

Economics

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*(on Sabbatical,
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Economics is the study of how people and societies choose to use scarce resources in the production of goods and services, and of the distribution of these goods and services among individuals and groups in society.

Without any prior college-level preparation in economics, a student who enters Whitman would have to complete thirty-five credits to fulfill the requirements for an economics major. A semester of calculus is also required. Courses completed in the economics department apply to the social science and quantitative analysis (selected courses) distribution areas.

The Economics major: Economics 107 or 109, 227 or Mathematics 128 or Mathematics 338, Economics 307 and 308; additional work in economics to make a total of 35 credits; a minimum of 16 credits must be earned in economics courses numbered 310 through 490; Economics 493, Economics 494 and other economics courses taken P-D-F may not be used to meet the 35 credit requirement. A minimum grade of C (2.0) is required in Economics 307 and 308.

No more than eight off-campus program credits (credits earned in domestic or foreign study programs) and/or transfer credits and/or AP credits may be used to satisfy the course and credit requirements for the major.

In the final semester, students majoring in economics must pass a senior assessment consisting of the Major Field Test (MFT) and oral exam.

Students contemplating a major or minor in economics are encouraged to take a year of calculus and Economics 227 or Mathematics 128 or Mathematics 338, Economics 307 and 308 prior to their junior year. Economics 307 and 308 are prerequisites for many other courses. This is especially important for a student contemplating a junior semester or year abroad or at another institution.

Students planning to pursue honors in Economics are strongly encouraged to complete

Economics 327, Econometrics, before the senior year.

Economics combined majors: The economics department participates in two combined major programs, economics-environmental studies and economics-mathematics.

In the final semester, all economics combined majors must pass a senior assessment consisting of the Major Field Test (MFT) and oral exam.

All economics combined majors and all individually planned majors for which economics is a major component require a minimum grade of C (2.0) in Economics 307 and 308.

The Economics-Environmental Studies combined major: Economics 107 or 109, Economics 227 or Mathematics 128 or Mathematics 338, Economics 307, 308, 477 plus two additional courses in Economics, at least one of which is numbered 310 through 490; additional environmental studies-related courses described in the Environmental Studies listing of the Catalog. Courses completed in this major apply to the social science, science and quantitative analysis (selected courses) distribution areas.

The Economics-Mathematics major: Economics 107 or 109; 307, 308, 327, 428 plus two additional courses in economics, at least one of which is numbered 310 through 490; Mathematics 167, 225, 235, 236, 244, 300, 338; 339 or 350; and three additional credits chosen from mathematics courses numbered above 200. For economics-mathematics majors, Economics 107 or 109, and Mathematics 338 are the prerequisites for Economics 327, and Economics 227 does not apply toward the minimum major requirements. Courses completed in this major apply to the social science, science and quantitative analysis (selected courses) distribution areas.

The Economics minor: A total of 19 credits to include: Economics 107 or 109, 307, 308 and two additional courses in economics including one advanced course numbered 310 through 490.

Other requirements: Mathematics 125 is required for the economics and economics-combined majors, and for the economics minor; and Mathematics 125 is a prerequisite for Economics 307 and 308.

Advanced placement: Students with a score of 5 on both the Principles of Microeconomics and Principles of Macroeconomics Advanced Placement tests are considered to have completed the equivalent of Economics 107, and will receive four credits in economics.

107 Principles of Economics
4, 4

Staff

This introductory course provides basic theoretical tools to enable students to analyze contemporary economic society. Topics include: production, distribution, and pricing of goods and services; determination of the level of national income; monetary and fiscal policies.

109 Principles of Economics and the Environment

x, 4

Crouter

This introductory economics course provides the same coverage of topics as Econ 107, Principles of Economics, but special emphasis is placed on applying concepts to environmental and natural resource issues. Students pursuing an Environmental Studies combined major and others interested in the environment are encouraged to take this course. Students who receive credit for Economics 107 cannot receive credit for this course.

114 Financial Accounting
4; not offered 2007-08

An introduction to the fundamental principles of accounting. The course examines the nature and limitations of financial information resulting from the application of generally accepted accounting principles. Financial accounting emphasizes the use of financial information by external decision makers, such as creditors, stockholders and other investors, and governmental agencies. This course will focus upon the conceptual framework of the financial accounting model rather than bookkeeping techniques. Course counts for general degree credit, but not for economics department credit or for distribution credit.

218 American Economic History
4; not offered 2007-08

A survey of the development of the American economy. Emphasis will be upon examining long-term trends in the major economic variables and factors important to American economic growth, the development of American economic institutions, and the discussion of various historical issues relating to American economic history.

227 Statistics for Economics
4, 4

Parcells

An introductory course which surveys everyday economic statistics, topics in descriptive and inferential statistics, and regression analysis. The concentration is on applications to problems in economics.

Topics include: techniques for organizing and summarizing economic statistical data; random variables and probability distributions; sampling distributions; estimation and hypothesis testing, and simple and multiple regression theory. Computer lab assignments and applications will be part of the course. *Prerequisites:* Economics 107 or 109, college-level algebra.

268 Government and the Economy
x, 4

Crouter

This course examines some ways in which the government intervenes in the economic system. One half of the course will focus on antitrust by studying some important court cases. The other half of the course will explore regulation of particular sectors of the economy which may include electricity, energy, communications, transportation, health care, environmental quality, and worker and product safety. *Prerequisite:* Economics 107 or 109.

277 Global Environmental and Resource Issues
4; not offered 2007-08

This course applies the tools of economic analysis to global environmental and natural resource issues such as global pollution, the relationship of trade and the environment, sustainable economic growth and resource scarcity, economic growth and the environment, and natural resource conflicts. *Prerequisite:* Econ 107 or 109.

293, 294 Special Studies in Economics: Intermediate Level

4

An intermediate course designed to review selected topics in the field of economics through lectures, seminars, or group research projects. *Prerequisite:* Economics 107 or 109.

294 ST: Economics of Crime and Punishment

x, 4

Parcells

Does crime pay? Do governments punish and regulate crime too much or too little? Using economic concepts, this course examines the economic issues of crime and crime control. Topics include: economic costs of crime, models of criminal choice, cost-benefit analysis of allocating criminal justice resources to con-

trol criminal behavior (including discussion of privatization of the criminal justice system), the underground economy, costs and benefits of drug laws, and policies for crime prevention. Some of the current issues to be addressed may include: prison privatization, the death penalty, gun control, three strikes and you're out laws, and the legalization of criminal activities such as drug use, prostitution and gambling. Basic economic tools will be used and they will be developed as needed. One or two field trips during the semester. *Prerequisite:* Economics 107 or 109, or consent of the instructor.

294B ST: Global Collective Action

4; not offered 2007-08

This course covers the principles that underlie collective action amongst nations in this era of rapid globalization. These principles are applied to diverse topics including market failures, international public goods, inequity amongst nations, global health, foreign aid, transnational terrorism, atmospheric pollution, the architecture of economic institutions, intergenerational choices and so on. Tools from the introductory economics course along with some basic game theory will be employed to analyze these issues. *Prerequisites:* Economics 107 or 109.

307 Intermediate Microeconomics

4, 4 **Fall: Crouter; Spring: Storchmann**

A course in intermediate microeconomics (price theory) which includes the theory of consumer behavior, the theory of the firm (including production theory), the pricing and employment of resources, market supply and demand, general equilibrium, and welfare economics. *All economics and economics-combined majors* must pass this course with a minimum grade of C (2.0). *Prerequisites:* Economics 107 or 109; Mathematics 125.

308 Intermediate Macroeconomics

4, 4 **Fall: Hazlett; Spring: Belay**

This course provides an extensive analysis of current macroeconomics issues and events from the perspective of mainstream schools of economic thought. It covers theories of economic growth, business cycles, labor markets, interest rates, inflation and exchange rates; causes and consequences of government deficits, effects of trade deficits; short-and-long term effects of monetary and fiscal policies. *All economics and economics-combined majors* must pass this course with a minimum grade of C (2.0). *Prerequisites:* Economics 107 or 109; Mathematics 125.

327 Introduction to Econometrics

4, 4 **Fall: Parcels; Spring: Storchmann**

Econometrics is concerned with the testing of economic theories through the use of mathematical statistics. This course is an introduction to the science and art of building models and will explore the theory and use of regression analysis to make quantitative estimates of economic relationships. Descriptions of

economic reality, testing hypotheses about economic theory, and forecasting future economic activity are topics that will be covered. Simple and multivariate regression will be examined and simultaneous-equation estimation and forecasting will be studied. State-of-the-art econometric software will be used for empirical analysis. *Prerequisites:* Economics 227 or Mathematics 128 or Mathematics 338, Economics 307, and 308; or consent of instructor. Students pursuing honors in Economics are strongly encouraged to complete this course before the senior year.

328 Game Theory

4, x

Hazlett

Game theory is the study of strategic decisions made by mutually interdependent individuals. This course emphasizes the roles that information and reputation play in determining strategic outcomes. Applications include: patents, cartels, hostile takeovers, labor strikes, predatory pricing, common property problems, central bank credibility, involuntary unemployment, free-rider problems, and voting paradoxes. *Prerequisites:* Economics 107 or 109, and a semester of calculus.

347 Transportation and the Environment

4; not offered 2007-08

This course examines the factors behind the extraordinary growth of transportation in the last 50 years. After reviewing the various calculations and estimates of the external costs of the transportation sector, we will focus on the policies which were developed to contain these costs. The main emphasis will be to develop a critical view with respect to the efficiency, as well as the side effects, of policy instruments such as investments, command and control policies, taxes, and subsidies. Each option will be considered and discussed by means of concrete examples. *Prerequisite:* Economics 307.

349 Wine Economics

x, 4

Storchmann

This course will apply the material taught in microeconomics and econometrics classes. Using the wine industry as an example, it will cover a wide range of theoretical concepts such as auction theory, voting and ranking, revealed preferences, market structure and pricing, and input-output analysis. A particular emphasis will be given to the interaction between environmental parameters and wine price and quality. *Prerequisite:* Economics 307.

358 Introduction to Financial Economics

x, 4

Hazlett

Modern fundamentals of the theory of finance. Topics include investment rules, risk, asset pricing, efficient markets, and debt versus equity financing. *Prerequisites:* Economics 227 or Mathematics 128 or Mathematics 338, and Economics 307.

388 Labor Economics

x, 4

Belay

This course presents labor markets from a micro-economic, macroeconomic and historical perspective. Coverage includes the structure of labor markets, wage determination, unemployment, discrimination, role of unions, effects of government policy, and global economic pressures. *Prerequisite:* Economics 307.

393, 394 Special Studies in Economics: Advanced Level

4

A course designed to review selected topics in the field of economics through lectures, seminars, or group research projects. *Prerequisite:* consent of instructor.

393A Special Topics: Development Economics

4, x

Mascarenhas

This course analyzes the historical growth patterns of advanced and developing countries to gain insights into why countries are at different levels of development. It covers several growth theories; the relationship between growth and structural change as well as the role of markets versus central planning. Factors that influence growth, including land, labor, credit, foreign investment and aid, are explored. Coverage also includes the role of the government in the growth process and policy measures to promote growth. *Prerequisites:* Economics 307 and 308. *Distribution:* social science.

407 Monetary Theory and Policy

4, x

Hazlett

A study of money, private and public banking institutions, central bank controls, monetary theory, and an analysis of the problems associated with contemporary monetary policy. Emphasis is on theory and national policy rather than bank operations. *Prerequisite:* Economics 307 and 308.

408 Applied Macroeconomics

4, x

Belay

This course will turn students' attention to the problems of integrating empirical methods into macroeconomics analysis. It provides students with hands-on computer based exercises on some of the results of testing or estimating macroeconomics models. This course covers a range of domestic topics, such as the behavior of investment spending, consumer spending, government spending and business cycles in the U.S. On the international side, it covers world growth rates, exchange rates and international business cycles and the global economy. *Prerequisite:* Economics 308.

428 Mathematical Economics

4, x

Belay

An introduction to the application of mathematics to the theoretical aspects of economic analysis. Such mathematical methods as matrix algebra, differential calculus, and difference equations are employed to develop and analyze numerous economic models, including several models of the market, models of the firm and consumer, national income models, as well

as models of economic growth. The course does not require exceptional mathematical ability. It is intended for all students with an interest in mathematics and economics. *Prerequisites:* Mathematics 126; Economics 307 and 308.

438 Public Finance

x, 4

Mascarenhas

A study of the tax and expenditure policies of government, and how they affect the economy and the economic welfare of society. Typical coverage includes the theory of public goods, externalities, public choice, the impact of government upon the distribution of income, transfer programs, taxation, debt finance, and the economic consequences of a federalist system. *Prerequisite:* Economics 307.

447 Global Economics

x, 4

Mascarenhas

Global Economics provides an introduction to the theories underlying international trade with an emphasis on helping us explain why, what and with whom nations trade. We will analyze various barriers to trade that nations erect, with a particular emphasis on the redistributive effects of trade and trade barriers. The course will cover the interplay between politics and economics in a range of different issue areas, including the international trading system (GATT, WTO, etc.) and attempts at regional economic integration (the European Union, NAFTA). The theoretical models will be used to analyze topics making headlines like labor standards, environment and off-shoring. *Prerequisites:* Econ 307.

448 International Finance

x, 4

Hazlett

Consideration of recent developments in international finance and open-economy macro-economics, and of policy issues in their historical context and in modern theory. Issues include inflation and business cycles in open economies, fixed versus floating exchange rates, a gold standard, banking and currency crises, monetary unions, balance of payments issues, and the role of the International Monetary Fund. *Prerequisites:* Economics 307 and 308.

467 Law and Economics

x, 4

Crouter

This seminar examines the ways in which the legal system acts as a complement to, and a substitute for, the market system. Specific topics will include property rights, contracts, torts, product liability, and criminal law. *Prerequisite:* Economics 307.

477 Environmental and Natural Resource Economics

4, x

Crouter

The first portion of this seminar deals with environmental economics and establishes a framework with which to view environmental problems. Topics covered include the theory of externalities and the features of different remedies, the evaluation of environmental amenities, and a survey of current en-

vironmental policies. The second portion of the course deals with natural resource economics and considers the use of renewable and nonrenewable resources over time. Finally, international environmental and natural resource issues are addressed. *Prerequisite*: Economics 307.

478 Urban Economics

4; not offered 2007-08

A study of the economic framework of urban areas. Economic interrelationships between the urban core and the metropolitan area will be examined, including problems of location, land use, the distribution of population and industry, transportation, finance, housing, race, and poverty. *Prerequisites*: Economics 227 or Mathematics 128 or Mathematics 338, and Economics 307.

479 Economic Geography

x, 4

Parcels

The study of locational, organizational and behavioral principles and processes associated with the spatial allocation of scarce resources and the spatial patterns and (direct, indirect, economic, social, and environmental) consequences resulting from such allocations. State-of-the-art Geographical Information Systems (GIS) software will be used for analysis and computer-based projects. *Prerequisites*: Economics 227, (Math 128 or 338, while not ideal, would be an acceptable substitute), Economics 307; or consent of the instructor.

493, 494 Directed Reading

2-4, 2-4

Staff

Independent reading reports, and tutorials in areas chosen by students. Graded P-D-F. *Prerequisite*: consent of instructor.

495 Seminar in Economic Problems

4; not offered 2007-08

A senior seminar in some relevant economic problem or problems. *Prerequisite*: consent of instructor.

498 Honors Thesis

4, 4

Staff

Designed to further independent research projects leading to the preparation of an undergraduate thesis or a project report. *Required of* and limited to senior honors candidates in economics. *Prerequisite*: admission to honors candidacy.