ECON 100 or ECON 210.

Restrictions: Sophomore standing and consent required.

Usually offered: Annually, fall and spring semester.

Semester credits: 1-4.

### ECON 250 Radical Political Economics

Content: Critical connections among different economic structures and dynamics on the one hand, and political strategies and struggles for change on the other. Economic crisis theory, theories of the state, class and class consciousness, labor, and social-movement struggles.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Annually, spring semester.

Semester credits: 4.

**ECON 255 Technology, Institutions, and Economic Growth**

Content: Emergence of modern economic growth in Europe. The roots of the Industrial Revolution over the very long term, 1000 to 1750, through the application of basic economic theory. Causes and consequences of very long-term economic growth. Specific attention paid to technology, institutions, geography, and culture as sources of economic growth.

While the geographic focus is European, important cross-sectional work, especially with regard to China, is undertaken.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Every third year, spring semester.

Semester credits: 4.

**ECON 256 The Industrial Revolution**

Content: Europe's transition from an agricultural to an industrial society in the 18th century. The roots of modern economic growth in preindustrial Europe, the contributions of science and technology, trade, government, and population. Consequences of industrialization for living standards, both long-run improvements and short-run hardships. Rise of European power abroad and colonial contributions to growth. Focus on the British Industrial Revolution.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Every third year, spring semester.

Semester credits: 4.

**ECON 260 Environmental and Natural Resource Economics**

Content: An analysis of environmental and resource problems ranging from hazardous-waste disposal to air pollution, species extinction to global warming, from an economic perspective. The property-rights basis of pollution problems, environmental ethics, benefit-cost analysis, regulatory policy, clean technology, population growth and consumption, sustainable development.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Annually, spring semester.

Semester credits: 4.

**ECON 265 Pacific Northwest Policy Issues**

Content: Basic economic analysis to explore issues facing the Pacific Northwest. Diagnosis of the problem motivating a policy and evaluation of the merits of the policy solution. Potential issues: financing public education, promoting economic development, protecting natural resources, designing mass transit, providing public support for professional sports, responding to gentrification.

Prerequisites: ECON 100.

Restrictions: Sophomore standing required.

Usually offered: Every third year, spring semester.

Semester credits: 4.

**ECON 270 Economic Crises and Financial Contagions**

Content: Theories and quantitative analysis of recent and past macroeconomic crises and financial contagions. Bank runs and panics; asset price bubbles; business cycle fluctuations; balance of payments, sovereign debt, liquidity, and currency crises; systemic risk and global financial contagions. The role of macroeconomic and macroprudential policies in creating and counteracting crisis episodes.

Prerequisites: ECON 100.

Usually offered: Alternate Years, spring semester.

Semester credits: 4.

**ECON 299 Independent Study**

Content: Opportunities for well-prepared students to design and pursue a substantive course of independent learning. Details determined by the student and the supervising instructor. May be repeated for credit.

Prerequisites: None.

Restrictions: Sophomore standing and consent required.

Usually offered: Annually, fall and spring semester.

Semester credits: 1-4.

**ECON 301 Intermediate Microeconomic Theory**

Content: An analysis of markets and the potential sources of market failure. Demand theory, production theory, market structure, factor pricing, general equilibrium. Principles governing production, exchange, and consumption among individual consumers and firms.

Prerequisites: ECON 100. MATH 131.

Restrictions: Sophomore standing required.

Usually offered: Annually, fall semester.

Semester credits: 4.

**ECON 302 Intermediate Macroeconomic Theory**

Content: Theories and policies of classical, Keynesian, new classical, and new Keynesian economists; national income accounting; IS-LM analysis; aggregate supply and demand; money, interest rates, and investment; government spending and taxation; fiscal and monetary policy.

Prerequisites: ECON 100. MATH 131.

Restrictions: Sophomore standing required.

Usually offered: Annually, spring semester.

Semester credits: 4.

**ECON 303 Econometrics**

Content: Construction and estimation of statistical models of the economy; using statistical models to test economic hypotheses. Multiple regression analysis, residual analysis, analysis of variance.

Prerequisites: ECON 103, MATH 105, PSY 200, or MATH 255; ECON 301 or ECON 302; MATH 131.

Restrictions: Sophomore standing required.

Usually offered: Annually, fall and spring semester.

Semester credits: 4.

**ECON 310 Behavioral Economics**

Content: Incorporates recent observations of human behavior into economic analysis, including prosocial (as opposed to selfish) behavior, mental shortcuts (as opposed to complete benefit-cost analysis), and cognitive biases such as present bias, the endowment effect, the gambler's paradox, and the decoy effect. Explores the role of natural selection in shaping modern human behavior with respect to cooperation, sharing, risk-taking, and intertemporal choice.

Prerequisites: ECON 301.

Usually offered: Alternate Years, fall semester.

Semester credits: 4.

**ECON 312 Global Health Economics**

Content: This course is divided into three sections that will deepen students' understanding of problems and solutions in global health economics. First: the theory of health economics, microeconomic tools, health behavior, demand for health care, health insurance markets, and health-care financing. Second section will be seminar-style and include heavy readings on topics in global health to gain an understanding of diseases, health systems, and health behavior. Third: Students will delve into empirical research in global health economics by utilizing Demographic and Health Survey Data (DHS) data to write papers on chosen topics in health economics.

Prerequisites: ECON 301 and 303. (ECON 303 may be taken concurrently.)

Restrictions: Sophomore standing required.

Usually offered: Annually, fall semester.

Semester credits: 4.

**ECON 314 International Finance**

Content: How international financial transactions and government policies affect exchange rates, interest rates, inflation, balance of payments, sovereign debt, income, and wealth. Theory and application of foreign exchange markets (spots, forwards, arbitrage, covered and uncovered interest parity); balance of payments accounting, measures of government deficits and debts; open-economy macroeconomic modeling, applications, and issues.

Prerequisites: ECON 103. ECON 302.

Restrictions: Sophomore standing required.

Usually offered: Annually, spring semester.

Semester credits: 4.

**ECON 320 Modern Money, Banking, and the Macroeconomy**

Content: Monetarily sovereign governments are not constrained in the same way as economic units that use a currency. Mechanics of monetary sovereignty and their implications for public finances and economic stability. Public debt, taxes, and monetary financing. Real vs. financial constraints and policy choices. Differences between sovereign and nonsovereign governments.

Prerequisites: ECON 302.

Restrictions: Sophomore standing required.

Usually offered: Alternate Years, spring semester.

Semester credits: 4.

**ECON 332 Urban Economics**

Content: Economic aspects of urban areas. Why cities exist and how they interact within a regional economy; the pattern of land use in modern metropolitan areas; the economic forces behind urban problems such as poverty, crime, congestion, and sprawl; evaluation of the merits of alternative policy responses to urban problems.

Prerequisites: ECON 301.

Restrictions: Sophomore standing required.

Usually offered: Alternate Years, fall semester.

Semester credits: 4.

**ECON 348 International Economics**

Content: Introduction to international economics with emphasis on international trade theory and policy. Study of the cross-border movements of goods and services, as in international trade, tourism, and outsourcing; capital/money, as in foreign direct investment (FDI) and international aids; or people, as in immigration. Topics may include why countries trade with each other, what goods and services they trade, who gains and who loses from international trade, and how governments intervene to regulate cross-border trade flows.

Prerequisites: ECON 301.

Usually offered: Annually.

Semester credits: 4.

**ECON 360 Advanced Environmental and Natural Resource Economics**

Content: Application of intermediate microeconomic theory to contemporary environmental and natural-resource problems such as air and water pollution, climate change, land use, and biodiversity. Use of utility maximization to derive the demand for environmental goods, revealed preferences to value changes in environmental quality, and discounting theory to determine optimal resource use over time. Focus on the theory of environmental and natural-resource policies, such as pollution standards and fees, permit markets, and land use regulations, as well as their implementation in practice.

Prerequisites: ECON 301.

Restrictions: Sophomore standing required.

Usually offered: Alternate Years, spring semester.

Semester credits: 4.

**ECON 365 Public Economics**

Content: The role of government in a primarily market economy. Microeconomic issues: the provision of public goods; externality problems; the incidence, efficiency, and broader impacts of taxation policy; different approaches to defining fairness in income distribution; economic theories of public choice. Pressing current public-policy issues including health care and education policy, welfare reform, campaign finance, the social security system, defense spending.

Prerequisites: ECON 301.

Restrictions: Sophomore standing required.

Usually offered: Alternate Years, fall semester.

Semester credits: 4.

**ECON 401 Seminar in Microeconomics**

Content: Microeconomic strengths and weaknesses of market-directed economic activity. Industrial policy, discrimination in labor markets, impact and role of trade unions, welfare economics.

Prerequisites: ECON 301.

Restrictions: Sophomore standing required.

Usually offered: Annually, fall semester.

Semester credits: 4.

**ECON 402 Seminar in Macroeconomics**

Content: Topics beyond intermediate macroeconomics including alternate theories of consumption and investment, macroeconomic forecasting, the role of expectations, problems with macro measurements.

Prerequisites: ECON 302.

Restrictions: Sophomore standing required.

Usually offered: Annually, spring semester.

Semester credits: 4.

**ECON 403 Seminar in Econometrics**

Content: Advanced empirical research in economics. Critical review and presentation of empirical literature. Development of an original empirical research question and empirical estimation strategy. Compilation of dataset and statistical estimation. Oral presentation of research paper to students and faculty.

Prerequisites: ECON 301 and ECON 303.

Restrictions: Senior standing required.

Usually offered: Annually, spring semester.

Semester credits: 4.

**ECON 404 Seminar in Mathematical Economics**

Content: Mathematical models of economic behavior. Mathematics of microeconomic theory and macroeconomic theory, economic optimization, equilibrium and disequilibrium analysis, probability models, growth theory, dynamic economic modeling.

Prerequisites: ECON 103, MATH 105, PSY 200, or MATH 255; ECON 301 or ECON 302; MATH 131.

Restrictions: Sophomore standing required.

Usually offered: Alternate Years.

Semester credits: 4.

**ECON 444 Practicum**

Content: Same as ECON 244 but requiring more advanced work. Credit-no credit. May be repeated for credit.

Prerequisites: ECON 103, MATH 105, PSY 200, or MATH 255. ECON 301. ECON 302.

Restrictions: Sophomore standing and consent required.

Usually offered: Annually, fall and spring semester.

Semester credits: 1-4.

**ECON 499 Independent Study**

Content: Same as ECON 299 but requiring more advanced work. May be repeated for credit.

Prerequisites: None.

Restrictions: Sophomore standing and consent required.

Usually offered: Annually, fall and spring semester.

Semester credits: 1-4.