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# ECONOMICS

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## About the Department

Economics focuses on decision making and problem solving. It concerns itself with making intelligent individual and social choices in a world of scarcity. The department believes that a student who spends four years wrestling with economic issues and developing the analytical tools necessary to resolve them will emerge with sharpened reasoning and communication skills and will be more alert to the complexities of the world.

The mission of the economics program is to educate undergraduates in the fundamental concepts and methods of economics and to help them become better informed and more productive citizens. Learning outcomes for students include the development of sufficient facility with the tools of economics to critically analyze private and public decision-making processes, contemporary and historical socioeconomic issues, and the fundamental role that economic forces play in society.

The programs in economics are designed to provide students with a strong background in economic theory and applied analysis. The department offers majors leading to both the Bachelor of Science and Bachelor of Arts degrees in economics, as well as a minor. The BA degree is designed for students seeking broad preparation in more than a single area and is often combined with second majors in international political economy, politics and government, or business. The BS degree is designed for students with strong quantitative skills or those with an interest in graduate study in economics or applied mathematics.

All economics students should: (1) develop sufficient facility with the tools of economics to be able to critically analyze private and public decision-making processes and contemporary and historical socioeconomic issues, and (2) understand the fundamental role that economic forces play in society.

Economics majors should demonstrate the ability to: (1) understand and manipulate complex economic models and draw meaningful connections between these models and empirical applications; (2) conduct an empirical economic research project and convey the findings effectively, both orally and in writing; (3) develop the implications of alternative policy choices by application of microeconomics and macroeconomics; (4) understand and critique recent economic research; (5) be aware of recent developments in the U.S. and world economy; and (6) acquire skills appropriate to their career goals.

Economics majors should develop excellent communications skills, including the ability to communicate effectively both orally and in writing. Using these skills, they should be competent to convey: (1) their understanding of the technical aspects of economics, (2) the results of empirical analysis and applied theory, and (3) their familiarity with economic events.

In addition, economics majors planning to undertake graduate study should develop expertise in mathematics, mathematical economics, and econometrics.

## General Requirements for the Major or Minor

General university degree requirements stipulate that 1) at least four units of the major or three units of the minor be taken in residence at Puget Sound; 2) students earn a GPA of 2.0 in courses taken for the

major or the minor; and 3) all courses taken for a major or minor must be taken for graded credit. Any exceptions to these stipulations are indicated in the major and minor degree requirements listed below.

## Requirements for the Major

### Bachelor of Arts Degree

1. Completion of a minimum of nine units to include
  - a. ECON 101, 102, 284, 301, 302, and 411;
  - b. Three economics electives at the 200-level or above, at least one of which must be 300-level or above. BUS 431 or BUS 432 may be counted as one of the three electives;
2. MATH 160 or 260 (or an equivalent statistical methods course with approval of the Economics Department).
3. MATH 170, 180, 181, or 280.

### Bachelor of Science Degree

1. Completion of a minimum of nine units, to include
  - a. ECON 101, 102, 284, 301, 302, 391, and 411;
  - b. Two economics electives at the 200-level or above, at least one of which must be 300-level or above. BUS 431 or BUS 432 may be counted as one of the two electives;
2. MATH 160 or 260 (or an equivalent statistical methods course with approval of the Economics Department);
3. Calculus through multivariate, MATH 280.

## Requirements for the Minor

Completion of five units to include

1. ECON 101 and 102;
2. Three 200-level or above economics electives, to include at least one course at 300-level or above.

## Notes for Majors and Minors

1. With prior approval from the Economics Department, one unit of ECON 495/496 may be counted toward the electives.
2. Only courses for which the student has received a C or better can count for the major or minor.
3. The economics department reserves the option of not applying courses more than 6 years old to a major or minor.
4. Students who study abroad may apply two approved electives toward their Economics major.
5. Students contemplating graduate school in economics should take three semesters of calculus and linear algebra at a minimum and should include probability theory and differential equations if possible.
6. Students should take at least one 200-level economics course before enrolling in ECON 301 or 302.

## Course Offerings

Unless otherwise specified, each course carries 1 unit of credit and is offered at least once each academic year. Please see "Frequency of Course Offerings" on page 10.

**Seminars in Scholarly Inquiry.** See *Seminars in Scholarly Inquiry in the Core Curriculum section of this Bulletin for course descriptions (page 10).*

### SSI1 173 Alexander Hamilton's America: The Political Economy behind the Musical

**Other courses offered by economics department faculty.** See *Connections in the Core Curriculum section of this Bulletin for*

*Connections course description (page 24). Note: Connections courses offered by economics faculty do not count for the major or minor.*

### **CONN 345 Economics of Happiness**

Satisfies the Connections core requirement.

### **CONN 481 Gamblers, Liars, and Cheats**

Satisfies the Connections core requirement.

### **CONN 410 Science and Economics of Climate Change**

Satisfies the Connections core requirement.

**101 Introduction to Markets and Macroeconomics** This is the first course in the economics two-semester introductory sequence. It introduces students to the market model and macroeconomics. Topics explored in the market model unit include supply and demand, incentives, opportunity cost and comparative advantage. Topics in macroeconomics include national income determination, inflation, unemployment, fiscal and monetary policy and key macroeconomic institutions. *Satisfies the Social Scientific Approaches core requirement.*

**102 Introduction to Behavior and Choice** This is the second course in the economics two-semester introductory sequence. It introduces the student to the microeconomic concepts of consumer choice, demand theory, consumer and producer surplus, the theory of the firm, perfect competition and market failure. Prerequisite: ECON 101. Offered each semester.

**199 Sound Economics** 0.25 unit activity credit This course is an activity credit where students participate in Sound Economics, a student-run economics blog. Students become familiar with the style and technique for academic blog writing, ultimately producing weekly articles which generate novel content, engage in current economic events, and synthesize economic ideas from the literature and the broader economic blogosphere. Weekly meetings are required to promote economic discussions, participation in peer review, workshopping writing skills, and the promotion and management of Sound Economics itself. *Prerequisite: ECON 101 and 102 (can be concurrent) and permission of instructor. Course can be repeated for credit. Offered each semester.*

**218 American Economic History** This course utilizes the tools of elementary economic analysis to explain basic issues in American economic history. In general, the course is organized chronologically. The course begins with discussions of the colonial and revolutionary periods, then continues with analysis of banking development, slavery, the Civil War, and industrial and labor market changes in the later nineteenth century. The course concludes with an analysis of the causes and effects of the Great Depression. *Prerequisite: ECON 101 or permission of the instructor.*

**221 History of Economic Thought** The development of economic thought from late eighteenth century to the early twentieth century. The relation of economic thought to other social, political, and scientific thought is emphasized. The class focuses primarily on seven major figures in the history of economic thought: Smith, Ricardo, Mill, Marx, Marshall, Veblen, and Keynes. Readings are from original and secondary sources. *Prerequisite: ECON 101 and 102 or permission of instructor. Offered each year.*

**225 Environmental and Natural Resource Economics** This course introduces economic perspectives on modern environmental issues. Students study economic theories related to natural resources and the environment. The first half of the course focuses on general concepts and theory, including markets and market failures, non-market valuation, benefit-cost analysis, and dynamic optimization of resource use over time. The second half shifts to applications including renewable and non-renewable resources, pollution, global climate change, fisheries,

water, and concepts of sustainability. *Prerequisite: ECON 101 or permission of the instructor. Offered each year.*

**240 Economics of Migration** This course introduces students to the economics of interregional and international migration. The tools of microeconomics are applied to understand the theoretical and empirical aspects of migration decisions and their implications on regional growth. Using economic models the course explores and understands the causes and effects of migration on receiving and sending regions. While this course primarily focuses on interregional and international migration in the United States, it also includes additional discussions on current applications and topics concerning migration issues in other countries in the world. The final section of the course includes a discussion on immigration policies in the U.S. and abroad and the issues concerning them. *Prerequisite: ECON 101 and ECON 102.*

**241 Regional and Urban Economics** The tools of microeconomics are applied to understand the theoretical and empirical topics in urban and regional economics. The course begins with a discussion about the different definitions of regions, followed by topics on location theory of firms, labor markets, and household migration decisions. The second part of the course focuses on the urban sector of the economy exploring urban growth, land-use patterns, and externalities associated with urban areas. The final section of the course includes a discussion on regional economic policies and its implications on economic growth. *Prerequisite: ECON 101 and ECON 102 or permission of the instructor. Offered each year.*

**244 Gender and the Economy** This course is an analysis of changing roles of women, using theoretical and empirical tools of economics. Topics include work and family issues, the labor market, occupational segregation, and discrimination. Although the primary focus is on women in the U.S., this course devotes a substantial amount of time to issues related to women from other countries. Students gain an understanding of what the economy and economic policy can do, how they can affect men and women differently, and how economic policy can lead to greater gender (in)equality. *Prerequisite: ECON 101 and 102 or permission of instructor. Offered each year.*

**261 Public Finance and Tax Policy** This course presents an overview of the theory and practice of public sector economics in the United States. Topics that receive special attention include the government expenditure and social welfare policies, federal-state-local tax principles and policy, government budgets and deficit finance, and issues associated with public finance in a federal system. *Prerequisite: ECON 101 or permission of the instructor. Offered each year.*

**268 Development Economics** In this course, students acquire empirical skills to analyze critical issues in global development. Students apply simple quantitative tools to data from low-income countries to examine the economic strategies of households and the policy choices of governments. Examples range from using household-level data to identify the effect of central government policies on poverty and inequality in Mexico to examining how market failures and unremunerated household labor lead to underinvestment in the education of girls and women. Other topics covered include how the choice of a human development measure affects economic policy, how individuals and households make migration decisions, how population policy affects—or doesn't affect—fertility choices, how to accurately identify the causal impact of development projects and whether microfinance helps participants escape poverty traps. The course draws heavily on the book *Poor Economics* for rich narratives about the lives of the poor and for recent insights from behavioral economics that can inform development policy. While

Microsoft Excel is the main empirical tool, no experience with Excel is assumed. *Prerequisite: ECON 101. Offered Spring term.*

**270 The Economics of Money and Banking** This course examines the role of money in a modern economy. The focus is on the role of money and financial institutions. Topics covered include interest rate determination, asset and liability management, the role of the Federal Reserve System, and the importance of monetary policy in the macroeconomy. *Prerequisite: ECON 101 or permission of the instructor. Offered each year.*

**271 International Economics** This course surveys the theories, policies, and controversies in international trade and international finance. Students explore various models that attempt to explain the observed patterns of trade and the instruments used by governments to affect trade patterns. Students also examine the determination of exchange rates, the balance of payments and international macroeconomic policy. *Prerequisite: ECON 101. Offered each year.*

**284 Introduction to Econometrics** This course concerns application of statistical theory to the analysis of economic questions. Students learn the tools of regression analysis and apply them in a major empirical project. *Prerequisite: ECON 101, 102, at least one 200-400-level economics course, and MATH 160. Offered each semester.*

**291 Behavioral Economics** This course uses tools from economics and psychology to address individual decisions which are hard to account for with traditional, rational economic theory. Using both theoretical and laboratory methods, students explore topics involving both bounded rationality and bounded self-interest. These topics include the influence of altruism, trust, and emotion in economic decisions and alternative explanations for "irrational decisions": choice anomalies, bias in risk attitudes, and heuristics. Students participate in and develop controlled experiments to examine these issues empirically. *Prerequisite: ECON 101 and 102. Offered each year.*

**301 Microeconomic Theory** This course develops and extends the methods of microeconomic analysis. Topics include consumer-choice theory, models of exchange, the theory of the firm, pricing models, and general equilibrium analysis. *Prerequisite: ECON 101 and 102 or permission of the instructor. Offered each semester.*

**302 Macroeconomic Theory** The basic principles of national income determination are studied from a theoretical perspective. Various models of macroeconomics are analyzed with emphasis on effects of monetary and fiscal policy. Particular emphasis is placed on understanding the causes and consequences of unemployment, inflation, and economic growth. *Prerequisite: ECON 101 and 102 or permission of the instructor. Offered each semester.*

**327 Climate Change: Economics, Policy, and Politics** Global climate change is considered by many to be the most significant environmental challenge of the 21st century. Unchecked, the continued accumulation of greenhouse gases over this century is projected to eventually warm the planet by about 6 to 14°F, with associated impacts on the environment, economy, and society. This course explores the economic characteristics of the climate change problem, assesses national and international policy design and implementation issues, and a survey of the economic tools necessary to evaluate climate change policies. It is largely discussion-oriented and thus requires a high degree of participation by students in the classroom. *Prerequisite: ECON 101. Crosslisted as ENVR 327. Offered every other year.*

**330 Law and Economics** The major focus of this course is on the

application of microeconomic tools to legal issues. The course considers the general issues of legal analysis and microeconomic theory as applied especially to the areas of tort, property, and contract law. *Prerequisite: ECON 101 and 102. Offered fall semester only.*

**335 Modern Labor Economics** This course is devoted to a microeconomic analysis of the labor sector in the U.S. economy. The emphasis is on the allocation and distribution of time as an economic resource. Topics to be discussed include demand for labor, supply of effort, non-market time allocation, market imperfections, human capital theory, and models of wage determination. *Prerequisite: ECON 101 and 102 or permission of the instructor. Offered frequently.*

**341 The Economics of Online Dating** This course develops the connections between economic theory and the online dating market. Economic techniques are used to examine unique features of the online dating market, such as the significance of market thickness, the prevalence of cheap talk, and search theory. Features of the online dating market are explored to simultaneously provide insight on more broadly applied economic principles including adverse selection, network externalities, and matching markets. The course emphasizes microeconomic theoretical techniques to model these phenomena. *Prerequisite: ECON 101 and 102 or permission of instructor. Offered frequently.*

**351 Industrial Organization: Market Structures and Strategic Behavior** The meaning and significance of competition is developed from a variety of theoretical perspectives. The theory of the firm is developed, and the activities of firms in various market settings (competitive, monopolistically competitive, oligopolistic, and monopolistic) are analyzed. The impact of firm behavior on social welfare is also discussed. Substantial emphasis is placed on game theoretical models and their applications, including collusion, product differentiation, entry deterrence, and dynamic firm interaction. *Prerequisite: ECON 101 and 102, MATH 170 or 180, or permission of instructor. Offered frequently.*

**365 Economics and Philosophy** The course examines the relationship between economic theory and contemporary philosophy. The first part of the course is concerned with the connection between economics and epistemology (theory of knowledge) and the second part with the relationship between economics and ethics (moral philosophy). *Prerequisites: ECON 101 and 102, and one course in Philosophy, or permission of instructor. Offered each year.*

**380 Game Theory in Economics** Game theory is a technique for modeling and analyzing strategic decision-making processes in a world of interdependence. Game theoretic techniques are based on strategic interdependence, recognizing that an individual entity's payoff is dependent on the actions of others including consumers, producers, and regulators. The major focus of this class is to introduce and develop the tools of game theory for application to a variety of economic topics such as auctions, investment decisions, competitive behavior, trade, and environmental negotiations. *Prerequisite: ECON 101 and 102. Offered each year.*

**381 Experimental Economics** This course introduces students to the theory and practice of laboratory methods in economics. The course explores and identifies the range of issues in economics to which experimental methods have been applied. In addition, the course focuses on the principles of experimental design, as applied to these issues. Along the way, students participate in a range of classroom experiments which illustrate key ideas. *Prerequisite: ECON 101 and 102, MATH 160, or permission of instructor. Offered each year.*

**384 Advanced Empirical Methods in Economics** This course examines advanced empirical methods used in economics. The focus is on developing and testing hypotheses in economics. The course develops econometric techniques that approximate a desirable experimental design to test causal hypotheses. These techniques are typically called quasi-experimental. In addition, the increasing use of randomized field experiments in economics is examined. Topics are selected from a variety of economics sub-fields, including labor, urban, environmental, development, education, and macro economics. The course also includes development of an independent empirical research project. *Prerequisite: ECON 101, 102, and 284. Offered each year.*

**391 Mathematical Economics** This course applies calculus and linear algebra to the analysis of microeconomic and macroeconomic theory. The tools of mathematical optimization and programming are developed with direct application to the analysis of the problems of consumer behavior, the theory of the firm, general equilibrium, and aggregate economic analysis. *Prerequisites: ECON 301, 302, and MATH 280. Offered spring term only.*

**411 Senior Thesis Seminar** This senior seminar is an advanced study of current topics in economic theory and policy. Students undertake an original senior thesis. Note: Performance on a standardized field exam in economics constitutes one component of the senior research seminar. *Prerequisites: ECON 101, 102, and 301. Offered fall term only.*

### **495/496 Independent Study**

**498 Internship Tutorial** Students who enroll in this course work with a faculty member in the Economics department to develop an individualized learning plan that connects the actual internship site experience to study in the major. The learning plan will include required reading and writing assignments, as well as a culminating project or paper. *Prerequisite: approval of tutorial professor and the Internship Coordinator.*