

Economics

PROFESSORS **Feldman** (Chair), **Abegaz** (Director, Africana Studies Program), **Anderson** (Francis T. West Professor of Economics), **Archibald** (Chancellor Professor), **Basu, Campbell** (CSX Professor of Economics and Public Policy), **Hausman** (Chancellor Professor), **Jensen** (Director, Thomas Jefferson Program in Public Policy), **Mellor, Moody, Pereira** (Thomas Arthur Vaughn Professor of Economics), **Schmidt**, and **Stafford** ASSOCIATE PROFESSOR Hicks. ASSISTANT PROFESSORS **Coibion, He, McHenry, McInerney, Parman, Schreiber**. VISITING INSTRUCTORS **Dudley, Meyer, Phillips, Shelburn**. EMERITUS PROFESSOR **Haulman**

The program in economics offers courses that provide a valuable component of a liberal education as well as providing a foundation for graduate work in economics or for enrollment in professional programs such as law, business, urban and regional planning, public policy, as well as for careers after completion of the B.A. degree. For additional information on the program see Economics: A Handbook for Majors, Minors, and other Interested Students, available on the department website.

Requirements for Major

Required Credit Hours: 30 (beyond the 100 level)

Major Computing Requirement: Economics 307 (or equivalent, see below)

Major Writing Requirement: The Major Writing Requirement may be satisfied by completing one of the following courses: Economics, 308, 341, 342, 355, 380, 400, 411, 412, 446, 451, 456, 460, 474, 480, 484, an independent study course with a writing component (490) or departmental honors (495-496).

Core requirements: At least 9 semester hours must be taken in courses numbered 400 or above. All majors are required to take the following courses:

- 303 Intermediate Microeconomic Theory (3 credits)
- 304 Intermediate Macroeconomic Theory (3 credits)
- 307 Principles and Methods of Statistics (3 credits)

Students may substitute Business 231, Math 351, or Sociology 353 for the statistics requirement, but these courses do not count in the number of credit hours toward the major.

Requirements for Minor

Required Credit Hours: 15 (beyond the 100 level)

Core Requirements: The 15 semester hours must include at least one Intermediate Economic Theory course (303 or 304) and at least 3 semester hours in courses numbered 400 or above.

Consult the Department website (<http://www.wm.edu/economics>) for updated information on curricular requirements, course offerings, and other opportunities.

Description of Courses

101. Principles of Microeconomics.

(GER 3) Fall and Spring (3,3) Staff.

The study of economic behavior at the level of individual households and firms. Topics include scarcity and choice, supply and demand, production, cost and market organization.

102. Principles of Macroeconomics.

(GER 3) Fall and Spring (3,3) Staff. Prerequisites: ECON 101/151.

The study of aggregate economic activity. Topics include national income and output, unemployment, money and inflation, and international trade.

150. Freshman Seminar: Topics in Economics.

Fall or Spring (3-4) Staff.

This seminar focuses on specific topics in economics and will vary from semester to semester. This course may not substitute for ECON 101 or ECON 102.

151. Freshman Seminar: Microeconomic Topics.

(GER 3) Fall (4) Staff.

Seminars focus on topics in microeconomics and will vary from semester to semester. This course is a substitute for ECON101. Students may not receive credit for ECON 101 and ECON 151.

152. Freshman Seminar: Macroeconomic Topics.

(GER 3) Spring (4) Staff. Prerequisites: ECON 101/151.

Seminars focus on topics in macroeconomics and will vary from semester to semester. This course is a substitute for ECON102. Students may not receive credit for ECON 102 and ECON 152.

300. Topics in Economics.

Fall or Spring (3) Staff. Prerequisites: ECON 101/151, ECON 102/152.

Classes focusing on specific topics in economic theory or policy. The topics differ across sections and vary from semester to semester.

303. Intermediate Microeconomic Theory.

Fall and Spring (3,3) Campbell, Freeborn, Pereira. Prerequisites: ECON 101/151.

The theory of price and resource allocation in a market economy.

304. Intermediate Macroeconomic Theory.

Fall and Spring (3,3) Abegaz, Archibald, Coibion, Schmidt, Schreiber. Prerequisites: ECON 102/152.

Theories of aggregate economic behavior.

307. Principles and Methods of Statistics.

(GER 1) Fall and Spring (3,3) Archibald, Hausman. Prerequisites: ECON 101/151, ECON 102/152.

A study of the principles and uses of descriptive statistics, probability distributions, sampling distributions, statistical inference, hypothesis testing and regression analysis. See section heading "Statistics" under "Requirements for the Baccalaureate Degree".

308. Econometrics.

Fall and Spring (3,3) He, Jensen, Moody, Schmidt. Prerequisites: ECON 101/151, ECON 102/152, ECON 307.

A survey of the econometric methods that are commonly used in economic research with emphasis on the application of these techniques rather than their theoretical development. No calculus or linear algebra is required.

311. Money and Banking.

Fall or Spring (3) McBeth. Prerequisites: ECON 101/151, ECON 102/152.

An analysis of the monetary system with emphasis upon financial institutions, determination of the money supply and the relationship between money and economic activity.

315. Financial Economics.

Fall (3) Moser. Prerequisites: ECON 101/151, ECON 102/152.

A survey of the theory and principles of the financial system and of financial economics.

321. Economics of the Public Sector.

Fall and Spring (3,3) McInerney. Prerequisites: ECON 101/151, ECON 102/152.

Theory and principles of public economics with emphasis on state and federal expenditure programs and taxes. Topics include education, welfare, Social Security, unemployment insurance, and the impact of taxes on labor supply, savings, and wealth.

322. Environmental and Natural Resource Economics.

Fall (odd numbered years), Spring (3) Hicks, Dudley, Stafford. Prerequisites: ECON 101/151

The application of efficiency and equity criteria to environmental issues. Topics include policies for environmental protection, renewable resources, exhaustible resources and unique natural environments.

331. Introduction to Mathematical Economics.

Fall (3) Moody. Prerequisites: ECON 101/151, ECON 102/152.

A survey of mathematical techniques used in economics including topics in linear algebra, calculus and optimization techniques. Emphasis will be on the economic applications of these methods.

341. American Economic History.

(GER 4A) Fall or Spring (3) Hausman, Parman, Phillips. Prerequisites: ECON 101/151, ECON 102/152.

A study of the major trends and developments in the American economy from colonial times through New Deal. Topics include trade, transportation, business, banking, labor, and policy.

342. Global Economic History.

(GER 4A) Fall or Spring (3) Hausman, Parman. Prerequisites: ECON 101/151, ECON 102/152.

An introduction to the global economic history of the world from ancient times to the mid-20th century, with emphasis on a European development, growth, world-wide economic interactions perspective.

346. Comparative Economic Inequality in Multiracial Societies.

(GER 4C) Spring (3) Abegaz. Prerequisites: ECON 101/151, ECON 102/152.

A comparative study of the historical patterns of inequality of income and wealth in multiracial economies. Theory and empirical evidence on the dynamics of racial and class inequality will be examined with a focus on three case studies (Brazil, South Africa, and the U.S.) (Cross listed with AFST 310).

355. Seminar in Population Economics.

Fall or Spring (3) Jensen. Prerequisites: ECON 101/151, ECON 102/152.

Economic analysis is used to examine the determinants and consequences of population change. Topics considered include the economics of population growth in developing countries, population aging in developing countries and illegal migration into the United States.

362. Government Regulation of Business.

Fall or Spring (3) Parman, Stafford. Prerequisites: ECON 101/151, ECON 102/152.

An analysis of the principles and purposes of government regulation of business. Topics include energy policy, consumer and worker protection, transportation, telecommunications and public utilities.

380. Experimental Economics.

Fall or Spring (3) Anderson. Prerequisites: ECON 101/151.

Experimental economics is a field in which decision making is examined in a controlled laboratory environment. The resulting data are used to evaluate theories and policies that are not easily tested with naturally occurring data. This course surveys experimental research in many fields including decision and game theory, environmental economics, industrial organization, and public economics, and provides a basic framework for designing and conducting experiments.

382. Comparative Economics.

(GER 4C) Fall or Spring (3) Abegaz. Prerequisites: ECON 101/151, ECON 102/152.

A study of the centrally planned economy as a distinctive system of resource allocation and income distribution. The emphasis is on the economics of transition from classical central planning to a market economy. Case studies of reform include Russia, Hungary, the Czech

Republic, Poland and China.

***398. Internship.**

Fall and Spring (1) Staff. Prerequisites: ECON 101 and ECON 102.

A pass/fail, directed readings/research course in conjunction with an internship experience.

400. Topics in Economics.

Fall or Spring (3) Staff. Prerequisites: ECON 303 and/or ECON 304.

Seminar classes, normally 10-15 junior or senior economics majors, focusing on specific topics in economic theory or policy. Topics vary by section and semester to semester.

403. Advanced Microeconomic Theory: Incentives.

Fall or Spring (3) Campbell. Prerequisites: ECON 303, MATH 111 or ECON 331.

An investigation of contracts and other devices that harness self-interest. The aim is to determine the conditions under which the mechanisms generate socially optimal outcomes. Situations in which the pursuit of self-interest is self-defeating, yielding outcomes that are far from socially optimal, are also treated. Calculus is used to identify and evaluate outcomes.

407. Cross Section Econometrics.

Fall (3) Jensen, Hicks. Prerequisite: ECON 308.

Economic data often come as a cross-section of data points, frequently collected as part of a sample survey. The nature of these data calls for the use of a specialized set of tools, which will be developed in the course. Among the models to be examined are discrete, censored and truncated dependent variable, sample selectivity and duration models. Hands-on analysis of data sets will feature prominently.

408. Time-Series Econometrics.

Spring (3) Moody. Prerequisites: ECON 308, ECON 331 (or MATH 211).

This course is an introduction to the econometric analysis of time series data. Topics include ARIMA models, forecasting, analysis of nonstationary series, unit root tests, co-integration and principles of modeling.

410. Game Theory.

Fall or Spring (3) Anderson. Prerequisite: ECON 101 and ECON 303.

Game Theory is a set of mathematical models used to study how individuals make decisions when their actions affect each other. The emphasis of the course material is a mix of formal theory and applications, including bargaining, information and auctions. While economists turn to game theory to model many situations, the field is firmly rooted in mathematics. Thus, you will struggle in this course if you are not very comfortable with college-level algebra and basic calculus. In addition to mathematical modeling, this course will make extensive use of economics experiments to identify situations where game theory predicts actual behavior and to learn more about why game theory fails to predict behavior in some settings.

411. Advanced Macroeconomics

Fall or Spring (3) Coibion. Prerequisite: ECON 304, MATH 111.

A critical survey of the current state of macroeconomic model building including discussions of Neoclassical and New Keynesian models, emphasizing the microeconomic foundations of the models and their implications for business cycle analysis.

415. Applied Financial Derivatives.

Fall (3) Tarter. Prerequisites: ECON 303 and 307.

The economic theory of stochastic calculus and the solutions of the resulting partial differential equations are developed in the context of equity derivatives. Corollary risk-management characteristics are considered. Context is provided as each student manages a paper portfolio of electronic derivatives.

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420. Economics of Information.

Fall or Spring (3) Campbell. Prerequisites: ECON 303.

How markets and governments create incentives to elicit private information from individuals and firms, and how individual welfare is affected as a result. Topics include: Auctions; bank failures; internet commerce; education; mandatory retirement; voting and preference revelation; allocating dormitory rooms.

422. Applied Environmental Economics.

Fall (even numbered years) (3) Hicks. Prerequisites: MATH 111, ECON 308.

This course will cover the application of welfare economics to environmental problems. Topics include differences in consumer surplus and other measures of economic welfare and techniques to measure the economic value of environmental resources. The course will be organized around contemporary environmental issues; for example, the economic value of oyster reef restoration in the Chesapeake Bay, preservation of endangered species, and impacts of global climate change on property. The course will examine these problems using real world data and will expose students to a wide variety of economic valuation techniques.

435. Topics in Mathematical Economics.

Spring (3) Moody. Prerequisite: ECON 331.

A survey of topics in mathematical economics including growth theory, general equilibrium analysis and duality theory.

446. History of Economic Thought.

Fall or Spring (3) Haulman. Prerequisites: ECON 303, ECON 304.

The development of economic analysis with emphasis upon classical and neo-classical economics.

451. Labor Market Analysis.

Fall or Spring (3) McHenry. Prerequisite: ECON 303.

A theoretical and empirical analysis of labor demand and supply behavior. Topics include labor force participation, labor mobility and wage differentials, the economics of labor unions, and analyses of minimum wage, occupational safety and health, and unemployment insurance.

456. Economics of Health Care.

Fall or Spring (3) Mellor. Prerequisite: ECON 303

This course applies economic analysis to the study of health and health care. Topics include: the determinants of health status, features of the market for medical care, insurance and health care delivery, and the role of government in the health care sector.

460. Economic Analysis of Law.

Fall or Spring (3,3) Stafford. Prerequisite: ECON 303.

Economic analysis is employed to explain the existence of prevailing legal rules in standard areas of legal study such as property, contracts, torts, family law, civil procedure and criminal procedure.

461. Industrial Organization: Theory, Evidence and Cases.

Fall or Spring (3) Stafford. Prerequisite: ECON 303.

An analysis of the key theories of market behavior and performance under varying conditions of competition and monopoly, the empirical studies testing these theories and the application of the Federal antitrust laws to protect market competition.

474. Seminar in International Economic Integration.

Fall or Spring (3) Abegaz, Feldman. Prerequisite: ECON 303, 304, and 475.

The theory and practice of preferential trade arrangements and their impact on the multilateral trading system. Topics covered include stages of regional integration (free trade area, customs union, economic and monetary union), regionalism versus multilateralism and the role of domestic interests in the formulation of trade policy. Case studies include NAFTA, the EC/EU and the GATT.

475. International Trade Theory and Policy.

Fall and Spring (3,3) Basu, Feldman. Prerequisite: ECON 303.

This course examines the gains from trade, trading patterns between countries, the effect of trade on income distribution and the effects of industrial and commercial policies. Other topics include the political economy of trade protection and the development of the world trading system.

476. International Finance and Open Economy Macroeconomics.

Fall and Spring (3) Basu, Coibion, Schmidt, Schreiber. Prerequisite: ECON 304.

This course is a theoretical and empirical examination of international financial markets and national income determination in an open economy. Topics include exchange rate systems, the balance of payments and macroeconomic policymaking among interdependent economies.

483. Development Economics.

Fall or Spring (3,3) Abegaz, Basu, Feldman. Prerequisites: ECON 101/151, ECON 102/152, ECON 303 and ECON 304.

A survey of theories that seek to explain the process of economic development and the contrasts in economic performance among low-income countries. Emphasis on the link between the economy and institutions, both market and non-market. Topics include sources and sectoral distribution of growth, evolution of markets, trade, finance, income distribution, and development policy/strategy.

484. Economics of Growth.

Fall or Spring (3) Abegaz. Prerequisites: ECON 303, ECON 304.

Explores models of economic growth with emphasis on developing economies. Examines proximate causes (factor accumulation and technology), correlates (industrialization, demography, inequality), fundamentals (geography, history, culture, institutions), and policy implications. Blends theory with empirical evidence on the convergence and divergence of per capita incomes.

*490. Independent Study in Economics.

Fall and Spring (1-4, 1-4) Staff. Prerequisites: ECON 303 and/or ECON 304.

A directed readings/research course conducted on an individual or small group basis on various topics in economics. Normally 3 credits, this class may be taken for 1, 2 or 4 credits with permission of the instructor. No more than one independent study course may be taken in any one semester and no more than 6 independent study credits may be counted toward the economics major.

†*495-496. Honors.

Fall, Spring (3,3) Staff. Prerequisite: Major in economics.

Students wishing to pursue Honors in economics should obtain a copy of departmental guidelines from the economics department office. Those admitted to the program will enroll in these courses during their senior year. A student who completes an Honors thesis but does not achieve Honors may receive credit for ECON 490. For College provisions governing the Admission to Honors, see catalog section titled Honors and Special Programs.