

Economics Listings in the College Bulletin

Introduction

The Department of Economics (ECON) deals with problems of social and individual choice in situations of scarcity. The field of economics has a coherent body of theory for analyzing such situations which has been applied to many current economic and social problems. These theories have also been extensively tested against empirical evidence. Courses in economics provide students with an understanding of economic theory and its application in a variety of areas.

Note: Throughout the listing of major requirements, minor requirements, and course prerequisites, any course may be replaced by the honors equivalent.

Major in Economics

Purpose The economics major provides students with the basic theoretical understanding and statistical tools necessary to understand society's role in economic decision making. The major prepares students for graduate or professional schools or the general job market.

Requirements

1. Mathematics: M118 and either M119 or M211
2. Statistics: E370
3. Introductory economics: E201 and E202
4. Intermediate economic theory: E321 and E322
5. At least three additional economics courses numbered above E322. At least two of these courses must be taken in residence on the Bloomington campus. E370, E496, and Y398 cannot be used to meet this requirement.
6. A total of at least 27 credit hours of economics. E496, Y398, and E175 cannot be included in this total.

Students must also complete the degree requirements in the College of Arts and Sciences.

Minor in Economics

Requirements Students must meet the following course requirements for a total of 18 credit hours.

1. Mathematics: M119 or M211
2. Introductory economics: E201 and E202
3. Intermediate economic theory: E321
4. At least one additional economics course numbered above E321, excluding E370.
5. A total of at least 15 credit hours of economics, of which at least 9 credit hours must be taken in residence on the Bloomington campus. E496, Y398, and E175 cannot be included in this total.

Interdepartmental Major in Economics and Mathematics

Purpose The interdepartmental major in economics and mathematics is designed to enable students to model economic questions mathematically, and to analyze and solve those models.

Requirements Students must meet the following course requirements. Any course may be replaced by the honors equivalent.

1. Economics: E201, E202, E321, E322 and at least three additional economics courses numbered above E322, including at least one at the 400 level. E370, E496, and Y398 cannot be used to meet this requirement.
2. Mathematics: M211-M212 or M213, M301 or M303, M311 and at least two courses, including one at the 400 level, from one of the following mathematics areas: analysis (M312, M413, M414, M415, M420); differential equations (M343, M344, M441, M442); applied mathematics (M371, M447, M448, M451, M471, M472); or probability and statistics (M366, M463, M464, M466). ***Note:** M366 has a prerequisite of M360; see requirement 3 below. For students who qualify for honors, Mathematics S499 may replace the second course in a mathematical area with approval of the Department of Mathematics.
3. Statistics: the sequence Mathematics M360-M366, or Economics E370, or Mathematics M365.

Special Considerations

1. No more than 3 credit hours of Honors Thesis (Economics E499 or Mathematics S499) may be counted toward the major.
2. It is recommended that students planning to pursue a Ph.D. in economics consult with the Department of Economics concerning classes in the areas of analysis, econometrics, and statistics.
3. It is recommended that students in actuarial studies take Mathematics M360, M366, M371, M463, M464, and one course from M466 or Economics E471. It is recommended that these students also consult with the Department of Economics concerning relevant seminar courses. Students should consult the actuarial studies section of the Department of Mathematics entry in this bulletin.

Interdepartmental Major in Economics and Political Science

Purpose The interdepartmental major in economics and political science explores important issues arising in both the public and private sectors and provides students with the basic theoretical tools necessary to investigate these issues.

Note: Any economics course may be replaced by the honors equivalent.

Requirements

Students must meet the following course requirements for a total of 42 credit hours in Political Science and Economics:

1. Mathematics requirements: Finite Mathematics M118 and Calculus M119 or M211 (These courses do not count toward the 42 credit hours required for the major.)
2. Economics E201, E202, E321, and at least three additional economics courses. Two of these three courses must be numbered above E321. The following courses cannot be used to meet this requirement: E175, E370, E496, Y398.

At least 18 credit hours in political science to include the following:

1. One course chosen from Political Science Y204, Y205, Y210, Y303, Y394, or Y405
2. Another 15 credit hours in political science chosen from Y200, Y202, Y204, Y205, Y210, Y301-Y308, Y326, Y343, Y346, Y349, Y350, Y376, Y394, Y401, Y405, Y481, Y490, or Y499. (Y200 or Y401 may be repeated once for credit, for a maximum of 9 credit hours possible for these two courses. No other courses may be repeated for credit.)
3. Statistics requirement: ECON E370 or POLS Y395

Special Considerations

1. Students meeting requirements 1-3 above with a total of 39 credit hours will be allowed to use 3 credit hours toward the major from preapproved sections of COLL E104 (Topics) courses. A list of preapproved sections of COLL E104 (Topics) is available each semester in the Departments of Economics and Political Science.
 2. No more than 6 credit hours of honors thesis credit (3 credit hours from Economics E499, and 3 credit hours from Political Science Y499) may be counted toward the major.
 3. A maximum of 3 credit hours of Political Science Y484 (for teaching interns only) may be counted toward the major.
- Students must also complete the degree requirements in the College of Arts and Sciences.

Interdepartmental Minor in Economics and Political Science

Purpose

The interdepartmental minor in political science and economics introduces students to important issues in both the public and private sectors.

Requirements

Students must meet the following course requirements for a total of 18 credit hours.

1. Economics E201, E202, and one additional economics course (E175, E370, E496, and Y398 cannot be used to meet this requirement.)
2. One course chosen from Political Science Y204, Y205, Y210, Y303, Y394, or Y405
3. Another 6 credit hours in political science in courses not used in numbers 1 or 2 above chosen from Y200, Y202, Y204, Y205, Y210, Y301-Y308, Y326, Y343, Y346, Y349, Y350, Y376, Y394, Y401, Y405, Y481, Y490, or Y499. (Y200 or Y401 may be repeated for credit for a maximum of 9 credit hours total of those two courses. No other courses may be repeated for credit.)

Note: This minor is not available to students choosing a major in economics or political science. The interdepartmental minor in Political Science and Economics is also not available to students choosing a minor in political science or a minor in economics.

Honors Program in Economics

Students with records of distinction may be eligible for the degree of B.A. with honors in economics. The honors program in economics recognizes those students with marked potential to excel in the study of economics and who desire more intensive contact with faculty than is available in the classroom and who desire some discretion to pursue topics that interest them.

Students who have completed E201, E202, E370, E321, E322, and have earned a GPA of 3.300 or higher may be admitted to the honors program. Requirements for a B.A. with honors in economics are:

1. A GPA of 3.500 or higher in economics courses upon graduation.
2. At least 6 credits in economics courses numbered E390 through E490. Credit in E391 Undergraduate Readings in Economics must be approved in advance by the honors director.
3. Presentation of an undergraduate honors project approved by the honors director. Three to 6 hours of credit may be earned for preparation of the honors project (with permission of the honors director) by registering for E499.

Course Descriptions

E175 Economics for Educators (3 cr.) Designed for students preparing to be teachers. Covers basic concepts and analytical techniques in both microeconomics and macroeconomics. Emphasis is placed on active learning exercises, discussion and analysis of current events, group problem solving and other instructional techniques useful in primary and secondary education. Does not count toward a major or minor in economics.

E201 Introduction to Microeconomics (3 cr.) S & H Scarcity, opportunity cost, competitive and non-competitive market pricing, and interdependence as an analytical core. Individual sections apply this core to a variety of current economic policy problems, such as poverty, pollution, excise taxes, rent controls, and farm subsidies. I Sem., II Sem., SS.

E202 Introduction to Macroeconomics (3 cr.) S & H P: E201. Measuring and explaining aggregate economic performance, money, monetary policy, and fiscal policy as an analytical core. Individual sections apply this core to a variety of current economic policy problems, such as inflation, unemployment, and economic growth. I Sem., II Sem., SS.

S201 Introduction to Microeconomics: Honors (3 cr.) S & H Designed for students of superior ability. Covers same core materials as E201 and substitutes for E201 as a prerequisite for other courses. I Sem.

S202 Introduction to Macroeconomics: Honors (3 cr.) S & H P: S201 or E201. Designed for students of superior ability. Covers same core material as E202 and substitutes for E202 as a prerequisite for other courses. II Sem.

E303 Survey of International Economics (3 cr.) S & H P: E201 and E202. Basis for and effects of international trade, commercial policy and effects of trade restrictions, balance of payments and exchange rate adjustment, international monetary systems, and fixed versus flexible exchange rates. Not recommended for economics majors. Only 6 credit hours from E303, E331, and E332 may be counted toward a major in economics.

E304 Survey of Labor Economics (3 cr.) S & H P: E201 and E202. Economic problems of the wage earner in modern society; structure, policies, and problems of labor organizations; employer and governmental labor relations.

E305 Money and Banking (3 cr.) S & H P: E201 and E202. Monetary and banking system of the U.S. The supply and control of money. The impact of money on the U.S. economy. Topics in the application of Federal Reserve monetary policy. Analytical treatment of the Federal Reserve system and the commercial banking industry.

E308 Survey of Public Finance (3 cr.) S & H P: E201 and E202. Major elements of taxation and public expenditures. Not recommended for economics majors. Only 6 credit hours from E308, E361, and E362 may be counted toward a major in economics.

E309 Topics in Economics (3 cr.) S & H P: E201 and E202. Study of a topic area in economics. Topics will vary. Intended primarily for non-majors

wanting exposure to economics beyond the introductory level. May be repeated with different topics for a maximum of 9 credit hours. Only 3 credit hours may count toward the major or minor in economics.

E321 Intermediate Microeconomic Theory (3 cr.) S & H P: E201 and MATH M119 or M211. The economics of consumer choice. The economics of production, cost minimization, and profit maximization for business firms in the short run and long run under various market structures. Competition and adjustment to market equilibrium. Introduction to game theory, strategic interaction, and noncooperative equilibria. Credit given for only one of E321 or S321.

S321 Intermediate Microeconomic Theory: Honors (3 cr.) S & H P: E201 and MATH M119 or M211. Designed for students of superior ability. Covers same core material as E321 and substitutes for E321 as a prerequisite for other courses. Credit given for only one of E321 or S321.

E322 Intermediate Macroeconomic Theory (3 cr.) S & H P: E202 and E321. National income accounting; theory of income, employment, and price level. Countercyclical and other public policy measures.

S322 Intermediate Macroeconomic Theory: Honors (3 cr.) S & H P: E202 and E321. Designed for students of superior ability. Covers same core material as E322 and substitutes for E322 as a prerequisite for other courses. Credit given for only one of S322 or E322.

E327 Game Theory (3 cr.) S & H P: E321. Mathematical analysis of strategic interaction. Noncooperative games played once or repeatedly, with perfect or imperfect information. Necessary condition for a solution (equilibrium) as well as sufficient conditions (refinements). Cooperative games, such as bargaining and market games. Numerous applications, including experimental games.

E331 International Trade (3 cr.) P: E321. Theories of trade pattern, positive and normative aspects of trade and trade-related policies in competitive and non-competitive markets; effects of trade liberalization and economic integration; trade policies by developed and developing nations; international factor movements. Only 6 credit hours from E303, E331, and E332 may be counted toward a major in economics.

E332 International Monetary Economics (3 cr.) P: E322. Theory of exchange rate and balance of payments adjustment, macroeconomic policy in open economies, history and comparison of international monetary systems, and proposals for reform. Credit given for only one of E332 and E433. Only 6 credit hours from E303, E331, and E332 may be counted toward a major in economics.

E337 Economic Development (3 cr.) P: E321. Characteristics of economically underdeveloped countries. Obstacles to sustained growth; planning and other policies for stimulating growth; examination of development problems and experience in particular countries.

E341 Economics of Labor Market (3 cr.) P: E321. R: E370. Analysis of the functioning of labor markets with theoretical, empirical, and policy applications in determination of employment and wages in the U.S. economy.

E344 Health Economics (3 cr.) P: E321. R: E370 or equivalent is strongly recommended. Systematic introduction to health economics and economics of health care, emphasis on basic economic concepts such as supply and demand, production of health, information economics, choice under uncertainty, health insurance markets, Medicare and Medicaid, managed care, government intervention and regulation. Survey course with some topics in some depth.

E347 Women and the Economy (3 cr.) P: E321. Description and analysis of the position of women in the U.S. economy. Emphasis is placed on using microeconomic theories to explain women's labor force behavior; sex differentials in earnings and occupations; discrimination; economic issues related to marriage, divorce, fertility, and mortality; institutional and governmental policies that affect women's economic behavior.

E351 Law and Economics (3 cr.) P: E321. Devoted to economic analysis of law, focusing on the economic efficiency of common law. Main components of the course are property law, contracts, and torts; some aspects of criminal law are also covered. Discussion is based mostly on examples, both invented and taken from actual cases.

E359 Economic History of the United States (3 cr.) S & H P: E321. Economic development and institutional change in the U.S. from colonial times to the present. Timing, pace, and sources of economic growth; structural change; economic activity; industrialization; government intervention; and income distribution.

E361 Public Finance: Government Spending (3 cr.) P: E321. Theory of public goods and externalities. Cost-benefit analysis. Public choice theory. Analysis of specific expenditure, transfer, and regulatory programs. Only 6 credit hours from E308, E361, and E362 may be counted toward a major in economics.

E362 Public Finance: Taxation (3 cr.) P: E321. U.S. tax structure, income redistribution effects, and efficiency in resource allocation. Use of welfare theory and microeconomic models to evaluate particular issues. Only 6 credit hours from E308, E361, and E362 may be counted toward a major in economics.

E364 Environment and Resource Economics (3 cr.) S & H P: E321. Basic theory of common property resources applied to environment and resource conservation problems. Topics include economic efficiency, equity, measurement problems, and policy formulation.

E370 Statistical Analysis for Business and Economics (3 cr.) N & M P: E201 and MATH M118 or similar course emphasizing probability concepts. R: MATH M119 and E202. Lectures emphasize the use of basic probability concepts and statistical theory in the estimation and testing of single parameter and multivariate relationships. In computer labs, using Microsoft Excel, each student calculates descriptive statistics, probabilities, and least squares regression coefficients in situations based on current business and economic events. Credit given for only one of the following: ECON E270, S270, E370, S370, CJUS K300, MATH/PSY K300, K310; SOC S371; STAT S300, or SPEA K300. I Sem., II Sem., SS.

S370 Statistical Analysis for Business and Economics: Honors (3 cr.) N & M P: E201 and MATH M118 or similar course emphasizing probability concepts. R: MATH M119 and E202. Designed for students of superior ability. Covers same core material as E370 and substitutes for E370 as a prerequisite for other courses. Credit given for only one of the following: ECON E270, S270, E370, S370, CJUS K300, MATH/PSY K300, K310; SOC S371; STAT S300, or SPEA K300.

E382 The Digital Economy (3 cr.) P: E321. Studies the economics of information goods. Topics include macroeconomic productivity and the information revolution, pricing information goods, lock-in and switching costs, bundling information goods, network externalities, strategy and the internet, digital auction markets, public policy issues, and current topics in the information economy.

E385 Economics of Industry (3 cr.) P: E321. Empirical analysis of market structure and behavior. Location, technology, economies of scale, vertical integration, conglomerates, barriers to entry, and competitive practices. Economic assessment of product performance and environmental impact.

E386 Soviet-Type Economies in Transition (3 cr.) P: E321. Economic institutions, resource allocation mechanisms, incentives and decision-making in a Soviet-type economy; economics of transition to a market-oriented system. Particular attention is paid to price liberalization, development of the financial system, privatization of state-owned assets, opening to the world economy, and the role of private sector. Credit given for only one of E386 or E497.

E390 Undergraduate Seminar in Economics (3 cr.) P: E321. Additional prerequisites may be required depending on the seminar topic. Intensive study of a topic area in economics. Topics will vary. May be repeated with different topics for a maximum of 9 credit hours.

E391 Undergraduate Readings in Economics (1-3 cr.) P: E321, E322, E370; undergraduate economics major; minimum GPA in economics courses of 3.000. Additional prerequisites may be required by the faculty mentor. Independent readings and research by special arrangement with an economics faculty mentor and the director of undergraduate studies. A research paper or other substantial writing assignments are usually required. A maximum of 3 credit hours in E391 may count toward the major in economics.

E425 Financial Economics (3 cr.) P: E321. R: E370 strongly recommended but not required. Modern financial markets; theories and empirical evidence. Present value, modern portfolio theory, risk and return, the capital asset pricing model, arbitrage pricing theory, the efficient markets hypothesis, bubbles, noise and market anomalies, options and derivative securities, and the economic function of derivatives.

E427 Seminar in Experimental Economics (3 cr.) P: E321 and E370 or consent of instructor. R: E327. Focuses on the use of laboratory experimental methods in applied microeconomics. Specific application areas will include the analysis of resource allocation mechanisms for both private and public goods and individual choice under uncertainty using both human and nonhuman subjects.

E471 Econometric Theory and Practice I (3 cr.) P: E370 and either MATH M119 or M211 or consent of instructor. Emphasis is on the probability and statistical theory underpinning the classical linear regression model. Special topics include finite and asymptotic properties of point and interval estimation, hypothesis testing and model building. Several software packages are used in computer lab applications.

E472 Econometric Theory and Practice II (3 cr.) P: E471. Emphasis is on the matrix formulation and computer estimation methods for single and multiple equation models using economic and business data. Attention is given to the assumptions required for testing sets of coefficients and model structures. Special topics include heteroscedasticity, multicollinearity, errors in variables, simultaneity, time-series analysis, limited dependent variables, sample selection, and alternatives to least-squares estimation.

E490 Advanced Undergraduate Seminar in Economics (3 cr.) P: E321. Additional prerequisites may be required depending on the seminar topic. Advanced intensive study of a topic area in economics. Topics will vary. May be repeated with different topics for a maximum of 9 credit hours.

E496 Foreign Study in Economics (3-8 cr.; once only) S & H P: consent of chairperson. Course involves planning of research project during year preceding summer abroad. Time spent in research abroad must amount to at least one week for each credit hour granted. Research must be presented by end of semester following foreign study. Does not count toward a major or minor in economics.

E499 Reading and Research for Honors (3-6 cr.) P: Approval of departmental honors advisor. Research and preparation of senior honors project. Maximum of 6 credit hours count toward degree.

Y398 Internship in Economics (1-3 cr.) P: Departmental approval required. Supervised work experience in an academic or business environment, including service as a teaching assistant for undergraduate classes. Performance evaluation is determined by a faculty mentor. May be repeated for a maximum of 3 credit hours. Does not count toward a major or minor in economics.