

ECONOMICS (ECO)

ECO 101 | INTRODUCTION TO ECONOMIC ISSUES | 4 quarter hours (Undergraduate)

This course will introduce students to basic concepts from both micro- and macroeconomics. The goal is for students to gain an appreciation of how economics can be used to understand the world. Students will enhance their analytical skills by using basic economic concepts to examine current domestic and international issues. Students will improve their oral communication skills during class discussions and debates. This course is intended for non-Commerce students and cannot be counted toward a major or minor in economics.

LSP 121 (or HON 180) or MAT 101 (or equivalent) are prerequisites for this class.

ECO 105 | PRINCIPLES OF MICROECONOMICS | 4 quarter hours (Undergraduate)

Principles of Microeconomics. Basic theories of micro (or individual) economic units; the theory of consumer demand, the firm, and distribution; pricing and production in competitive, monopolistic and oligopolistic industries.

MAT 101 (or equivalent) is a prerequisite for this class.

ECO 106 | PRINCIPLES OF MACROECONOMICS | 4 quarter hours (Undergraduate)

Principles of Macroeconomics. Fundamental theories of macro (or aggregate) economics: supply and demand, national income accounting and analysis, and international trade. Analysis of unemployment, and inflation, and policies designed to combat these and other current problems.

MAT 101 (or equivalent) is a prerequisite for this class.

ECO 198 | CURRENT ECONOMIC ISSUES | 2 quarter hours (Undergraduate)

This is a 2-hour special topics course. Content and format of this course are variable. This course format will facilitate an in-depth examination of a specific economic issue. The specific topic covered will be indicated in the class schedule. The goal of the topics course is to introduce students to the discipline of economics through the study of a specific issue at the introductory level. This course will generally not carry any prerequisites and will not be applicable toward the requirements of the Economics major or minor. The course can be repeated for credit when a different topic is scheduled.

ECO 250 | CAREER PREPARATION FOR ECONOMICS MAJORS | 2 quarter hours (Undergraduate)

Students will explore possible career options for economics majors while addressing three competency areas: self-management skills, career building skills, and general business skills. The course will focus on further developing students' quantitative skills as they research career options and will include the development of a portfolio as a final assignment. (2 quarter hours)

ECO 105, ECO 106 and status as an ECO major in either the College of Business or the College of Liberals Arts & Social Sciences is a prerequisite of this class.

ECO 304 | ANALYTICS FOR ECONOMICS | 4 quarter hours (Undergraduate)

Students will learn how to interpret and apply the ordinary least squares regression model to answer important questions related to economics and business. The course incorporates real world applications of the ways in which these empirical methods are influencing decisions in businesses and government. Students will also analyze real data and learn how to design their own empirical studies. Students may not receive credit for ECO 304 and ECO 375.

MAT 137 and (BUS 102 or a declared BA Economics major) are prerequisites for this class.

ECO 305 | INTERMEDIATE MICROECONOMICS | 4 quarter hours (Undergraduate)

This course is an extension of the topics introduced in Economics 105. It uses models to explain economic decision-making by consumers and firms. Students will examine how markets allocate resources, how market structure affects choices and social welfare, and the ways in which government can improve or impair markets.

ECO 105 (minimum of C-) and MAT 130 (or equivalent) are prerequisites for this class.

ECO 306 | INTERMEDIATE MACROECONOMICS | 4 quarter hours (Undergraduate)

The purpose of this course is to develop macroeconomic models that assist in understanding the myriad economic problems facing us today, both domestic and foreign, and in evaluating proposed solutions. These static and dynamic models are used to understand interactions in the macroeconomy, and will serve as a tool in predicting the level of GDP, inflation, unemployment and interest rates. Models included are: traditional short-run Keynesian analysis; the New Classical market-clearing approach; and the recent work in Neo-Keynesian thought.

ECO 105, ECO 106 & MAT 130 (or equivalent) are prerequisites for this class.

ECO 307 | MANAGERIAL DECISION MAKING | 4 quarter hours (Undergraduate)

This course introduces the students to various decision-making frameworks in managerial and business contexts. Through studying and applying analytical frameworks to common situations, students will learn and practice skills to become better decision makers. Topics include structural analysis, environmental forces, behavioral biases and cognitive constraints, and the role of incentives and motives in decision-making. Students will engage in various activities that develop and build their confidence to approach potentially complex and often ambiguous situations using formal tools. The class emphasizes the use of social cues, behavioral science insights, historical references, and organizational knowledge to improve decision outcomes. This course is appropriate for both Economics and Non-Economics majors.

ECO 105 is a prerequisite for this class.

**ECO 308 | BUSINESS STRATEGY | 4 quarter hours
(Undergraduate)**

Strategy affects outcomes everywhere, from business to sports to politics, and everyday life. This class will help students develop their strategic thinking and problem-solving capabilities in the business world. We demystify the strategic thought process using models and techniques that increase the creation of value and enhance efficiency for firms and consumers. We use an applied and hands-on methodology that emphasizes student interactions and critical thinking. Topics include, market selection, resource allocation choices, competitive dynamics, and situational analysis. Becoming familiar with strategic frameworks and tools will lead students to improve their skill set and ability to identify market challenges and manage organizational issues commonly encountered in business analyst and consulting positions. This course is appropriate for both Economics and Non-Economics majors.

ECO 105 is a prerequisite for this class.

**ECO 310 | URBAN ECONOMICS | 4 quarter hours
(Undergraduate)**

This course discusses the economic rationale for the existence of cities and urban areas. Location decision-making by both firms and households is analyzed with attention given to the resulting land values, land rents, population density gradients, and urban land use patterns. We study models of the supply and demand for housing, the measurement and determination of house value, and the corresponding problems of segregation, housing abandonment, property taxation, and public housing. Other urban problems such as poverty, crime, and transportation are also discussed.

ECO 105 is a prerequisite for this class.

**ECO 312 | THE CHICAGO ECONOMY | 4 quarter hours
(Undergraduate)**

The first part of this course will focus on changes in the Chicago metropolitan economy over time. Topics to be covered will include the development of the Chicago economy in the 19th Century, modern economic development, land use, and suburbanization. The second part of the course will focus on selected policy issues including poverty, housing, pollution, crime, education, transportation, and taxes.

ECO 105 is a prerequisite for this class.

**ECO 313 | MARKET STRUCTURE AND REGULATION OF BUSINESS | 4 quarter hours
(Undergraduate)**

This course examines the behavior of firms, especially how firms pursue business strategies, in real-world markets. What factors determine price and output? Why do firms like Apple, Google and Microsoft dominate their markets? And what are the implications of this dominance? Why does government intervene in market transactions? What has government done about mergers, price fixing, and false advertising?

A grade of C- or better in ECO 305 is a prerequisite for this course.

**ECO 314 | ECONOMICS OF THE PUBLIC SECTOR | 4 quarter hours
(Undergraduate)**

This course discusses market failures and the economic role of government. Topics covered will include: government interventions that correct market failures, the efficiency of government policies, collective decision-making and voting, as well as the theory of optimal taxation and the incentive effects of taxes. Specific government programs such as Social Security and welfare programs are also analyzed. The emphasis is on the revenues, expenditures and policies of the federal government.

A grade of C- or better in ECO 305 is a prerequisite for this course.

**ECO 315 | INTRODUCTION TO MONEY AND BANKING | 4 quarter hours
(Undergraduate)**

Introduction to Money and Banking. The structure of the American banking system; role of the Federal Reserve System; private financial markets and institutions; the effectiveness of monetary policy, and international finance.

ECO 105, ECO 106 and MAT 130 (or equivalent) are prerequisites for this class.

**ECO 316 | EUROPEAN ECONOMIC HISTORY | 4 quarter hours
(Undergraduate)**

European Economic History. Major factors and institutions which have influenced the economic development of European nations. Impact of these nations on U.S. development is also discussed.

ECO 105 and ECO 106 are prerequisites for this course.

**ECO 317 | AMERICAN ECONOMIC HISTORY | 4 quarter hours
(Undergraduate)**

This course addresses the major factors and institutions which have influenced the economic development of the United States, including differences in regional development, slavery, transportation improvements, western expansion, the rise of large scale business, and government policy responses.

ECO 105 and ECO 106 are prerequisites for this course.

**ECO 318 | LABOR ECONOMICS AND ORGANIZATION | 4 quarter hours
(Undergraduate)**

Historical and theoretical analysis of labor groups and labor market problems (including wage determination, unemployment and discrimination), with particular reference to the dynamic economy of the United States.

ECO 105, ECO 106 and MAT 130 (or equivalent) are prerequisites for this class.

**ECO 319 | ECONOMICS AND GENDER | 4 quarter hours
(Undergraduate)**

This course covers economic trends concerning women in the economy and examines economic analyses of gender issues, with special emphasis on gender issues in the work place. The increase in the number of women in the work place has been a major change in labor markets, affecting workers, employers and families. Different economic perspectives are examined to give students an understanding of the range of contributions by economists to this field. The course also examines feminist economics which raises concerns about economic analysis in general and as it is applied to this field.

ECO 105 and ECO 106 are prerequisites for this course.

**ECO 320 | ECONOMICS OF RELIGION | 4 quarter hours
(Undergraduate)**

This course examines selected economic and sociological aspects of religion in society. Some of the topics that are covered include marriage and divorce, fertility and population growth, schooling, church contributions and work.

ECO 105 and ECO 106 are prerequisites for this course.

**ECO 321 | LAW & ECONOMICS | 4 quarter hours
(Undergraduate)**

The overall goal of this course will be to demonstrate how businesses and government interact by surveying the economic and legal aspects of this relationship. This course is designed to prepare students to engage in methods of formal inquiry. The students will examine the American historical aspects of this relationship from the industrial revolution to the present. All topics are discussed with an emphasis on real-world applications and will include: a review of microeconomic theory pertaining to market structures with an emphasis on oligopolies; the history of antitrust; a review of the US legal and political framework; government regulation and key judicial decisions affecting businesses and industries concentrating on the legal and economic logic of those decisions. Class will begin with a discussion of current events once a week and it is expected that each student will attempt to participate and be knowledgeable of what is occurring locally, nationally and internationally.

ECO 105 is a prerequisite for this class.

**ECO 322 | FINANCIAL MARKET REGULATION | 4 quarter hours
(Undergraduate)**

This class explores policy approaches to regulating the financial system and the economy. The list of topics (such as regulation of banking, insurance and other financial services) changes depending on faculty and student interest. Other topics could include the solvency of Social Security and Illinois pension systems, student loans, cryptocurrencies, and providing financial services to underserved areas and groups. Students study the nature of market capitalism itself and proposals to reform it. This course builds on the Money and Banking course (ECO315 or FIN320) to permit deeper understanding of these issues.

ECO 315 or FIN 320 is a prerequisite for this class.

**ECO 325 | THE ECONOMICS OF POVERTY | 4 quarter hours
(Undergraduate)**

This class addresses society's view of poverty. It begins with an introduction to theories of economic justice for perspective. The introduction is followed by empirical issues related to the measurement of poverty and identification of its causes. An assessment of programs designed to ameliorate the effects of poverty also is covered.

ECO 105 and ECO 106 are prerequisites for this course.

**ECO 326 | HEALTH ECONOMICS | 4 quarter hours
(Undergraduate)**

Taking a microeconomic perspective, this course provides a comprehensive overview of the field of health economics building on economic principles, recent research, and problem-based learning. Students will consider conceptual and empirical analyses of: supply of and demand for health and medical services; role of insurance; influence of physicians and hospitals on price, quantity, and quality of services; factors that distort the market; and the impact of technological change on health care cost. The recent changes in federal law regarding health insurance coverage are considered as well.

ECO 105 (minimum of C-) and MAT 130 (or equivalent) are prerequisites for this class.

**ECO 330 | RADICAL RESPONSES TO CAPITALISM | 4 quarter hours
(Undergraduate)**

The collapse of communism in Central and Eastern Europe and the continuing movement of the Chinese economy away from central planning means there are few real world economies in the 21st century that fully embrace the classic socialist model. However, there continues to be an influence exerted by socialist theory on policy in contemporary economies as well as a heterodox theoretical tradition. This course will examine the current influence of socialist thinking on various economies in the world and how the character of radicalism has evolved in recent decades.

ECO 105 and ECO 106 are prerequisites for this course.

**ECO 333 | TOPICS IN GLOBAL ECONOMIES | 4 quarter hours
(Undergraduate)**

This course provides an introduction to the major changes in the global economy in the twentieth century. It will devote particular attention to comparative analysis of national economic institutions and performance and business conditions, as well as prominent international institutions such as the International Monetary Fund, World Bank, and World Trade Organization. Knowledge of microeconomic and macroeconomic analysis (Economics 105 and 106) will be presumed and applied to global economic flows and national institutions. Selection of countries and case studies from advanced and developing countries will vary according to recent economic developments.

ECO 106 is a prerequisite for this class.

**ECO 334 | UNDERSTANDING CHINA'S ECONOMY | 4 quarter hours
(Undergraduate)**

The expansion of relations between China and foreign enterprises continues to entwine China's economy with those of the world. This course will analyze China's continuing evolution into a global market economy. We will examine China's impact on the world economy and the problems that must be overcome for China to continue its dynamic growth. We will further discuss the characteristics of China's evolution and how they can be extrapolated to other nations undergoing similar transitions.

ECO 105 and ECO 106 are prerequisites for this course.

**ECO 335 | SUSTAINABLE STRATEGIES FOR ENERGY AND THE ENVIRONMENT | 4 quarter hours
(Undergraduate)**

This class explores the relationship between energy, business, the economy, the environment and society. An interdisciplinary approach and real world case studies are used to understand the various dimensions of sustainable energy strategies (economic, scientific, political, environmental) and how they impact business and society. In the end, students will be able to (1) assess the costs and benefits of different energy and environmental strategies, and (2) contribute to discussions about building more sustainable economies for the future.

ECO 105 is a prerequisite for this class.

**ECO 336 | EXPLORING ECONOMICS & STATISTICS THROUGH SPORTS | 4 quarter hours
(Undergraduate)**

The main objective of this course is to have students use and understand economics analysis. It covers many of the basic principles/theories in microeconomics, using the sports industry to illustrate these topics. Students use concepts from Business core courses (microeconomics and statistics) to analyze questions such as 'Do large-city professional sports franchises have a competitive advantage over their small-market counterparts?' or 'Why did Chicago and the State of Illinois use \$463 million of public money to refurbish Soldier Field?'

(ECO 105 and MAT 137 or equivalent) are prerequisites for this course.

ECO 340 | DEVELOPMENT OF ECONOMIC THOUGHT | 4 quarter hours (Undergraduate)

A study of the most influential contributions to our understanding of political economy broadly understood. An historical examination of the development of economic theories with special emphasis placed upon their relevance to present economic and political issues.

ECO 105, ECO 106, MAT 130 and (ECO 306 with a minimum grade of C-) are prerequisites for this class.

ECO 341 | BEHAVIORAL ECONOMICS | 4 quarter hours (Undergraduate)

Behavioral Economics incorporates insights from psychology to expand the standard models of economic choice. This course will examine the findings from the psychology literature that inform the issue of decision making, explore how these findings have challenged standard economic models, and examine how the findings are being incorporated into economic thinking about choice. In addition to an introduction to the Behavioral Economics literature, students will have the opportunity to develop a project of their own using behavioral economics to examine a current economic issue.

A grade of C- or better in ECO 305 is a prerequisite for this course.

ECO 359 | DEVELOPMENT ECONOMICS | 4 quarter hours (Undergraduate)

By some estimates, approximately 1.4 billion people live on less than \$1.25 a day. When the world's per capita GDP is \$10,000, why do so many people live on so little? Life expectancy in many parts of sub-Saharan Africa is less than 50 years, and in Burundi the average adult has less than three years of schooling. Why does this happen, and what can be done to change this? Students will learn how to objectively measure levels of poverty and development. Students will come to understand and analyze which types of interventions lead to improvements in people's lives. Using Stata, students will also learn techniques that researchers use to identify causal relationships between interventions and outcomes.

A grade of C- or better in ECO 305 is a prerequisite for this course.

ECO 360 | ECONOMICS OF LOW-INCOME COUNTRIES | 4 quarter hours (Undergraduate)

This course analyzes economic development issues in low-income countries. Attention is given to several key issues including agricultural and rural development, population growth, human capital, international trade, foreign resource flows, the role of the public sector, and environmental quality.

(ECO 105 or ECO 106) is a prerequisite for this class.

ECO 361 | INTERNATIONAL TRADE | 4 quarter hours (Undergraduate)

This course deals primarily with the trade side of international economic relations. The main objective is the development of analytical tools required for an understanding of the gains from trade and barriers to trade. Particular emphasis is placed on currently pressing issues including the impact of trade on domestic employment and income, international trade tensions, and the rise of regional trade blocks.

ECO 105, ECO 106 and MAT 130 (or equivalent) are prerequisites for this class.

ECO 362 | INTERNATIONAL MONETARY ECONOMICS | 4 quarter hours (Undergraduate)

How does international trade and capital mobility affect a country's ability to use fiscal and monetary policy to promote economic growth and successful development? This question and others of international importance are examined in an environment where other countries' behavior matters. Topics to be explored include: the foreign exchange market under both fixed and floating exchange rate regimes, the balance of payments, economic policy in an "open" economy, and the role of international institutions such as the International Monetary Fund and World Bank.

ECO 106 and MAT 130 are prerequisites for this class.

ECO 363 | ECONOMICS OF THE EUROPEAN UNION | 4 quarter hours (Undergraduate)

The European Union, established in 1993 by the Treaty of Maastricht, has become the world's largest economy as a result of gradual incorporation of European countries. The euro represents approximately one fourth of the world's foreign currency reserves. In the economic and political-economic literature the euro has acquired relevance as a possible substitute of the U.S. dollar, especially during the period 2005 - 2010. However, as of 2008, along with the increase of trade among the EU countries, the single currency has been confronting issues with some of its weakest countries which are highly dependent on tourism [Greece, Ireland, Portugal, Italy and Spain]. The loss of independent monetary policy assigns a crucial role to fiscal policy as the only tool designed to stabilize the economy especially in times of recession. The budget deficit and the public debt levels of the weaker countries, during the world economic crisis of 2009, have also extended since then to the majority of the EU members. The political economy convenience of the single currency is now questioned in academic and business environments. The bail outs of Greece and Ireland by the European Central Bank and the International Monetary Fund, and the reduction of the Moody's credit ratings to several countries have considerably contributed to the panic of contagion.

ECO 105 and ECO 106 are prerequisites for this course.

ECO 376 | TIME SERIES ANALYSIS | 4 quarter hours (Undergraduate)

This course introduces time series regression models. Rather than focusing only on the technical and theoretical sides, primary attention is given to applications of time series regression models using economic and financial data. The data will be drawn from websites such as wsj.com and government website FRED (Federal Reserve Economic Data). The course will build upon the STATA programming skills learned in ECO375 [Introduction to Econometrics], particularly as they relate to extracting currently available data into the STATA program. Additionally, students will learn various methodologies to understand the time series processes in economics and finance.

ECO 304 or ECO 375 is a prerequisite for this class.

ECO 377 | ECONOMIC ANALYTICS USING SAS & R | 4 quarter hours (Undergraduate)

This course teaches advanced data analytical skills by identifying meaningful patterns of data and transforming patterns into statistical models to make more profitable decisions using big data. It covers descriptive, predictive, and prescriptive analytics. The class will introduce many practical methodologies through the use of SAS. The class covers the topics on advance levels of clustering analysis, discrete choice models, multivariate regression models, and neural network analysis to find the best suitable techniques to drive the best business decision.

ECO 304 or ECO 375, and a declared major in Economic Data Analytics (COB), Economics Honors (COB) or Economics Honors (LAS) are prerequisites for this class.

ECO 379 | GAME THEORY | 4 quarter hours (Undergraduate)

Game Theory provides a series of frameworks and tools to analyze strategic interactions. This course introduces the game-theoretic approach and shows its usefulness in understanding situations arising in economics, business, and other areas where agents make interdependent decisions. The main goal is for students to develop the ability to think about strategic problems and make strategic decisions in a more disciplined way.

A grade of C- or better in ECO 305 is a prerequisite for this course.

ECO 380 | MATHEMATICAL ECONOMICS | 4 quarter hours (Undergraduate)

Review of various mathematical functions useful in formulating economic theories followed by elements of Matrix algebra and its application to concepts of micro and macro economic equilibria. Particular emphasis will be placed on differential calculus, including the use of partial derivatives. These mathematical tools will be applied to optimization problems in micro and macro economic theory.

ECO 105, MAT 135 (or equivalent) and MAT 136 (or equivalent) are prerequisites for this class.

ECO 393 | INTERNSHIP IN APPLIED ECONOMICS | 4 quarter hours (Undergraduate)

This course provides an opportunity to apply knowledge acquired in the classroom to a real world situation within a private or public enterprise. Registration is by permission of the instructor following internship approval. The course can be used to satisfy the Liberal Studies Experiential Learning requirement or as an open elective. The course is not applicable to the economics electives required for the major or minor in economics.

ECO 105 and ECO 106 are prerequisites for this course.

ECO 395 | CAPSTONE SEMINAR IN ECONOMICS | 4 quarter hours (Undergraduate)

A seminar in which students explore how the discipline of economics addresses issues from a different perspective than other disciplines within and beyond the social sciences. This course is the Liberal Studies Capstone Requirement for the LA&S Economics major and is restricted to LA&S economics majors with senior standing.

ECO 305, ECO 306 and status as an LAS Economics major with Senior standing is a prerequisite for this class.

ECO 398 | SPECIAL TOPICS | 4 quarter hours (Undergraduate)

Special Topics. Content and format of this course are variable. All topics will include an in-depth study of current issues in Economics. Subject matter will be indicated in class schedule. Prerequisites vary by topic.

ECO 399 | INDEPENDENT STUDY | 4 quarter hours (Undergraduate)

An Independent Study may be available to students of demonstrated capability for intensive independent work in economics. Written permission of supervising faculty member, chair, and director of undergraduate programs is required prior to registration. (variable credit)

ECO 435 | REAL ANALYSIS I | 4 quarter hours (Graduate)

This course covers real number system, completeness, supremum, and infimum, sequences and their limits, \liminf , \limsup , limits of functions, continuity.

(MAT 149 or MAT 152 or MAT 162 or MAT 172) and (MAT 141 or MAT 215) are a prerequisite for this class.

ECO 436 | REAL ANALYSIS II | 4 quarter hours (Graduate)

This course follows ECO 435 and covers properties of continuous functions, uniform continuity, sequences of functions, differentiation, integration.

ECO 435 or MAT 335 or equivalents is a prerequisite for this class.

ECO 500 | MONEY AND FINANCIAL SYSTEMS | 4 quarter hours (Graduate)

This course examines both the role of money in the economy from a functional and macroeconomic perspective as well as the structure and function of the most important financial institutions and financial markets. Topics covered include the role of the Federal Reserve as monetary policymaker, interest rate and exchange rate determination, the relationship between money and economic activity, and the organization and importance of money markets, capital markets, markets for derivative securities, commercial banks and other intermediaries in a well-functioning financial system.

MS in Taxation and MSAA students are restricted from registering for this class.

ECO 501 | CONCEPTS OF MICRO AND MACRO ECONOMICS | 4 quarter hours (Graduate)

This course investigates the basic elements of the economic way of thinking. Students will begin with models of the consumer and the producer, looking specifically at demand and supply, elasticity, measures of efficiency, production and cost theory, and the determination of price and quantity under different market structures. The remainder of the course is devoted to analyzing the economy as a whole, focusing on the determination of Gross Domestic Product, the role of money and monetary policy, labor markets and unemployment, price stability, and short-run fluctuations in output.

Status as a graduate accountancy student is a prerequisite for this class.

ECO 502 | ANALYSIS OF BUSINESS CONDITIONS | 2 quarter hours (Graduate)

This survey course in macroeconomics will cover the nature of macroeconomic activity including the component parts of aggregate expenditures and the nature of key indicators of the economy's performance. The roles of fiscal and monetary policy makers will be examined as well as the structure of the central bank.

MS in Taxation and MSAA students are restricted from registering for this class.

**ECO 505 | ADVANCED MICROECONOMICS | 4 quarter hours
(Graduate)**

An advanced course in microeconomic theory. This course will present a systematic and rigorous analysis of price determination and the allocation of specific resources to particular uses.

Status as an Economics & Quantitative Analysis MS student (or instructor consent) is a prerequisite for this class.

**ECO 506 | ADVANCED MACROECONOMICS | 4 quarter hours
(Graduate)**

An advanced course in macroeconomic theory that examines the determination of income, employment, and prices, and their interrelations. Covers traditional Keynesian as well as alternative models of output, consumption, investment, money demand, inflation and unemployment. The dynamic character of income determination is emphasized, along with effects of government policy, economic institutions, and social goals.

ECO 502 or status as an Economics & Quantitative Analysis MS student is a prerequisite for this class.

**ECO 507 | DATA ANALYTICS I: REGRESSION ANALYSIS | 4 quarter hours
(Graduate)**

This course focuses on the tools and techniques used to statistically analyze economic data. We will focus on both theoretical understanding (why do we use such tools and how do they work) and applied understanding (the ability to carry on a research project using these tools). Students will learn Stata, which is the most widely used statistical analysis programming language in Economics. Students will learn the practical skills of how to choose the right tools for the analysis, how to prepare and inspect the data, and how to run an analysis that is robust, can be replicated, and can be understood and used by others - all extremely valuable qualities in real life work.

(GSB 420 or GSB 519 or equivalent) or status as an Economics and Quantitative Analysis MS student is a prerequisite for this class.

**ECO 508 | DATA ANALYTICS II: TIME SERIES AND PANEL DATA ANALYSIS | 4 quarter hours
(Graduate)**

This course focuses on advanced techniques used to statistically analyze economic data. We will focus on both theoretical understanding (why do we use such tools and how do they work) and applied understanding (the ability to carry on a research project using these tools). Topics to be covered include the analysis of time series and panel data, discrete choice models, simultaneous equations, forecasting and experimental methods. Students will learn statistical Stata commands that apply to the advanced topics covered.

ECO 507 is a prerequisite for this class.

**ECO 509 | BUSINESS CONDITIONS ANALYSIS | 4 quarter hours
(Graduate)**

This course teaches students how to use available economic data to assess business conditions. This is done by: (1) evaluating the sources and usefulness of data periodically released by government and private sources and (2) developing a macroeconomic framework that the student can use to analyze business conditions. Completion of this course will allow students to understand economic news and relate it to their business or job.

MS in Taxation and MSAA students are restricted from registering for this class.

**ECO 510 | DATA ANALYTICS III: CAUSAL INFERENCE | 4 quarter hours
(Graduate)**

This course is about the research designs and methods that researchers use to support causal inferences in the social sciences. Some specific topics include randomized experiments, instrumental variables, regression discontinuity designs, difference-in-differences models, regression analysis, and propensity score matching.

ECO 507 and ECO 508 are prerequisites for this class.

**ECO 511 | BUSINESS AND ECONOMIC FORECASTING | 4 quarter hours
(Graduate)**

This course surveys a number of quantitative techniques commonly used to forecast business and economic variables. Emphasis will be on techniques, their relative strengths and weaknesses and real-world economic applications. Topics include smoothing techniques, regression and econometric analysis and Box-Jenkins time series.

(GSB 420 or GSB 519 or equivalent) or status as an Economics and Quantitative Analysis MS student is a prerequisite for this class.

**ECO 513 | DEMYSTIFYING THE FEDERAL RESERVE BANK | 4 quarter hours
(Graduate)**

This is a course about monetary policy. The Federal Reserve has (and other central banks have) the capacity to directly control interest rates and the monetary base (money supply) with an impact on real output growth, unemployment, inflation and financial stability. The expected movement in these variables is important for business and consumer decisions. The Fed has been criticized as of late for policies that put us into the recent financial crisis and for policies that do not appear to be getting us quickly out of the current slowdown, but instead are setting the country up for higher inflation. This course will focus on the theory and evidence of what the Fed does (and other central banks do), why they do it and how what they do affects our well-being. It is meant to demystify their policies by providing a rationale behind their statements and actions. Unlike most courses that rely on textbooks, this course will have numerous topics and readings that do not yet appear in traditional texts. Consequently, it will include some of the latest (over the last couple of years or months) ideas on what central banking is and should be about.

ECO 502 or ECO 509 or ECO 506 is a prerequisite for this class.

**ECO 514 | INDUSTRIAL ORGANIZATION | 4 quarter hours
(Graduate)**

This course is concerned with how the market system directs production decisions under varying deviations from the competitive environment. The links between market structure, conduct and performance are examined. Topics include determinants of market structure, various theories of imperfect competition, price discrimination, predatory pricing, and antitrust policy.

ECO 555 or 505

**ECO 515 | MICROECONOMICS OF MARKET ORGANIZATION | 4 quarter hours
(Graduate)**

Imperfectly competitive markets are more common than perfectly competitive markets. This course is about the effects of imperfectly competitive market structure on the organization, pricing, product choice, and entry of firms. We will study the acquisition and use of market power, strategic competition across firms, private sector sources of market failure, and the role of government competition policy. Factor markets will also be discussed.

ECO 505 is a prerequisite for this class.

ECO 516 | ECONOMICS OF THE PUBLIC SECTOR I | 4 quarter hours (Graduate)

Application of microeconomic analysis to the role of government in society. The theoretical foundation for the design of an efficient and equitable tax and expenditure program is presented and the impact of such a program on the economy is explored through general equilibrium analysis. Students must have a solid foundation in basic calculus.

ECO 505 or ECO 555 is a prerequisite for this class.

ECO 517 | THE PUBLIC POLICY, BUSINESS, AND ETHICAL ENVIRONMENT OF GOVERNMENT | 4 quarter hours (Graduate)

Businesses are becoming more involved in deal making both in the public and private sector. Individuals now sit on the boards of public and private companies and are being asked to provide business analysis and networking skills. Moreover, many firms have established PACS and have set-up governmental practice sections. These firms are also becoming more dependent on the government for business opportunities and are more involved in fundraising on behalf of public officials in order to gain access and to influence the regulatory and legislative process. In fact many business people have raised money for both political parties with the hope of leveraging their contributions for future work or political appointments.

Status as a MSEPA or MBA student required for this class.

ECO 518 | LABOR ECONOMICS AND LABOR RELATIONS | 4 quarter hours (Graduate)

A study of the American labor force: measurement, characteristics and behavior under changing income, employment and technology. An examination of recent labor market developments provides the basis for a critical analysis and appraisal of contemporary wage theory. Topics include changes in the labor force, unemployment, wage determination, the minimum wage, internal labor markets, productivity, discrimination, unions and collective bargaining.

ECO 555 or 505

ECO 520 | BUSINESS ANALYTICS TOOLS II | 4 quarter hours (Graduate)

This course teaches advanced data analytical skills by identifying meaningful patterns of data and transforming patterns into statistical models to make more profitable decisions using big data. It covers descriptive, predictive, and prescriptive analytics. The class will introduce many practical methodologies through the use of SAS. The class covers the topics on advance levels of clustering analysis, discrete choice models, multivariate regression models, and neural network analysis to find the best suitable techniques to drive the best business decision.

GSB 420 or GSB 519 is a prerequisite for this class.

ECO 525 | GAME THEORY AND STRATEGY | 4 quarter hours (Graduate)

The goal of this course is to introduce students to game-theoretic way of thinking and show its usefulness in understanding various problems arising in business, economics, as well as many other disciplines and every day life. The tools used in game theory are analytical in nature, and hence the building blocks of the course will necessarily draw on analytics. The instructor's job will be to make these analytics accessible to students without using too much mathematics. Once students grasp these tools, a variety of applications will be presented, discussed, and illustrated using experiments. These applications will be mainly in the fields of business and economics, but will often span to other areas like law, politics, biology, and ethics. In this way, students will get a broad perspective of the multiple applications of game-theoretic reasoning.

ECO 526 | BUSINESS STRATEGY | 4 quarter hours (Graduate)

This class deals with firms' business plans and policies and how they change in response to various incentives and stimuli. We will discuss frameworks used to analyze and formulate business strategies. We will introduce tools and techniques for diagnosing a firm's competitive position, identifying managerial and organizational issues, evaluating plans of action, and anticipating the consequences of alternative decisions.

ECO 527 | BUSINESS REGULATION AND ANTITRUST | 4 quarter hours (Graduate)

This course examines the rationale for and efficiency of government regulation of business in the United States. Various forms of government regulation are evaluated to determine their effectiveness in promoting market efficiency. We will emphasize the importance of market structure and industrial performance, including the strategic interaction of firms. We will examine the behavior of individual markets in some detail, focusing on cost analysis, the determinants of market demand, investment behavior, market power, and the implications of government regulatory behavior.

ECO 555 or 505

ECO 528 | STRATEGIES AND PROCESSES OF NEGOTIATIONS | 4 quarter hours (Graduate)

This course is geared towards developing negotiation skills that are important in both the business world as well as day to day life. We will consider both practical and theoretical aspects of negotiations. In the theoretical part, we will learn what factors affect negotiations success. For example, what is the alternative if an agreement is not reached? In the practical part, we will practice negotiations in class using relevant case studies.

ECO 555 is a prerequisite for this class.

ECO 529 | STRATEGY, COMPETITION, AND ANTITRUST | 4 quarter hours (Graduate)

This class introduces major topics in the economics of imperfectly competitive industries, competition policy, and the economics of incentives and information. The main goals are to understand basic firm behaviors and interactions under various industry configurations, and to scrutinize these behaviors and interactions through the lenses of competition policies (antitrust laws and regulation). We will draw on microeconomic theory, game theory and competitive strategy, as well as empirical evidence and a variety of case studies.

ECO 531 | BUSINESS MODELS AND INNOVATION STRATEGY | 4 quarter hours (Graduate)

This course studies the intersection of three areas: (a) Business Models, (b) Innovation Strategy, and (c) Dynamic Competition. We will explore each of these areas through assessments of conceptual and empirical papers, case study assignments, student presentations, and an experiential consulting project with a local company. We will emphasize the tradeoffs in pursuing certain strategies given the constraints imposed by the competitive environment, the resources and capabilities of the firm, and the impact of technological innovation across various industries. Other topic areas include platform economics, networks and standards, intellectual property, and methods of pivoting business models in the presence of disruptive technologies.

ECO 535 | BEHAVIORAL ECONOMICS AND DECISION-MAKING | 4 quarter hours**(Graduate)**

Behavioral Economics studies the psychological processes and biases underlying decision-making in economics and other connected areas. The course focuses on optimality in decision-making by consumers and producers, and emphasizes where and how deviations from optimality affect the profitability of business strategies and the efficiency of economic policies. Students learn and discuss the most robust and relevant theoretical and empirical findings in Behavioral Economics through a variety of applications in economics, business, and managerial and policy-driven environments.

ECO 540 | THE BUSINESS OF HEALTH | 4 quarter hours**(Graduate)**

This course provides an overview of the healthcare sector, including the pharmaceutical and medical device industry, health insurance, healthcare providers, and public sector. The overarching perspective of the course will be through the critical lens of economics in that the underlying incentive mechanism (or lack thereof) will be probed and evaluated. Even students new to the healthcare sector will gain a wide-ranging understanding of the myriad ways in which the healthcare industry touches all of us.

Not available to MSEPA Students.

ECO 541 | HEALTHCARE DATA ANALYTICS | 4 quarter hours**(Graduate)**

This course will provide students with an overview of the complex data decision-makers in the healthcare industry must make sense of every day. These data include but are not limited to health insurance billing, electronic health records, patient satisfaction surveys, disease surveillance data, and others. A key overriding issue will be the development of skill to distinguish correlation from causation.

GSB 420 (or GSB 420 waiver) or GSB 519 (or GSB 519 waiver) or IT 403 (or IT403 milestone) is a prerequisite for this class.

ECO 542 | HEALTH ECONOMICS | 4 quarter hours**(Graduate)**

Health Economics is the study of the allocation of resources relating to health and the market for medical care. Taking a microeconomic perspective, this course provides a comprehensive overview of the field of health economics building on economic principles, recent research, and problem-based learning. Students will consider conceptual and empirical analyses of: supply of and demand for health and medical services; role of insurance; influence of physicians and hospitals on price, quantity, and quality of services; reimbursement mechanisms; factors that distort the market; and the impact of technological change on health care cost. Students will also learn how analytic tools such as cost-benefit and cost-effectiveness analyses can contribute to decision making for the provision and financing of health care.

ECO 505 or ECO 555 is a prerequisite for this class.

ECO 550 | REGIONAL AND URBAN ECONOMICS | 4 quarter hours**(Graduate)**

The course investigates the spatial character of an economic system. The first part of the course is concerned with theories in regional economics, including business and household location theory, urbanization, and regional development. The latter part of the course deals with urban economics, a specialized area concerned with the economic forces behind many urban problems. Topics include the economics of housing, transportation, poverty, crime and urban public finance.

ECO 555 or 505

ECO 551 | SUSTAINABILITY DECISION-MAKING AND STRATEGY FOR BUSINESS | 4 quarter hours**(Graduate)**

Students will examine how economic principles and sustainability concepts influence corporate decision-making and strategy formulation. In this course we will cover key economic theories, market mechanisms, and policy instruments relevant to sustainability, and will emphasize their practical application to business. Students will develop skills in economic analysis, sustainability assessment, and strategic planning to address sustainability issues in the business world.

ECO 555 | MANAGERIAL ECONOMICS | 4 quarter hours**(Graduate)**

This course focuses on the application of microeconomic principles to managerial decision making. These principles include the theories of consumer choice, production and cost as they relate to decisions made by firms and households under various industry configurations. Specific topics are consumer and market demand; elasticities; production theory; cost structure; profit maximization; market impacts of government interventions; externalities; and the effect of market structure on firm decisions on pricing, output and profit.

ECO 557 | INTERNATIONAL TRADE THEORY & POLICY | 4 quarter hours**(Graduate)**

Modern theories of international trade: classical theory of comparative advantage, factor proportions theory, factor price equalization, application of welfare economics to international trade, including regional economic integration, commercial policy and tariff problems. Cross-listed with IB 520.

ECO 555 or 505

ECO 558 | INTERNATIONAL MACROECONOMICS | 4 quarter hours**(Graduate)**

Analyzes traditional macroeconomic issues in a framework that allows for international trade and capital flows. Cross-listed as IB 521.

ECO 506 or ECO 509 is a prerequisite for this class.

ECO 560 | DEVELOPMENT OF THE AMERICAN ECONOMY | 4 quarter hours**(Graduate)**

This course describes the economic development of the United States by examining topics such as: colonial settlement patterns, the impact of the railroad, the development of the financial system and the Great Depression.

(ECO 505 or ECO 555) and (ECO 506 or ECO 509) are prerequisites for this class.

ECO 561 | ECONOMICS OF DEVELOPING COUNTRIES | 4 quarter hours**(Graduate)**

Introduction to the economist's analytical skills applied to problems of developing and newly industrialized countries. Studies economic theory of development, development policy, and decision-making in the developing world; several case studies are examined. Cross-listed with IB 525.

ECO 555 or 505

ECO 575 | DATA ANALYTICS PRACTICUM | 4 quarter hours**(Graduate)**

This course provides a comprehensive exploration into the multifaceted world of economic analysis tailored for consulting, industry, and government. Leveraging several robust datasets, students will immerse themselves in real-world challenges spanning demand forecasting, data management, competitive market analysis, market entry strategies, and more. Through a balanced blend of theoretical knowledge and hands-on experience, students will gain valuable insights into the pivotal role economic analysis plays in consulting, honing their skills to craft actionable strategies and data-driven recommendations for diverse business scenarios.

ECO 507 and ECO 508 are prerequisites for this class. ECO 510 is a corequisite for this class.

ECO 798 | SPECIAL TOPICS | 4 quarter hours**(Graduate)**

Content and format of this course are variable. An in-depth study of current issues in economics. Subject matter will be indicated in class schedule.

ECO 799 | INDEPENDENT STUDY | 4 quarter hours**(Graduate)**

Available to graduate students of demonstrated capability for intensive independent work in economics.