

# Economics

## *Social Sciences Division*

Personal fulfillment and effective citizenship require some understanding of the principles of human interaction in society. Economics is the scientific study of choosing how best to use technology and limited resources to maximize individual or social welfare. Through its analysis of behavior, economics can add much to our understanding of vital public-policy issues. A grasp of the principles of economics enables students to analyze problems such as inflation, unemployment, economic growth, pollution, monopoly power, consumer exploitation, race and gender discrimination, strikes, urban blight, and international trade.

Economics can also be defined by its methods of analysis. In seeking to understand and predict social behavior, economists build, test, and revise models. Economics students learn to work with models of the behavior of consumers, producers, suppliers of labor and capital, and government. They study the markets in which these economic agents interact. This technique for understanding the experience of men and women in society differs sharply from the literary and intuitive methods of the humanities and fine arts.

Economics is a highly integrated discipline in which most economists work simultaneously with theory, analytical models, data, quantitative research methods, and public-policy issues. Each economics course at Kenyon introduces all of these elements, in varying mixes. The common thread among the courses is reliance on models that explain and predict human behavior. Economics courses at Kenyon are designed to help students develop the ability to think in a rigorous, analytical fashion and to develop communication skills. This emphasis places economics at the heart of liberal arts education.

### FACULTY

**William R. Melick**, Chair, Bruce L. Gensemer Professor

**Galina A. An**, Assistant Professor

**Jay R. Corrigan**, Associate Professor

**David E. Harrington**, Himmelright Professor

**James P. Keeler**, Professor

**Kathy J. Krynski**, Himmelright Professor

**Cara E. McDaniel**, Assistant Professor

**Jaret S. Treber**, Assistant Professor

### EMERITUS FACULTY

**Carl T. Brehm**, Professor Emeritus

**Bruce L. Gensemer**, Professor Emeritus

**Richard L. Trethewey**, Professor Emeritus

**NEW STUDENTS**

ECON 101 (Principles of Microeconomics) and ECON 102 (Principles of Macroeconomics) are the complementary set of foundation courses in economics. Both are lecture and discussion courses, with usually between twenty and thirty students in each section. The introductory courses survey theories of producer and consumer behavior and show how these theories can be used to predict the consequences of individual, business, and government actions. Current public-policy issues are also studied. Different instructors teach sections of these courses using different teaching styles. All sections, however, feature several examinations each semester, and in most sections there are also homework assignments or quizzes. In addition to a major text, most sections also introduce readings about current issues. These courses are an excellent introduction to economics for those who plan no further work in the discipline, but they are also the foundation and prerequisites for all upper-level courses and the first courses in the economics major.

When should one enroll in ECON 101 and ECON 102? Even though ECON 101 and 102 are challenging introductory courses, most first-year students who take these courses perform well. Those students who are most successful in the principles courses have a strong general preparation for college, reasonably good study habits, and academic motivation to keep up with reading and homework assignments every week.

There are significant advantages in taking ECON 101 and ECON 102 as a first-year student. The courses prepare one to take virtually any other economics course starting in the sophomore year. Students who are seriously considering an economics major often find this early start helpful.

Can economics majors participate in off-campus study in the junior year? Yes, but those who plan to major in economics and study off campus should seriously consider enrolling in ECON 101 and 102 as first-year students and ECON 201 and 202 (intermediate economic theory) as second-year students to provide a sound base for off-campus study.

**REQUIREMENTS FOR THE MAJOR**

Successful completion of ECON 101 and ECON 102 with a grade of at least C in each is a prerequisite for admission to the major program. A minimum of 3.5 additional units, for a total of 4.5 units within the department, is required, including ECON 201 and 202, a semester of seminar, and a course in quantitative methods. This last requirement may be satisfied by either ECON 205 (Empirical Economics) or ECON 375 (Introduction to Econometrics), both of which have a prerequisite of a college introductory statistics course.

**SENIOR EXERCISE**

The Senior Exercise involves a systematic effort to understand social behavior using economic principles. The exercise will allow majors to gain an appreciation of the integrity of economics as a discipline. Majors must answer two essay questions. Students typically receive the questions in early December, and their answers are due at the end of the first week of classes for the spring semester. There is also an oral examination conducted by the economics faculty members for each student who completes the written portion of the exercise.

**HONORS**

The Honors Program in economics provides an opportunity for more independent research and study than is available in regular courses of study. Honors candidates are required to participate in both the junior and senior honors seminars, and in ECON 375 (Introduction to Econometrics). In the honors seminars, students present and discuss with their peers the results of their research. Those interested in the Honors Program should discuss this possibility with a member of the department.

**ECONOMICS COURSES****ECON 101 Principles of Microeconomics**

*Credit: .5 unit QR*

This course studies issues of economic choice, economic efficiency, and social welfare. The course presents theories of consumer and producer behavior and shows how these theories can be used to predict the consequences of individual, business, and government actions. Topics covered include opportunity cost, the gains from trade, supply and demand analysis, and price controls; consumer choice; production and cost; product pricing, market structure, monopoly power, and government regulation; resource conservation, and pollution. This course is required of students who major in economics.

**ECON 102 Principles of Macroeconomics**

*Credit: .5 unit QR*

This course studies national economic performance. Building upon the microeconomic theories of consumer and producer behavior developed in ECON 101, the course introduces models that focus on the questions of unemployment, inflation, and growth. Topics covered include measurement of national income and inflation, macroeconomic models, saving and investment, money and banking, fiscal and monetary policy, and international trade and finance. This course is required of students who major in economics. Prerequisite: ECON 101.

**ECON 201 Microeconomic Theory**

*Credit: .5 unit QR*

Microeconomics is an intensive study of the fundamental logic of economic behavior primarily within the context of a market economy. The course develops a systematic analysis of consumer and producer behavior, linked together through the principles of exchange and market structure. The resulting explanation of product prices and factor rewards is used to evaluate and analyze economic efficiency and the distribution of welfare under alternative economic policies and conditions. Prerequisites: ECON 101 and ECON 102.

**ECON 202 Macroeconomic Theory**

*Credit: .5 unit QR*

This course is a theoretical and applied study of the level of national income and employment. The performance of the economy, in terms of prices, interest rates, unemployment rates, international trade relations, business cycles, and the long-run growth of income, has significant effects on our standards of living. The course offers explanations of macroeconomic performance in these aspects. Diverse schools of thought exist, distinguished by theoretical concepts, priorities in performance goals, and empirical evidence. The course considers these approaches and also emphasizes the microeconomic foundations of macroeconomic theory. Government is

active in the management of both domestic and international aspects of the macroeconomy, and the course considers current public-policy issues. Prerequisites: ECON 101, ECON 102, and ECON 201, or permission of the instructor.

### **ECON 205 Empirical Economics**

*Credit: .5 unit QR*

Students learn how to express economic concepts in quantitative terms, perform basic statistical measures and tests of hypotheses using a spreadsheet program, and interpret quantitative presentations of information. Students learn how the economics literature presents research by studying examples from journal articles. Students also study the choice of appropriate methods for analyzing empirical economic research questions. Topics include the scientific method, applications of statistical concepts in economics, measurement of economic concepts, and the use of mathematical models, graphs, and data sources. Prerequisites: ECON 101, ECON 102, and a college course in statistics, or permission of the instructor.

### **ECON 331 Economics of Development**

*Credit: .5 unit QR*

Students examine the economic conditions and problems of developing economies. Alternative theories of economic development are studied, as are strategies for achieving development goals. Specific topics include the meaning of development; historical and theoretical perspectives; income distribution; agriculture, population, and human resources; industrialization, employment and technology; urbanization and migration; foreign trade, investment, and aid; and government planning. Prerequisites: ECON 101 and ECON 102 (or ECON 102 concurrently), or permission of the instructor.

*Instructor: An*

### **ECON 335 Economics of Immigration**

*Credit: .5 unit*

This course examines the impact of immigration on the U.S. economy, focusing on why people choose to come here and what impact they have on labor markets, product markets, income inequality, the nature of cities, and government budgets. The goals of the course are (1) to develop the analytical tools used by economists to understand the economic effects of immigration, (2) to examine the empirical evidence on these effects, and (3) to assess the political economy and potential economic and political consequences of U.S. immigration policy choices. The course will also examine the impact of immigration on the countries that people leave. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

*Instructor: Harrington*

### **ECON 336 Environmental Economics**

*Credit: .5 unit QR*

This course uses economic analysis to better understand the nature of environmental issues such as pollution and the allocation of natural resources. The course also examines the economic rationale behind policies aimed at improving the quality of the environment and altering our use of natural resources. The relative strengths of alternative policies will be discussed using a series of case studies focusing on actual policies aimed at correcting environmental problems. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

*Instructor: Corrigan*

### **ECON 337 Portfolio Allocation and Asset Pricing**

*Credit: .5 unit*

This course examines the optimal allocation of an individual's wealth among risky financial assets and the related question of the pricing of these risky assets. After a consideration of various measures of risk and return, modern portfolio theory is used to derive the capital asset pricing model. The empirical performance of the capital asset pricing model will be analyzed and alternative asset pricing models will be discussed. Throughout the course, equity shares will be used as a particular application. (The pricing of fixed income assets is left to ECON 343 Money and Financial Markets.) The remainder of the course is spent on derivative assets, most importantly futures and options. Time permitting, options will be treated in some detail, concluding with a discussion of the Black-Scholes option pricing model. While completing assignments, students will make fairly heavy use of a spreadsheet program such as Excel. Prerequisites: ECON 101 and ECON 102, or permission of the instructor. Recommended: MATH 106.\n

*Instructor: Melick*

### **ECON 338 International Trade**

*Credit: .5 unit*

This course focuses on the basics of international trade—theories of international trade, the instruments of trade policies, their impact on welfare and employment, factor movements, and economic integration. While emphasis is placed on developing and empirically testing theories, we also discuss major trade-related issues such as the economic effects of globalization, the role of the World Trade Organization, labor and immigration issues, foreign direct investment, and outsourcing. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

### **ECON 339 International Finance and Open-Economy Macroeconomics**

*Credit: .5 unit QR*

This course examines the determination of national incomes, price levels, interest rates, and exchange rates using open-economy macroeconomic models. The course begins with an intensive study of balance of payments accounting and the foreign exchange market, followed by a consideration of the law of one price, purchasing power parity, and uncovered and covered interest parity. The second half of the course will be spent deriving several open-economy macroeconomic models and using these models to discuss important international financial policy issues. These discussions will highlight the interaction of domestic policymakers with important international financial institutions such as the International Monetary Fund, the World Bank, and the Bank for International Settlements. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

### **ECON 342 Economics of Regulation**

*Credit: .5 unit QR*

This course will examine government regulation of the behavior of individuals, firms, industries, and markets. The first half of the course will focus on the economic regulation (and deregulation) of industries and occupations. Examples of government-imposed restrictions on prices, quantities, and the freedom to enter and exit industries and occupations will be drawn from medical services, funeral services, and entertainment industries. The second half of the course will focus

on various types of social regulations, focusing on health and safety regulations. Throughout the course, we will explore the economic rationales for the regulations and evaluate their effects upon economic efficiency. Prerequisite: ECON 101 and ECON 102. Offered once every two or three years.

*Instructor: Harrington*

### **ECON 343 Money and Financial Markets**

*Credit: .5 unit QR*

This course examines U.S. money and financial markets, and their interaction with and influence on prices, real output, employment, and international trade. After an extensive discussion of fixed income pricing and the term structure, the class will consider the operations of financial institutions and the Federal Reserve System. The implementation of monetary policy and its effect on domestic and foreign financial markets, real output, and foreign trade will also be examined. In addition, alternative domestic and international monetary arrangements will be considered. While completing assignments, students will make fairly heavy use of a spreadsheet program such as Excel. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

### **ECON 344 Labor Economics**

*Credit: .5 unit QR*

This course provides an introduction to the economic analysis of labor markets. Topics include: the determinants of labor demand and labor supply; the theory of compensating wage differentials; formation of human capital; discrimination in the work place; public policy toward the work place; and the determinants of earnings inequality. Prerequisites: ECON 101 and 102 or permission of instructor.

### **ECON 346 Industrial Organization**

*Credit: .5 unit QR*

This course provides an introduction to industrial organization, a field that focuses on how firms, interacting through markets, attempt to exploit opportunities for profit. We examine the standard models of perfect and imperfect competition, emphasizing the strategic behavior of the interacting firms. Topics include pricing models, strategic aspects of business practice, vertical integration, and technological change. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

### **ECON 347 Economics of the Public Sector**

*Credit: .5 unit QR*

This course is a study of the public sector in the U.S. economy, featuring government provision of public goods, redistribution of income, and taxation. Students consider the theory that justifies government intervention in a market economy, as well as the reasons for government's tendency to create economic inefficiencies. Specific expenditure programs such as defense, health care, education, social insurance, and welfare are studied, as well as specific taxes. Each student writes a term paper. Prerequisites: ECON 101 and 102 or permission of instructor.

*Instructor: Corrigan*

### **ECON 355 Business Cycles**

*Credit: .5 unit*

This course explores the patterns of change of the national economy, through business cycle expansions and recessions, and their effects on employment and income. Data on U.S.

and worldwide economies will be analyzed to identify regular behavior that characterizes a macroeconomic business cycle. Economic theories will be offered that specify different initial causes of the cycle, some of which are endogenous while others are outside influences such as government policy or technological change. Theories also suggest how the cause is able to generate the full cycle that affects the macroeconomy. The Great Depression of the 1920s and 1930s will be considered as an extreme example. Recent and current cycles will be considered to understand their causes and characteristics. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

*Instructor: Keeler*

### **ECON 357 Economics with Calculus**

*Credit: .5 unit QR*

This course introduces students to the tools of derivative and integral calculus used in microeconomics and macroeconomics. These tools include Lagrange Multiplier methods for unconstrained and constrained optimization, Kuhn-Tucker conditions for nonlinear programming, and Hamiltonian functions for problems of dynamic optimization. The course will emphasize the application of the tools of calculus rather than the underlying calculus theory. Therefore, students taking the course are expected to be familiar with derivative and integral calculus, as well as with the main principles of micro- and macroeconomics. Prerequisites for the course are ECON 101, ECON 102, MATH 111, and MATH 112, or permission of the instructor. Offered every other year.

### **ECON 358 Economics of Health**

*Credit: .5 unit QR*

This course examines the economic aspects of the production, distribution, and organization of health-care services. Topics include measuring output; structure of markets; demand for, supply of, and pricing of services; and financing mechanisms and their impact on the relevant markets. Analysis will also focus on government policy toward health care and public health, its impact upon institutions and resource allocation, and major policy alternatives. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

*Instructor: Treber*

### **ECON 373 Economic Growth**

*Credit: .5 unit QR*

This seminar examines the sources, process, and implications of sustained growth of incomes. Adam Smith's *Wealth of Nations* was an early analysis of how economies grew richer, and the field has developed to explain why there are differences in standards of living across countries. We will consider several theories of the process of economic growth, and balance that with empirical evidence on performance of current theory. We will analyze how population growth, technological change, investment in physical and human capital, government policy, and the quality of institutions affect growth. Discussion on the implications of economic growth for globalization, environmental conditions, and income inequality will figure in our evaluation of the effects of economic growth. Prerequisites: ECON 101 and ECON 102.

### **ECON 375 Introduction to Econometrics**

*Credit: .5 unit QR*

This seminar studies the empirical testing of economic models. Emphasis will be given to linear regression tech-

niques, special problems associated with estimating economic relationships, and interpretation of the results. Each student will undertake and report on a research project. Prerequisites: a semester of college statistics, ECON 101 and ECON 102, or permission of the instructor.

### **ECON 378 Economics of Women and Work**

*Credit: .5 unit*

This seminar examines the role of women in the labor market and how that role has changed over time. This examination involves a comparison of women and men with respect to labor supply (for both market and nonmarket work), wage rates, occupational choices, and unemployment levels. The seminar evaluates economic models that attempt to explain these differences between labor market outcomes for men and women. Finally, the seminar examines some public policy proposals that are aimed at remedying gender differences in work opportunities and pay. Each student will write and present a seminar paper. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

*Instructor: Krynski*

### **ECON 383 American Economic History**

*Credit: .5 unit*

This seminar examines the American past with special emphasis on issues such as the influence of the Constitution on economic growth, welfare, and income distribution; the economics of slavery and the post-emancipation plight of blacks in the economy; and twentieth-century economic policy, with special emphasis on the Great Depression. Each student will write and present a seminar paper. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

### **ECON 385 Sports Economics**

*Credit: .5 unit*

This seminar will explore professional and amateur sports from an economic perspective. Aside from recreational and entertainment appeal, the sporting world provides a wealth of applications to several fields in economics. For example, this course will cover topics in industrial organization (antitrust and franchising), public finance (stadium financing), and labor economics (labor market discrimination), among others. This will give students an opportunity to apply theory covered in the core courses of the economics major to explain developments in the world of sports. The course will consist of lectures, readings, class discussions, and assessments including individual research papers and class presentations. Prerequisites: ECON 201 and ECON 205 or 375, or permission of the instructor. Offered every other year.

### **ECON 386 Economics of Health**

*Credit: .5 unit*

This seminar examines the economic aspects of the production, distribution, and organization of health-care services. Topics include measuring output; structure of markets; demand for, supply of, and pricing of services; and financing mechanisms and their impact on the relevant markets. Analysis will also focus on government policy toward health care and public health, its impact upon institutions and resource allocation, and major policy alternatives. Each student will write and present a seminar paper. Prerequisites: ECON 101 and ECON 102, or permission of the instructor.

### **ECON 391 Special Topic**

*Credit: .5 unit*

### **ECON 393 Individual Study**

*Credit: .5 unit*

This course is for students who wish to do advanced work beyond regular courses or to study subjects not included in course offerings. Prerequisites: ECON 101, ECON 102, and permission of both the instructor and the chair of the department.

### **ECON 397 Junior Honors Seminar**

*Credit: .5 unit QR*

This seminar is for juniors who are candidates for honors in economics. Students undertake a series of research projects, write papers, and discuss the results of their research with fellow students. Prerequisites: junior standing and permission of instructor.

### **ECON 440 Capstone Seminar in Public Policy**

*Credit: .5 unit*

This seminar brings together a political scientist and an economist to consider how these disciplines approach the study of public policy. The course will concentrate on applying both of the disciplines to the study of a selection of public policies ranging from poverty to budget deficits or globalization. We will explore the substantive issues and the process of governmental policymaking in specific policy domains. How is policy made? What should the policy be? The work of scholars in each discipline will be studied to better understand the differences in approaches and to consider the potential for combining them. What does political science contribute to the study of economic policymaking? What can the tools and perspective of economics contribute to the study of a topic like welfare reform or global warming? This seminar is required for students completing the Public Policy Concentration, and it is open to other seniors. Prerequisites: ECON 101, ECON 102, and one course in American politics, or permission of instructors. Note: this course is cross-listed as PSCI 440.

### **ECON 493 Individual Study**

*Credit: .5 unit*

This course is for students who wish to do advanced work beyond regular courses or to study subjects not included in course offerings. Prerequisites: ECON 101, ECON 102, and permission of both the instructor and the chair of the department.

### **ECON 497 Senior Honors Seminar**

*Credit: .5 unit QR*

This seminar is for seniors who are candidates for honors in economics. Students undertake a series of research projects, write papers, and discuss the results of their research with fellow students. Prerequisites: Junior Honors Seminar, senior standing, and permission of instructor.

SOME RECENTLY OFFERED SPECIAL TOPICS  
Economics of Education