

ECON-ECONOMICS

ECON 1113 Principles of Economics-Macro 3 Credit Hours

Prerequisite: Satisfactory score on the Math placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. The functioning and current problems of the aggregate economy: determination and analysis of national income, employment, inflation and stabilization; money and banking, monetary and fiscal policy; and aspects of international interdependence. Laboratory (F, Sp, Su) [III-SS].

ECON 1123 Principles of Economics-Micro 3 Credit Hours

Prerequisite: Satisfactory score on the Math placement test, or, for incoming freshmen direct from high school, satisfactory score on the ACT/SAT. Goals, incentives and allocation of resources resulting from economic behavior with applications and illustrations from current issues: operation of markets for goods, services and factors of production; the behavior of firms and industries in different types of competition and income distribution. Laboratory (F, Sp, Su) [III-SS].

ECON 2033 Your Guide to a Crazy World 3 Credit Hours

Have you ever wondered "What job is right for me?" or "Why do I do weird things?" Together, we'll explore the exciting world of economics in ways you've never imagined. From how we behave, to laws, health, cities, making a difference, politics, and much more. So, buckle up, and let's uncover the mysteries of life in our wild, wacky world! (F, Sp) [III-SS].

ECON 2843 Elements of Statistics 3 Credit Hours

Prerequisite: ALEKS math assessment score of 040 or higher, or Math Offer of MATH 1523 or higher, or completion of MATH 1503 or higher. Basic statistical techniques emphasizing business and economic applications. Topics covered include data summary techniques, elementary probability theory, estimation, hypothesis testing, simple regression, time-series and index numbers. Laboratory (F, Sp, Su) [I-M].

ECON 2970 Special Topics 1-3 Credit Hours

Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)

ECON 3113 Intermediate Microeconomic Theory 3 Credit Hours

Prerequisite: ECON 1113 and ECON 1123 with a grade of C or better and Mathematics 1743 or 1823 or 1914. Fundamental economic concepts and principles; value and distribution theories under conditions of competition, monopoly and monopolistic competition. Appraisal of modern problems in terms of these theories. (F, Sp, Su) [III-SS].

ECON 3133 Intermediate Macroeconomic Theory 3 Credit Hours

Prerequisite: a grade of C or better in ECON 1113, ECON 1123, and MATH 1743 or 1823 or 1914. National income concepts; aggregate demand by household, business, government, and foreign sectors; determination of national income, interest rate, price, output, and employment levels. (F, Sp, Su)

ECON 3213 Environmental Economics 3 Credit Hours

Prerequisite: a grade of C or better in ECON 1123. Economic approach to environmental protection; analysis focuses on property rights and externalities. Examines strategies for addressing externalities including command-and-control regulation, emissions taxes, and tradable discharge permits. Topics include air pollution, water pollution, waste disposal and recycling, and endangered species protection. (Irreg.)

ECON 3440 Mentored Research Experience 3 Credit Hours

0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

ECON 3513 Labor Problems 3 Credit Hours

Prerequisite: a grade of C or better in 1113 and 1123. Problems of labor in an industrial society; wages, hours, working conditions, child labor. Conflicts between management and labor. (F)

ECON 3523 Health Economics 3 Credit Hours

Prerequisite: ECON 1113 and ECON 1123 with a grade of C or higher. Overall view of health economics. Covers health insurance markets, externalities in health and medical care, health and labor markets, government intervention in health care provision, current health programs in the United States and models of health production. (Irreg.)

ECON 3613 International Trade Theory and Problems 3 Credit Hours

Prerequisite: a grade of C or better in 1113 and 1123. Benefits of trade, determination of the direction and level of trade, commercial policy and trade barriers, international trade problems and issues. (F, Sp)

ECON 3633 International Finance Theory and Problems 3 Credit Hours

Prerequisite: a grade of C or better in 1113 and 1123. Effects of international trade on employment, inflation, the exchange rate, effects of devaluation, types of international monetary arrangements, effects of foreign transfers, open economy macroeconomic policy. (F, Sp)

ECON 3713 Governmental Relations to Business 3 Credit Hours

Prerequisite: a grade of C or better in ECON 1113 and ECON 1123. Analysis of economic aspects of government regulation and direction of business enterprise; controls affecting managerial discretion in the determination of prices and other basic business policies. (F, Sp, Su) [III-SS].

ECON 3880 Directed Readings 1-3 Credit Hours

1 to 3 hours. Prerequisite: permission of instructor. May be repeated; maximum credit six hours. Readings will consist of topics designated by the instructor in keeping with student's specialization within major program. Topics will cover materials not usually presented in regular courses. (F, Sp, Su)

ECON 3960 Honors Reading 1-3 Credit Hours

1 to 3 hours. Prerequisite: admission to the Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)

ECON 3970 Honors Seminar 1-3 Credit Hours

1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. The projects covered will vary. The content deals with concepts not usually presented in regular coursework. (Sp)

ECON 3980 Honors Research 1-3 Credit Hours

1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)

- ECON 3990 Independent Study 1-3 Credit Hours**
1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)
- ECON G4223 Econometric Analysis 3 Credit Hours**
Prerequisite: a grade of C or better in 1113, 1123, and 2843. Classical statistical inference; means, proportions, variances, analysis of variance and covariance; regression and correlation analysis; normal, binomial, chi-square, t, F, Poisson, exponential distributions. (F, Sp) [I-M].
- ECON G4313 Industrial Organization 3 Credit Hours**
Prerequisite: ECON 1113 and ECON 1123 with a grade of C or better. Industrial organization studies the way firms interact and compete with each other. Covers pricing strategies (price discrimination, bundling and tie-in sales); product strategies (product variety, quality, advertising); and mergers and acquisitions. Can be taken for graduate credit. (Irreg.)
- ECON G4353 Public Finance: Issues and Taxation 3 Credit Hours**
Prerequisite: a grade of C or better in 1113 and 1123. Public expenditures, their nature, cause of the increase, and classification; sources of public revenue; methods of distributing the tax burdens; public debts and debt management; introduction to fiscal theory and policy. (F, Sp)
- ECON G4363 Sports Economics 3 Credit Hours**
Prerequisite: ECON 1113 and ECON 1123 with a grade of C or higher, or permission of instructor. Application of economics principles and techniques to sports-related topics and problems. (Irreg.)
- ECON 4413 International Trade, Laws and Institutions 3 Credit Hours**
Prerequisite: a grade of C or better in ECON 3613. Explores the interface of the economics and legal professions' analysis of international trade. The class will explore some of the issues and topics of common interest from the perspective of each profession. (F)
- ECON G4453 Urban Economics 3 Credit Hours**
Prerequisite: ECON 3113 with a grade of C or better. Study of economic models of urban location, including firm location and residential location models. Public policy topics of urban taxation, residential housing discrimination, urban renewal, etc., will also be discussed from an economic perspective. Can be taken for graduate credit. (Irreg.)
- ECON G4513 The Economics of Discrimination 3 Credit Hours**
Prerequisite: a grade of C or better in 1113 and 1123. This course will focus on discrimination in the labor market. Topics to be covered include wage discrimination, employment discrimination, and occupational segregation. Examples will be drawn frequently from current events and public policies. (F, Sp)
- ECON G4523 Economics of Education 3 Credit Hours**
Prerequisite: Sophomore standing; ECON 1123 and ECON 2843. This course will focus on policy analysis of the market for education in the United States, including production and consumption of education services. Students will discuss and critically evaluate scientific studies related to key questions in the policy debate, and will learn tools for understanding how to distinguish between correlation and causation in the world of education policy. (F, Sp)
- ECON G4673 Economics-Money & Banking 3 Credit Hours**
Prerequisite: ECON 3133 with a grade of C or better. Introduces the role of money, banks and financial institutions in the economy. Topics include banking and financial intermediation, financial market regulation, monetary economics and economic fluctuations, and monetary policy. Can be taken for graduate credit. (F)
- ECON G4733 Economic Development in the Middle East 3 Credit Hours**
Prerequisites: ECON 1113 and ECON 1123 with a grade of C or higher; ECON 3133 and/or ECON 3633 recommended. An introduction to the existing debates on comparative economic development in the Middle East and North Africa region during the post-independence period. (Irreg.)
- ECON G4773 Economic Game Theory 3 Credit Hours**
Prerequisite: ECON 3113 with a grade of C or better, and Mathematics 2123 or Mathematics 2423. Develops the fundamental concept of the Nash equilibrium, advancing to refinements such as subgame perfection and Bayesian perfection. Applications include oligopoly, adverse selection in insurance markets, and moral hazard in agency. May be taken for graduate credit (Sp)
- ECON G4783 Behavioral and Experimental Economics 3 Credit Hours**
Prerequisite: ECON 1113, ECON 1123 and ECON 2843 with a grade of C or better. Analysis of behavioral economics models and factors using experimental approaches; investigation of where human behavior does not always fit standard economic models; experiments and theory covering game theory, market equilibrium, public choices, auctions, and bargaining. Can be taken for graduate credit. (Irreg.)
- ECON 4853 World Economic Development 3 Credit Hours**
(Slashlisted with 5853) Prerequisite: a grade of C or better in 1113 and 1123. The economics of the developing nations; a review and analysis of common problems and issues. (Irreg.)
- ECON 4960 Directed Readings 1-4 Credit Hours**
1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)
- ECON 4970 Special Topics/Seminar 1-3 Credit Hours**
1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
- ECON 4983 Economics as Social Science 3 Credit Hours**
Prerequisite: a grade of C or better in 2843, 3113 and 3133, or permission of instructor. Examination of selected topics in various subdisciplines within economics e.g., international trade and finance, econometrics, energy economics, public finance, labor economics, economic history and development, etc. [V].
- ECON 4990 Independent Study 1-3 Credit Hours**
1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
- ECON 5023 Statistics for Decision Making 3 Credit Hours**
Prerequisite: admission to Master of Business Administration program or permission of instructor. Covers basic probability density functions, the parametric estimating techniques of linear multivariate regression analysis and the elements of statistical decision making under uncertainty. (F, Sp, Su)

- ECON 5033 Managerial Economics I 3 Credit Hours**
Prerequisite: graduate standing. Practical applications of economic theory and techniques to business problems. Topics include: demand theory and estimation; production and cost theory; empirical cost analysis; pricing practices, market structure and antitrust policy; corporate strategies for dealing with risk; long-term investment decisions with emphasis on plant size, technological change and investment requirements. (F, Sp)
- ECON 5043 Managerial Economics II 3 Credit Hours**
Prerequisite: 5033, 5073. Emphasizes current topics in several areas including: regulation, business and government, antitrust economics, the economics of intellectual capital markets, and the economics of technological change. Strategies for management will also be discussed. (Irreg.)
- ECON 5073 Contemporary Economic Methods and Analysis 3 Credit Hours**
A review of contemporary economic methodology and theory and their application to the analysis of macroeconomic questions and problems in the American economy. Techniques of economic forecasting will also be covered. (F, Sp, Su)
- ECON 5123 Advanced Price and Welfare Theory 3 Credit Hours**
Prerequisite: 3113 or equivalent, senior standing or permission. An intensive study of the static and dynamic welfare and efficiency properties of the price and market system method of social organization. Topics include: theory of markets, game theory, capital theory and intertemporal equilibrium, general equilibrium and employment, welfare theory. (Sp)
- ECON 5153 Mathematical Economics I 3 Credit Hours**
Prerequisite: 2843, 3113, 3133. Investigation of several important models of economic activity. Emphasis on methods of analysis and interpretation involving construction of mathematical models reflecting the economic substance of these models. Implications for economic policy considered.
- ECON 5163 Advanced Macroeconomic and Growth Theory 3 Credit Hours**
Prerequisite: 3113, 3133. Comparison of static macroeconomic systems; introduction to dynamic macroeconomic systems; post-Keynesian and modern theories of economic growth. (F)
- ECON 5173 Urban and Regional Analysis 3 Credit Hours**
(Crosslisted with RCPL 5173) Prerequisite: Regional and City Planning 5113 or equivalent. A lecture-seminar-problems-oriented course designed to acquaint the student with the scientific techniques used to analyze urban and regional social, economic, political and environmental problems. Oriented to reflect requirements for studies leading to the preparation of goals, policies, and plans for urban and regional scale development. (Sp)
- ECON 5213 Advanced Econometrics 3 Credit Hours**
Prerequisite: graduate standing. Measurement of micro- and macro-economic relations, both static and dynamic. Comparative statics and dynamics; practical use of inference from non-experimental data. Identification and estimation problems. (Irreg.)
- ECON 5223 Bayesian Econometrics 3 Credit Hours**
Prerequisite: Graduate standing and permission of instructor. Bayesian inference is the process of fitting probability models to datasets, resulting in probability distributions of model parameters and other unobserved quantities. The course will emphasize estimation of regression and parametric models, model checking, evaluation and extension, and fundamentals of Markov Chain simulation. Recurring comparisons to frequentist methods will permit assessments of the strengths and weaknesses of the Bayesian approach. (Irreg.)
- ECON 5243 Econometrics II 3 Credit Hours**
Prerequisite: 5213. Examines topics and techniques in applied econometric analysis. Course topics include limited dependent variables, sample selection bias, systems of equations and the use of econometric software. (Sp)
- ECON 5253 Data Science for Economists 3 Credit Hours**
Prerequisite: Graduate standing and ECON 4223, ECON 5213 or ECON 5023; or permission of instructor. This class will provide an overview of the data science workflow, from collecting raw data to drawing a set of insights from which a decision maker can make informed decisions. The course will broadly cover a variety of advances in data collection, data storage, visualization, machine learning, and econometrics topics, as well as teaching and reinforcing good programming practices. (F, Sp)
- ECON 5263 Econometrics Seminar 3 Credit Hours**
Prerequisite: Graduate standing; ECON 5213 and ECON 5243. This course introduces how to write a research paper that meets the standards of peer-reviewed economics journals. It emphasizes the importance of basic concepts required when a researcher submits a journal article. The main goal is to learn a set of research concepts and tools which an economics graduate student should be able to use for applied research in economics. (F, Sp)
- ECON 5283 Data Visualization and Analysis with Python 3 Credit Hours**
Prerequisite: Graduate Standing. Students will acquire essential skills for transforming data into meaningful visualizations and performing data analysis using Python. Emphasizing the creation of clear and elegant graphs from data, students will delve into the art of exploratory data visualization. Additionally, the course covers regression analysis and fundamental classification methods, demonstrating their real-world applications through hands-on experience with real data sets. (F, Sp, Su)
- ECON 5293 Machine Learning with Causal Inference 3 Credit Hours**
Prerequisite: Graduate Standing. This course explores the convergence of machine learning and causal inference, equipping students with the necessary skills to leverage the power of machine learning while investigating causal relationships in their analyses. It encompasses core machine learning techniques such as model selection, prediction, tree-based classification, and neural networks. (F, Sp, Su)
- ECON 5313 Advanced Industrial Organization 3 Credit Hours**
Prerequisite: graduate standing. Examines the market structure, conduct and performance of various industries. Topics include: theory and empirical results regarding structure, conduct and performance; the structure of U.S. industry versus other countries; recent developments; and antitrust policy. (Irreg.)
- ECON 5353 Public Finance II 3 Credit Hours**
Prerequisite: 4353 or permission of instructor. Teach advanced principles of public finance. The chief topics are market failure and public goods, public choice and principles of expenditure analysis.

- ECON 5453 Advanced Urban Economics 3 Credit Hours**
Prerequisite: graduate standing. Study of economic models of urban location, including firm location and residential location models. Public policy topics of urban taxation, residential housing discrimination, urban renewal, etc. will also be discussed from an economic perspective. (Irreg.)
- ECON 5613 International Economics--Trade 3 Credit Hours**
Prerequisite: 3613 and Mathematics 1743 or permission of instructor. Causes and effects of international trade; gain from trade; theory of tariff and effective protection; economic growth and trade; intermediate products; optimal trade policies; factor market imperfections; theory of integration. (Sp)
- ECON 5633 International Economics--Finance 3 Credit Hours**
Prerequisite: 3613 and Mathematics 1743 or permission of instructor. Foreign exchange rates; balance of payments; alternative international monetary systems; international reserves. (F)
- ECON 5853 World Economic Development 3 Credit Hours**
(Slashlisted with ECON 4853) Prerequisite: graduate standing. The economics of the developing nations; a review and analysis of common problems and issues. No student may earn credit for both 4853 and 5853. (Irreg.)
- ECON 5940 Research in Economic Problems 1-3 Credit Hours**
1 to 3 hours. May be repeated; maximum credit six hours. (F, Sp, Su)
- ECON 5960 Readings in Selected Fields of Economics 1-4 Credit Hours**
1 to 4 hours. May be repeated; maximum graduate credit eight hours. The only passing grade given in this course is the neutral grade of S. Directed readings under staff supervision for advanced students. A comprehensive report or examination is required. (F, Sp, Su)
- ECON 5970 Special Topics/Seminar 1-3 Credit Hours**
1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)
- ECON 5980 Research for Master's Thesis 2-9 Credit Hours**
Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)
- ECON 5990 Special Studies 1-3 Credit Hours**
1 to 3 hours. May be repeated with change of topic; maximum credit twelve hours. Advanced studies in various areas of economics. Given under stated titles determined each semester by the instructor involved. (F, Sp)
- ECON 6213 Seminar in Price and Welfare Theory 3 Credit Hours**
Prerequisite: 5123 or equivalent, graduate standing. Current theoretical issues and research developments are explored. Attention is given to externalities, social welfare functions, market and nonmarket choice mechanisms, capital theory and analysis of intertemporal adjustments, general equilibrium under dynamic growth conditions. (F)
- ECON 6313 Seminar in Macro and Growth Theory 3 Credit Hours**
Prerequisite: 5163. Detailed analysis of static and dynamic macroeconomic systems; macrostatic and macrodynamic policy issue. (Irreg.)
- ECON 6333 Seminar in Industrial Organization 3 Credit Hours**
Prerequisite: graduate standing or permission of instructor. Survey of recent industrial organization, public utility and regulation literature.
- ECON 6343 Econometrics III 3 Credit Hours**
Prerequisite: 5243. Topics and techniques in advanced econometric methods including time-series analysis and/or panel data analysis. May include applications in time-series econometrics such as ARMA models and VAR techniques; and applications in panel data econometrics including fixed effects, random effects and dynamic models. (F)
- ECON 6433 Labor Economics I 3 Credit Hours**
Prerequisite: Graduate standing. This course is the first of a two-course sequence. Students will learn current research and theory at the frontier of labor economics. The basics of labor supply, demand, and equilibrium to build a basic theoretical foundation for research in labor economics will be covered. Field topics including immigration, education, discrimination, and marijuana legalization will be introduced. (Irreg.)
- ECON 6533 Labor Economics II 3 Credit Hours**
Prerequisite: Graduate standing and ECON 6433. This course is the second of the two-course sequence. Students will learn about traditional and contemporary topics in labor economics and will be encouraged to develop independent research interests. The course will emphasize the importance of research design for the identification of casual effects, as well as writing an academic research paper suitable for economics journal publication. (Irreg.)
- ECON 6653 Seminar in Growth 3 Credit Hours**
Prerequisite: graduate standing and permission of instructor. Endogenous growth theory, recent work on growth success and failures, regime switching models of growth, the effects of crises on long run performance, and the role of the IMF and World bank in development. Other topics may include financial crises, corruption, etc. (Irreg.)
- ECON 6693 Seminar in Economic Development 3 Credit Hours**
Problems of economic development with special emphasis on the developing nations. Theoretical as well as policy issues concerning the process of economic development are examined. (Irreg.)
- ECON 6773 Seminar in Public Economics 3 Credit Hours**
Prerequisite: 5313 or permission of instructor. Survey of recent literature in the economics of public finance. Recent theoretical and empirical research will be examined. (Irreg.)
- ECON 6960 Directed Readings 1-3 Credit Hours**
1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)
- ECON 6970 Special Topics/Seminar 1-3 Credit Hours**
1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)
- ECON 6980 Research for Doctoral Dissertation 2-16 Credit Hours**
2 to 16 hours. Prerequisite: Graduate standing; may be repeated. Directed research culminating in the completion of the doctoral dissertation. (F, Sp, Su)
- ECON 6990 Independent Study 1-3 Credit Hours**
1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)