ECONOMICS (ECON)

ECON 0912. Requirement Preparation. (0 Credits)

For Ph.D. and master's students, registration is necessary to maintain continuous enrollment while preparing for a milestone requirement, such as a comprehensive exam, master's thesis, or dissertation submission. Students who are studying for comprehensive examinations while still completing coursework do not need to register for any special status; however, if they are neither registered for coursework nor taking comprehensive examinations during the semester in question, they must register for Requirement Prep.

ECON 0914. Requirement Preparation in Summer. (0 Credits)

For Ph.D. and Master's students, registration necessary to maintain continuous enrollment while preparing for a milestone requirement during the summer. (e.g., to be used by Ph.D. students after the oral examination/defense and prior to receiving the degree).

ECON 0930. Ph.D. Comprehensive Examination: Economics. (0 Credits)

Certification in economic theory (macro and micro theory) is achieved through written comprehensive examination. Each examination may be repeated once.

ECON 0936. Master's Comprehensive Examination-Economics. (0 Credits)

The M.A. comprehensive exam in economics tests knowledge of microeconomics and macroeconomics and is taken after completion of ECON 6010 and ECON 6020. It is a three-hour written certification examination and is offered twice per year, in January and at the end of May or in early June. It is intended for M.A. students.

ECON 0940. Pre-Dissertation Paper Development. (0 Credits)

Students in the Ph.D. program in economics register for this course while working on their pre-dissertation paper. The course is meant to be taken after passing core comprehensives and thus completing ECON 0930. It is meant to be taken before ECON 0950. It cannot be taken simultaneously with ECON 0912 or ECON 0950.

Prerequisite: ECON 0930.

ECON 0945. Pre-Dissertation Paper Acceptance. (0 Credits)

This is an administrative course for students in the Ph.D. program in economics signaling successful completion and acceptance of the predissertation paper.

Prerequisite: ECON 0940.

ECON 0950. Proposal Development. (1 Credit)

ECON 0960. Proposal Acceptance. (3 Credits)

ECON 0970. Dissertation Mentoring - Economics. (0 Credits)

Doctoral candidates in economics are required to be registered for Dissertation Mentoring, which has a 3-credit fee, the semester after the student's proposal is accepted.

ECON 1100. Principles of Macroeconomics. (3 Credits)

Investment, GDP, interest rates, the budget deficit, inflation, unemployment, banking, monetary and fiscal policies, and exchange rates appear frequently in the media but are often little understood. Macroeconomics studies these aggregates and their interconnections and looks at the influence of the Federal Reserve and the federal government.

Attributes: ACMI, BUMI, FRSS, IPE, LPBC, SSCI.

ECON 1150. CB Honors Macroeconomics. (4 Credits)

This course will introduce students to the analytical tools macroeconomists use to address questions about inflation, unemployment, economic growth, business cycles, the trade balance, and fiscal and monetary policy. The tools include basic models of the interaction among goods markets, labor markets, and financial markets and how these interactions determine overall economic performance. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

ECON 1200. Principles of Microeconomics. (3 Credits)

Microeconomics studies the decisions and interactions of consumers and businesses, resulting in an understanding of the process by which prices and quantities are determined in a market setting. Forms of industrial organization, such as competition, monopoly, and oligopoly, are explored. The markets for labor and other factors of production are also studied as a part of this course.

Attributes: ACMI, BUMI, ENST, FRSS, IPE, SSCI.

ECON 1250. CB Honors Microeconomics. (3 Credits)

The purpose of this course is to give students the principles that are required to understand current microeconomic issues. Economic logic and evidence are used to analyze consumer and business decisions, and the institutional factors shaping those decisions (e.g., the role of the government). We go through economic theories, and then discuss how these theories apply to the real world.

ECON 1800. Internship. (1 Credit)

Internships allows students to integrate academic work with practical applications. Additionally, they provide excellent training and offer students opportunities to sample different occupations, thus helping to consolidate goals for future employment and education. Recommendations from intern supervisors are often critical for future employment, and many internships can lead to employment within the given firm.

ECON 1999. Tutorial. (1 Credit)

Independent Study.

ECON 2140. Statistics I. (4 Credits)

This course introduces students to descriptive statistics, probability theory, discrete and continuous probability distributions, sampling methods, sampling distributions, estimation, and hypothesis testing. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** BUMI. IPE. URST.

ECON 2142. Statistics II. (4 Credits)

This course develops the student's ability to collect data, postulate a hypothesis or a model, select the appropriate statistical technique, analyze the data using statistical software, draw correct statistical inference, and clearly summarize the findings. Specific topics include chi-square tests, analysis of variance, simple and multiple regression and correlation models, time series analysis, and quality control. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attribute: IPE. Prereguisite: ECON 2140.

ECON 2999. Tutorial. (2 Credits)

Independent research and readings with supervision from a faculty member.

ECON 3100. History of Economic Thought. (4 Credits)

In this course, students examine the development of economic thought since the age of mercantilism. Economists covered include Adam Smith, Thomas Malthus, David Ricardo, Karl Marx, John Stuart Mill, Alfred Marshall, Thorstein Veblen, John Maynard Keynes, and John Kenneth Galbraith. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** INST, ISEU, ISIN.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3116. Intermediate Macroeconomics. (4 Credits)

An examination of the causes of fluctuations in the level of economic activity is at the center of this course. The impact of changes in consumption, investment, and government spending on employment, the price level, and economic growth are analyzed in detail. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attribute: ASSC.

Prerequisites: ECON 1100 or ECON 1150.

ECON 3118. Intermediate Microeconomics. (4 Credits)

Theory of demand, price-output, equilibrium of firms under different market conditions, theory of production, and determination of factor prices are analyzed in detail. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attribute: ASSC.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3119. Honors Intermediate Microeconomics. (4 Credits)

This course provides students with a comprehensive guide to microeconomic theory at the advanced undergraduate level. The honors version of this course is more mathematically challenging and covers several advanced topics. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Prerequisites: ECON 1200 or ECON 1250. Mutually Exclusive: ECON 3118.

ECON 3125. Managerial Economics. (4 Credits)

This course will focus on the application of microeconomics to management decision-making in both the private and public sectors. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Prerequisites:** ECON 1200 or ECON 1250.

Freequisites. ECON 1200 01 ECON 1250.

ECON 3135. Income Distribution. (4 Credits)

In this course, we will focus on government income and expenditure surveys, income density functions, estimating distribution models, Lorenz curves, Gini coefficients, and quantiles. Other topics of coverage include poverty definitions and estimation, and bsolute and relative income inequality. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Prerequisites:** ECON 1200 or ECON 1250.

ECON 3145. Behavioral Economics. (4 Credits)

Scientists and philosophers have long pondered the intricacies of human decision-making. Are people primarily deliberative or are they more prone to emotions? This course brings together the latest findings from economics, psychology, and neuroscience to discuss how humans go about making economic decisions and the factors that affect those decisions. Such decisions include ones at the level of individuals, within small groups, and in more anonymous and impersonal market settings. The course looks at how social norms as well as cognitive biases and errors affect our day-to-day judgements and how we can make more informed decisions. The aim of the course is to introduce students to an exciting and cross-disciplinary perspective in human decision-making. This will involve applying the knowledge and insights gained to undertake critical analyses of a range issues affecting our judgements on matters of significant economic importance, affecting both businesses as well as the nonprofit sector. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. Prerequisites: (ECON 1200 or ECON 1250) and ECON 2140 and ECON 3118.

ECON 3154. Math for Economists. (4 Credits)

Introduction to differential calculus and linear algebra, as used in economics. Topics include optimization of single variable and multivariable functions, optimization subject to constraints, determinants, matrix inversion, and use of exponential and logarithmic functions in economics. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Prerequisites:** ECON 1200 or ECON 1250.

ECON 3160. Game Theory. (4 Credits)

Game theory considers static and dynamic situations of strategic interaction among entities such as individuals, firms, governments, and teams. In this course, we develop game-theoretic solutions to these strategic situations and use these solutions to predict behavior. In doing so, we apply game theory to markets, bargaining, laws, contracts, voting, and social norms, among other things.

Attribute: ASSC.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3162. Economics and Business Forecasting. (4 Credits)

This course surveys the basic principles of forecasting and the most widely used forecasting models. This computer-assisted course uses the Main-frame or PC version of statistical packages like SPSSX. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

ECON 3210. Development Economics. (4 Credits)

This course introduces students to the trends, causes, and consequences of poverty and economic deprivation in developing countries. We will cover topics in poverty, health, education, program evaluation, and the interplay between development and psychology. We will draw lessons from policy experiments in a wide range of developing countries (in Latin America, Asia, Africa, and the Middle East) to understand what works and what doesn't. Specifically, you will learn about the basic facts surrounding the development process to use economic theory to make sense of these facts and identify gaps in our understanding and design policy experiments, collect and analyze data, and drive policy dialogue. Finally, this course prepares you to conduct research work in international organizations, such as the World Bank, International Monetary Fund, Bill and Melinda Gates Foundation, Catholic Relief Services, UNDP, and others. It prepares you to undertake development policy work in the real world. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. Attributes: GLBL, HPSE, HUST, INST, IPE, ISIE, ISIN, LALS, LASS, MKLA. Prerequisites: ECON 1200 or ECON 1250.

ECON 3212. Open Economy Macroeconomics. (4 Credits)

ECON 3212 is a field course in international macroeconomics. Ideally, students will take it after Intermediate Macroeconomics (ECON 3116). The course develops theoretical models to think about monetary policy in open economies, nominal exchange rate regimes, real exchange rates, sudden stops, international capital movements, twin crises, and sovereign debt crises. These models are then used to analyze the U.S. economy, as well as relevant case studies occurring in emerging nations in recent years. These might include U.S. twin deficits, the 1995 Mexican Tequila crisis, 1980s Latin American debt crises, the 2001 Turkish sudden stop, and the large current account surplus of the Chinese economy. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** ASSC, GLBL, INST, ISIN.

Prerequisites: (ECON 1200 or ECON 1250) and (ECON 1100 or ECON 1150).

ECON 3235. Economy of Latin America. (4 Credits)

This course will cover the Latin American experience from an economic perspective, including the political and social dimensions of this experience. Latin America's economic relations with the developed nations (trade, investment, foreign aid), the problems of internal stabilization in Latin American economies, and the "distributive" issues (land tenure, income distribution, employment) are among the most controversial subjects the course will consider. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: ADVD, AMST, APPI, ASHS, GLBL, HPSE, HUST, INST, IPE, ISLA, LALS, LASS, MKLA, PJEC, PJST.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3240. World Poverty. (4 Credits)

This course is an investigation into the causes and consequences of poverty, both in the United States and in developing countries. The available statistics and the economic explanations of poverty are surveyed. Contemporary debates over policies to reduce poverty are discussed, including issues of welfare, food and housing subsidies, foreign aid, famine relief, and agricultural development. The link between income distribution and economic growth is also discussed. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: ASSC, GLBL, HPSE, HUST, INST, IPE, ISIN, LALS, LASS, PJEC, PJST, URST, WGSS.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3242. Global Economic Issues. (4 Credits)

Students will debate the economic and environmental consequences of globalization, including trade agreements, labor standards, immigration, capital flows, climate change, and the HIV/AIDS and malaria pandemics. The perspective of non-western countries is emphasized, including their participation in such international agreements as the Kyoto and Montreal Protocols and within such institutions as the WTO, the World Bank, the United Nations, and the IMF. We study a little game theory as applied to international negotiations and some key principles of environmental economics, but there is no prior coursework formally required for this course. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** GLBL, INST, IPE, ISIN, LALS, LASS.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3244. International Economic Policy. (4 Credits)

This course explores the theoretical foundations of international trade flows and international monetary economics. The theoretical background is then used as a basis for discussion of international economic policy issues. The course emphasizes patterns of international trade and production; gains from trade; tariffs and other impediments to trade; welfare implications of international trade and trade policies; balance of payments; foreign exchange markets; coordination of monetary and fiscal policy in a global economy. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** ASSC, HPSE, HUST, INST, IPE, ISIE, ISIN, PJEC, PJST, URST. **Prerequisites:** (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3245. International Institutions: Economics and Politics. (4 Credits)

This course uses economic methodology to study the fundamental relationships between wealth and political power in the context of various international economic policies. Contemporary issues covered can include globalization, protectionism, trade wars, foreign assistance, and macroeconomic coordination. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: IPE, ISIE, ISIN.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3248. Migration and Development: A Social Justice Perspective. (4 Credits)

Migrations continue to reshape the global economy, especially in large cities. The human rights of conflict and climate refugees are major challenges for UN countries. Global inequality is now determined mainly by where you are born. This course reviews theory and evidence on the impact of immigration on sending and receiving countries. Why do some regions welcome immigrants (e.g., NYC and California) while others spend large sums to stop migration? Who gains and who loses from immigration? Is there a fair and humanitarian approach to immigration that promotes development in sending and receiving countries while minimizing the social and political cost of human mobility? Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: ASSC, HPSE, HUST, INST, IPE, ISIN, LALS, LASS. Prerequisites: ECON 1100 or ECON 1200.

ECON 3256. Comparative Economic Systems. (4 Credits)

Survey of the salient features of alternative economic systems; the mixed economies of the western world and Japan, the reforms in the former Soviet, Eastern European, and Chinese economies; problems of measuring economic performance. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: GLBL, INST, IPE, ISIN, SOIN.

ECON 3260. Economics and Epidemiology. (4 Credits)

This course introduces students to the multifaceted ways in which epidemics interact with economic circumstances. The course introduces students to basic concepts in epidemiology. Using these fundamental concepts, the course investigates how economic, financial, social, and structural factors contribute to the distribution of health and disease in diverse populations during epidemic outbreaks. Both present-day and historical examples of these interactions are provided throughout the course.

ECON 3340. Economics of International Business. (4 Credits)

This course describes the close connection between economic development and growth of the global economy via international business enterprise. Topics include an analysis of modern international business practices as one of the principal instruments of economic development; the emergence of the global, multinational enterprise out of post-WWII institutions and policies incorporated in GATT and IMF; international business strategies applied to diverse cultures and traditions; the tensions between national identity and the requirements of the global economy; profit vs. social welfare; technology transfer (with special emphasis on communications tech); MSBE entre to global markets; access to funding via international and indigenous financial markets; and the role of foreign direct investment. The course will also feature guest speakers. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. Attributes: INST, IPE, ISIN.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3345. Maritime Economics. (4 Credits)

In the presentation of theories of international trade, ceteris paribus conditions most often include transportation costs. That is, for purposes of exposition of the particular theory, the cost of transportation from one country to another is set at zero, while other costs, such as capital and labor, are closely analyzed. At the same time, it is universally acknowledged that a key factor in the growth of international trade has been the ongoing reduction of costs related to transportation. This course will focus on the maritime industry as fertile ground for the application of microeconomic—and, to some degree, macroeconomic—models. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Prerequisites:** (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3346. International Trade. (4 Credits)

A foundation course in international economics. Covers both international trade theory and policy. Issues examined include protectionism, trade and growth, custom unions, and multinational corporations. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** ASSC, HPSE, HUST, INST, IPE, ISIE, ISIN, LALS, LASS, MKLA, URST.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3347. International Finance. (4 Credits)

A foundation course in international economics. Covers foreign exchange markets and the balance of payments. Also examines macroeconomic policies affecting employment and inflation in an open economy. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** INST. IPE. ISIN.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3430. ST: Sustainable Business. (4 Credits)

This foundation course for the GSB-FCRH sustainable business minor covers the ethical, economic, and scientific principles needed to manage and promote enterprises that are both profitable but also socially and environmentally responsible. Using case studies, guest speakers, and their own research, students acquire the comprehensive perspective necessary to manage and promote social entrepreneurship within large and small companies and to work with NGOs, fair trade groups, private-public sector partnerships, micro-enterprises, etc. Sustainable means profitable, environmentally sound, and enabling for small scale entrepreneurs. Case studies range from Google's East Coast wind power grid to carbon offset programs in the Amazon to mobile phone remittance-based microfinance programs in Africa. This first course will draw on the knowledge of Fordham students and faculty as well guest speakers from the New York area to build a new sustainable business and development program at Fordham. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: ENST, ENT, ESEC, ESEL, IPE, PJEN, PJST, URST.

ECON 3432. ST: Modern Economics for a Sustainable World. (4 Credits)

The goal of this course is to demonstrate a novel perspective on economics that allows for well-being for all on a healthy planet. Students will learn the philosophical and religious, as well as the modern scientific, basics for sustainable development. This course focuses on applications of modern economics for global challenges. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

ECON 3435. Industrial Organization. (4 Credits)

An examination of the behavior of firms in monopolistic and oligopolistic market structures; the history, content, and effectiveness of anti-trust legislation; and the role of regulation in American industry. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: AMST, APPI, ASHS.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3453. Law and Economics. (4 Credits)

This course applies microeconomic analysis to traditional areas of legal study, such as contract, property, tort, and criminal law. The approach applies the "rational choice" framework used in economics to analyze the purpose, effect, and genesis of laws. Attention is paid to the effect of legal structures on economic efficiency. Economic analysis of law is one of the fastest-growing and most influential areas of both economic and legal scholarship. This course is of value to both the general economist and students planning to attend law school. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: AMST, APPI, ASHS, ASSC, BLEB, LPBC, LPGP. Prerequisites: ECON 1200 or ECON 1250.

ECON 3455. Economics and Regulation. (4 Credits)

This course provides students with the tools to understand the institutional aspect of regulatory and antitrust policies. It examines the economic issues at stake, what particular market failures provide a rationale for government intervention, the appropriate form of government actions, and the effects of government intervention. Such topics as government merger policies, cable television regulation, transportation regulation, crude oil and natural gas regulation, environmental regulation, and regulation of workplace health and safety will be covered. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attribute:** LPGP.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3563. Labor Economics. (4 Credits)

This course examines labor institutions and their historical development in addition to the economics and peculiarities of labor markets. The role that institutional pressures (e.g., trade unions, government legislation, labor-management relations), industry organization, and market forces play in determining the terms and conditions of employment are discussed. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** LALS, LASS, LPBC, LPGP. **Prerequisites:** ECON 1200 or ECON 1250.

ECON 3570. Labor Market and Diversity. (4 Credits)

The goal of this course is to enable students to think independently about labor market and diversity issues. This course will (a) provide an introduction to the economic analysis of behaviors and institutions in the labor market; and (b) give students the tools to deal with diversity questions within the labor market such as educational attainment, employment discrimination, and income inequality across gender and racial groups. Economic logic and evidence will be used to analyze employer and employee decisions and the institutional factors shaping those decisions. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** ADVD, AMST, ASHS, ASSC, DISA, PJEC, PJST, PLUR, URST, WGSS.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3580. Economics of Diversity. (4 Credits)

Many of the social interactions of an individual in American society are shaped by the ethnic, racial, and gender groups to which the individual belongs. In this course, we will investigate several of the economic effects of social interactions in a diverse society, including residential segregation, peer effects on neighborhood crime rates, interracial marriage patterns, diversity, social norms and cultural beliefs, the spread of diseases, income inequality, and affirmative action. While the specific topics covered are broad, many share properties that can be understood through the concepts of basic network theory. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: ACUP, ADVD, AMST, APPI, ASHS, LALS, LASS, LPGP, LPHP, MKLA, PJEC, PJST, PLUR, URST, WGSS.

ECON 3636. Money and Banking. (4 Credits)

In this course, we will cover the role of commercial banks and financial institutions in the creation and allocation of money and credit, the central bank as the regulator of the money supply, monetary theory and policy, and the international monetary system. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attribute: ASSC.

Prerequisites: ECON 1100 or ECON 1150.

ECON 3637. Monetary Policy. (4 Credits)

An analysis of the monetary sector of the economy and the impact of monetary policies designed to solve the problems of inflation, unemployment, and economic growth. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Prerequisites: ECON 1100 or ECON 1150.

ECON 3666. Economics at the Movies. (4 Credits)

Films spirit us away. Whether we journey somewhere in time or far, far away, we do it in the name of entertainment. One does not simply walk away from a well-made film unchanged. Regardless of the subject, genre, or direction, film draws from the human experience. This course will utilize film to illustrate the concepts that students have and will encounter in their study of economics. Through the lens of economic analysis, students will experience film and enrich the film-going experience. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3710. Economist as Storyteller. (4 Credits)

This course aims to provide students with a comprehensive understanding of how fundamental economics concepts are present in various forms of storytelling, including in myth, folklore, literature, and popular fiction. By the end of the course, students should be able to analyze the economic implications of stories from different cultures and time periods, and appreciate the ways in which narratives can be used to illustrate economic concepts. Additionally, students should be able to apply this knowledge to their own work, crafting narratives that effectively convey economic ideas to diverse audiences.

Attributes: ASSC, EP3.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3715. Economics: British Thinkers and Writers. (4 Credits)

This interdisciplinary course provides students with a comprehensive understanding of how fundamental economics concepts are present in various forms of storytelling, with a specific focus on the economy of London during what Hobsbawm termed the long nineteenth century (1789-1914). Class discussions will place particular emphasis on understanding how property rights, legal, political, and financial institutions, the railway boom, and international trade both positively and negatively affected the lives of Londoners while at the same time contributed to making London a thriving urban and global metropolis. The core class readings will include fiction by authors who lived in and around London in the nineteenth century, nonfiction about life in London by both nineteenth century and contemporary authors, and academic articles and publications by current scholars in the field. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

ECON 3739. Financial Markets. (4 Credits)

An introduction to flow of funds analysis and interest rate determination in the money and capital markets; the risk and term structure of interest rates. An introduction to financial futures, options, and swaps. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3740. Issues in Financial Markets. (4 Credits)

This course provides an in-depth examination and discussion of selected topics in financial markets. Topics of current interest will be drawn from both academic and non-academic sources Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3743. Stocks, Bonds, Options, and Futures. (4 Credits)

This course examines the working of the primary and secondary markets, investment banking, brokers and dealers, the New York and the American Stock Exchanges, the NASDAQ, the options and futures markets. Fundamental and technical analysis is also covered. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: AMST, APPI, ASHS.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3778. Corporate Finance. (4 Credits)

The decision-making processes of a firm across time and in the presence of uncertainty. Financial assets and markets. Valuation of financial assets. Working capital and long-term financial management. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3850. Environmental Economics. (4 Credits)

Good economic analysis underlies many successful environmental policies, from reducing air and water pollution to the Montreal Accord limiting ozone-depleting gases. However, the environmental challenges of global warming, biodiversity, and sustainable development are increasing globally, as well as politically and economically complex. This course reviews the key economic ideas underlying past successes and explores potential solutions for sustainable economic growth with environmental preservation in rich and poor countries alike. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: AMST, APPI, ASHS, ASSC, ENST, ENVS, EPLE, ESEC, ESEL, INST, ISIN, PJEN, PJST, SOIN, URST.

Prerequisites: ECON 1200 or ECON 1250.

ECON 3870. Public Finance. (4 Credits)

The role of public expenditure in a market economy. Equity and efficiency in a tax system. Description and analysis of the major taxes. Intergovernmental fiscal relations. Programs for redistributing income. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: LPGP, URST.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3872. Principles of Cost-Benefit Analysis (CBA). (4 Credits)

In this course, students will gain an introduction to the theory and practice behind environment policy decisions in developed and developing countries. We'll also discuss CBA's applications in health, education, transport, preserving the environment, and HIV/AIDS. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Prerequisites: ECON 3118 or ECON 3870.

ECON 3878. Evaluating New Dementia Interventions. (4 Credits)

The course presents and evaluates the many effective dementia interventions to reduce the symptoms of this debilitating condition, using a cost-benefit framework to establish whether the benefits outweigh the costs. It uses a behavioral definition of dementia by looking at how the symptoms of dementia can affect the activities of daily life, rather than just using the medical definition which is based on brain pathology. Because a behavioral definition is adopted, the course provides many insights into how economists can contribute to an understanding of this medical field and come up with public policy recommendations. The course is built around five newly evaluated dementia interventions: years of education, Medicare eligibility, hearing aids, vision correction, and avoiding living in nursing homes. The public policy emphasis is then broadened to include interventions that relate to elder abuse and human rights. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. Prerequisites: ECON 1200 or ECON 1250.

ECON 3884. Contemporary Economic Problems. (4 Credits)

This course will survey the outstanding microeconomic and macroeconomic problems facing the United States. Topics covered include changes in the global economy, unemployment, inflation, poverty, environmental protection, healthcare reform, the productivity issue, and the deficit. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** LPBC, LPGP, SOIN, WGSS.

Prerequisites: (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3885. Introductory Econometrics. (4 Credits)

This course introduces students to econometrics. It reviews the classical regression model before studying in detail deviations from the classical assumptions, which are often encountered in practice. The course covers several estimation techniques (such as maximum likelihood), as well as topics in time series analysis. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Prerequisites: (ECON 2140 or MATH 3006) and (ECON 2142 or SABU 2142 or MATH 3007) and (ECON 1100 or ECON 1150) and (ECON 1200 or ECON 1250).

ECON 3886. Machine Learning for Economists: An Introduction Using R. (4 Credits)

This course introduces students to a set of tools for modeling and understanding (possibly big) data. It blends elements from statistics/ econometrics and computer science. It is therefore interdisciplinary in nature and designed for quantitatively inclined students. The course focuses on supervised learning with applications of interest, notably in economics and finance. In the first part of the course, we will define the field, discuss the meaning of model accuracy and the bias-variance tradeoff, and briefly review linear regression using "R." In the second part, we will extend our study of classifiers, i.e., tools to classify observations into categories or evaluate the probability that an observation belongs to a category. For example, determining whether (and with what probability) the economy is currently in a recession is a classification problem. Methods may include the logistic regression, the naive Bayes classifier, and the K-nearest-neighbor approach. In the third part of the course, we will study resampling methods: cross-validation and the bootstrap. In the fourth and final part, we will cover more advanced topics that may include model selection and regularization, tree-based methods, or support vector machines. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. Prerequisites: ECON 2140 and (ECON 2142 or SABU 2142).

ECON 3971. Urban Economics. (4 Credits)

Urban Economics is the study of location choices by firms and households. The technological changes and economic factors driving the process of urbanization, and the shift from a "downtown-centered" city to the suburbanized metropolises prevalent in the U.S. today are the central focus of the course. Throughout the course, New York City's history and current situation are used as examples of the economic forces operating in cities. Students will participate in a group project to analyze a major urban problem such as housing affordability, poverty, crime, or education. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** AMST, APPI, ASHS, ASSC, LALS, LASS, MKLA, URST. **Prerequisites:** ECON 1200 or ECON 1250.

ECON 3999. Tutorial. (3 Credits)

Independent research and readings with supervision from a faculty member.

ECON 4005. Fair Trade Entrepreneurship. (4 Credits)

Fair trade is a global response to social injustice and poverty. Whether it is capital for startups or markets for fair trade coffee, the fair trade movement promotes socially and environmentally responsible business practices here and abroad. This course reviews the fair trade movement's successes and failures to find alternatives to business as usual that reduce poverty and build a sustainable global economy. Students focus on country-specific examples of fair trade and microfinance social innovation that reduce poverty by creating viable livelihoods. Marketing, insurance, finance, and management can all be applied to build a socially just and sustainable global economy. "We urgently need a humanism capable of bringing together the different fields of knowledge, including economics, in the service of a more integral and integrating vision," Pope Francis argued in his 2015 encyclical "Laudato Si'." This course explores that vision. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. Attributes: IPE, LALS, LASS, PJEC, PJST.

ECON 4020. Disability: Economic and Other Approaches. (4 Credits)

This course is a critical survey of the research and analysis of disability definitions, measures, and economic issues with a focus on the interaction between disability and the public policy arena in the United States. It uses economic models but also covers in-depth approaches and methodologies in other disciplines. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: DISA, DIUL, ICC, INST, PJEC, PJST, PLUR. Prerequisites: ECON 1250 or ECON 1200.

ECON 4025. Bronx Urban Economic Development. (4 Credits)

In this course, students will use economics, urban studies, and social service policy to examine economic, political, and social issues that impact the local Bronx community. Topics covered will include budgetary policy, education policy, community development/investment, and university/neighborhood relations, among others. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: AFAM, ICC, PJEC, PJST, URST.

ECON 4030. Environmental-Economic Policy. (4 Credits)

This course will introduce students to the basic supply-and-demand framework used to evaluate market outcomes in basic microeconomics courses. Within the context of this framework, the course will explore several policy-relevant environmental issues, including those related to agricultural production, climate change, electricity generation, and ecosystem services. Exploration of the contemporary environmental issues will be led by student groups, which will engage in Oxford-style debates regarding the potential resolution of each issue. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: ASSC, ENST, ESEC, ESEL, PJEN, PJST. Prerequisites: ECON 1200 or ECON 1250.

ECON 4035. Ecology and Economics of Food Systems. (4 Credits)

This course begins with a historical analysis of food as a catalyst for social and economic development. The associated costs of food production from both ecological and economic prospects are investigated with particular emphasis placed on important global food crops. Major discussions will include the ability to balance global equitability of food distribution and environmental sustainability. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

Attributes: ENST, ESEC, ESEL, ESHC, ICC, INST.

ECON 4100. Internship credit. (1 Credit)

This course is to be used for recording a course credit when students complete an approved internship.

ECON 4110. Ethics and Economics. (4 Credits)

This course examines how ethical considerations enter into economic decisions. Readings include writings by moral philosophers and the founders of economic thought, as well as recent research on ethical issues. Topics for discussion may include child care, trade liberalization, welfare reform, health care, poverty, pollution, and economic sanctions. Note: Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Attributes:** AMCS, AMST, APPI, ASHS, ASRP, EP4, LPBC, SOIN, URST, VAL.

ECON 4200. Seminar: Managerial Economics in a Global Economy. (4 Credits)

The application of economic theory (microeconomics and macroeconomics) and decision science tools (mathematics and econometrics) by firms and non-profit organizations to find optimal solutions to managerial decision problems in the face of constraints. The topics covered are new managerial theories of organizations in the globalized world of today; the theory and estimation of demand, production and costs, and their relationship to output and prices under various market structures. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction. **Prerequisites:** (ECON 1100 and ECON 1200) or (ECON 1150 and ECON 1250).

ECON 4800. Internship. (1 to 4 Credits)

Supervised placement for students interested in work experience. Four-credit courses that meet for 150 minutes per week require three additional hours of class preparation per week on the part of the student in lieu of an additional hour of formal instruction.

ECON 4998. Honors Seminar in Economics. (1 Credit) Supervised individual study project.

ECON 4999. Tutorial. (4 Credits)

Supervised individual study projects.

ECON 5005. Fair Trade Entrepreneurship. (3 Credits)

Fair trade is a global response to social injustice and poverty. Whether it is capital for "startups" or markets for fair trade coffee, the fair trade movement promotes socially and environmental responsibility business practices here and abroad. This course reviews the fair trade movement's successes and failures to find alternatives to business as usual that reduce poverty and build a sustainable global economy. Students focus on country specific examples of fair trade and microfinance social innovation that reduce poverty by creating viable livelihoods. Marketing, insurance, finance and management can all be applied to build a socially justice and sustainable global economy. "We urgently need a humanism capable of bringing together the different fields of knowledge, including economics, in the service of a more integral and integrating vision" Pope Francis argues in his recent Encyclical Letter, this course explores this vision.

Attributes: CEED, CENS, GSSE, LALS, LASS.

ECON 5006. Programming Economics and Finance. (3 Credits)

This course introduces the student to various computer programs and their applications in economics and in finance. The course begins with a general review of programming skills using MATLAB. It then presents other statistical and econometric packages such as SAS and STATA. The course concludes with a review of the LATEX program. **Attribute:** EDFI.

ECON 5011. Economic Analysis. (3 Credits)

This course provides a survey of macroeconomic and microeconomic theory intended to prepare those international political economy and development (IPED)students who did not major in economics as undergraduates for IPED's core courses in economics. Attribute: IPED.

ECON 5012. Foundations of Economics. (3 Credits)

This course is designed for students who did not major in economics but wish to pursue a master's degree in economics. It covers the foundations of microeconomic and macroeconomic theory and is intended to prepare new M.A. or M.S. students in economics for the core economics courses in the M.A. program in economics or the dual M.A./M.S. program in economics and data science. This course cannot be taken concurrently with ECON 6010 or 6020.

Mutually Exclusive: ECON 5011.

ECON 5015. Economic Development Policy. (3 Credits)

Using economic methodology, this course examines the interaction between political and economic institutions in the determination of economic policy in developing countries. Topics may include population control, urban bias, agrarian reform, trade policies, foreign aid, and macroeconomic adjustment policies.

Attributes: CEED, CENS, HUCB, IPED, URSG.

Prerequisite: ECON 5011.

ECON 5020. African Economic Development. (3 Credits)

The key objective of this course is to develop an understanding of the economic development problems of Africa, the trade patterns and financial relationships of Africa to the rest of the world. With examples, application, and country case studies, the course covers major development challenges and the possible solutions, the growing influence of African economics in industrialized and developing countries as well as future prospects.

Attribute: HULI.

ECON 5032. Economic Theory and Application of Transfer Pricing. (3 Credits)

The reorganization of corporations into large multinational units with diverse operations has renewed interest in the issue of transfer pricing of goods and services as they move between corporate units. Transfer pricing gives rise to a host of taxation and economic issues. In this course, we focus on economic models for transfer pricing using agency theory and game theory and discuss Hirshleifer's theories of corporate organization. We then discuss a variety of tax issues that arise under different pricing schemes and work through case studies to provide a well-rounded perspective of how theory relates to practice. Undergraduate seniors who wish to enroll in ECON 5032 must have successfully completed ECON 3118 and obtained the written permission of the professor, graduate department program director, and senior class dean to register for this course.

ECON 5040. Strategic Financial Management. (3 Credits)

This course provides students with an introduction to the basic questions facing an investor evaluating firm policy. It covers debt/equity choice, dividend policy, and principle-agent problems within the firm as well as the value of the firm under different financial and managerial structures. Current research is surveyed to determine how investors interpret various financial arrangements such as dividend policy, taxes, and stock offerings. Specific attention will be paid to information and incentives of each party in a financial contract in the context of structuring the firm, running the firm efficiently, and if all else fails, bankruptcy.

ECON 5105. Topics in Economic History. (3 Credits)

The course aims to examine how to apply the core ideas and methods of economics to a wide range of historical issues, while at the same time broadening and deepening the exchange of ideas between economists and historians.

Attributes: EDAM, HIST, PSIC.

ECON 5260. Epidemics and Development Policy. (3 Credits)

In this course, students examine epidemics in developing countries, their transmission and governmental policy related to their control. Students are expected to have completed the equivalent of Intermediate Microeconomics at the Undergraduate level.

Attributes: CEED, CENS, EDAM, GSSE, HUCB, INST, IPED, ISIN, PSIC.

ECON 5280. Urban Economics. (3 Credits)

The field of urban economics addresses a wide variety of urban questions and topics. At the most general level, the field introduces space into economic models and studies the location of economic activity. Urban economics typically addresses four sets of questions: development of urban areas, patterns of development within metropolitan areas, the spatial dimensions of urban problems, and the spatial aspects of local government.

Attributes: CEED, CENS, EDAM, PSIC.

ECON 5415. Gender & Economic Development. (3 Credits)

In this course, students analyze the social nature of gender and economic development from a cross-cultural perspective. Topics include household labor, occupational segregation and earnings, inequality in market work, poverty, family structure, public policy, and gender equity. The course draws on material from economics and other social sciences to analyze the social nature of gender and economic development in a cross-cultural perspective. Topics include women's household labor; occupational segregation and earnings inequality in market work; the intersections of gender, class, race, and ethnicity; women and poverty; family structure; public policy and gender equity.

Attributes: CEED, CENS, EDAM, HULI, PSIC.

ECON 5442. Emerging Markets: South Africa. (3 Credits)

Intended for students from South Africa participating in Fordham's ADV EMRA program, this course is offered every August at the University of Pretoria. Students will collect and analyze economic and financial data on South Africa and compare it to similar data on the emerging markets as well as with more established markets. In addition, students will have the opportunity to interact with South African business, labor, and government representatives as well as with U.S. business and government representatives. At the end of the course, students will attempt to determine the prospects for foreign equity investment for a particular country.

ECON 5500. Financial Analysis. (3 Credits)

An examination of the pricing of financial instruments and the working of the markets for stocks, bonds, options, and futures contracts. **Attribute:** IPED.

ECON 5510. International Economic Policy. (3 Credits)

Using economic methodology, this course examines the interaction between political and economic institutions in the determination of international economic policy. Topics may include protectionism, strategic trade policy, sanctions, and macroeconomic coordinations. **Attributes:** INST, IPED, ISIN.

Prerequisite: ECON 5011.

ECON 5515. International Monetary Policy. (3 Credits)

This graduate-level course in international macroeconomics and finance is part of the core courses of the International Political Economy and Development program. It is designed to help students develop an understanding of international capital markets and provide a conceptual framework for the analysis of macroeconomic policy in an open economy. Attribute: IPED.

ECON 5540. Emerging Markets. (3 Credits)

This course is intended primarily for IPED students interested in analyzing the dynamics of emerging financial markets in Africa, Asia, and Latin America. It compliments POGA 6991- Political Risk Analysis. Students must prepare a study of one country's basic macroeconomic performance, foreign exchange market, and stock market. The use of a computer and the internet are incorporated into the course to gather data and analyze it statistically. Intended primarily for IPED students, this course explores the dynamics of emerging financial markets in Africa, Asia, Eastern Europe, and Latin America. Complementing and expanding upon the skills learned in POGA 6991 Political Risk Analysis, students learn how to prepare a country study regarding their country's leading macroeconomic indicators, the stability of its foreign exchange market, and the likely returns and risks associated with its stock market. Realtime data is obtained from the university's Bloomberg Terminal and the internet. Additional data is available from standard written and CD-ROM statistical sources. Students are taught how to analyze this data using standard statistical software to forecast trends as well as to estimate returns, volatility, and cross-correlations. An optimal portfolio of equity investments in emerging markets is estimated. Students also analyze the dynamics of emerging financial markets in Africa, Asia, Eastern Europe, and Latin America.

ECON 5541. Emerging Markets: South Africa. (3 Credits)

In this course, students will analyze economic and financial data in order to judge the prospect for foreign equity investment in South Africa. Students will also meet with union, business, government, and political leaders. This course can substitute for ECON 5540 Emerging Markets and count toward the requirements for the Emerging Markets and Country Risk Analysis certificate.

ECON 5542. Emerging Markets: South Africa. (3 Credits)

Intended for students from South Africa participating in Fordham's ADV EMRA Program, this course is offered every August at the University of Pretoria. Students will collect and analyze economic and financial data on South Africa and compare it with similar data on other emerging markets as well as with more established markets. In addition, students will have the opportunity to interact with South African business, labor, and government representatives as well as with U.S. business and government representatives. At the end of the course, students will attempt to determine the prospects for foreign equity investments for the particular country.

ECON 5545. Microfinance in Emerging Economies. (3 Credits) This class will present the basic concepts related to microfinance, its origins and evolution. Students will analyze the main "emerging economies" microfinance models. The course will also present a detailed analysis of successful MFIs, their results in terms of micro-business development, and their impact on development and social inclusion. The class will present a detailed analysis of successful MFIs, their results in terms of micro-business development, and their impact on development and social inclusion. Students will also focus on the products and instruments used and how MFIs make them attractive and accessible for their clients, and at the same time profitable, creating a self-sustaining business model.

ECON 5551. Domestic and International Banking. (3 Credits)

A survey of domestic, and international banking activities and regulations, foreign exchange futures and options, foreign exchange rates, Eurocurrency markets, interest rate swaps, American banking regulations, hedging foreign exchange and interest rate risk, and financial innovation.

Attribute: IPED.

ECON 5570. Global Financial Markets. (3 Credits)

The course describes the markets and regulatory structures in which firms operate and the types of financial instruments used in developed and developing countries. Examines souces of risk investors face as well as how the financialsystem itself plays a role in development. An examination of financial markets in developed and developing countries. This course describes the markets and regulatory structures in which firms operate to raise funds and the type of financial instruments used. Attention is paid to sources of risk investors face domestically and internationally and the pricing of that risk. The course also looks at how firms operate under the financial constraints of a developing economy as well as how the financial system itself may play a role in affecting the rate of development. Satisfies IPED students the GBA certificate prerequisite of FN6411 Financial Environment. Designed to complement topics covered in ECGA 5551 Domestic and International Banking. **Attributes:** INST, IPED, ISIN.

ECON 5590. Health Economics. (3 Credits)

The aim of this course is to evaluate health expenditures and health policies in both the U.S. and in developing countries using a common framework that integrates equity and efficiency. The course covers cost minimization, cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis. All theories are matched with an application related to an actual policy expenditure decision. Applications related to the U.S. include valuing physician service, alcohol treatment, inpatient care, diagnostic related groups (DRGS), psychiatric hospitals, Medicare payments, and bills charged to patients. Applications of special interest to developing countries include vaccinations, Disability-Adjusted Life Years (DALYS) and the global burden of disease, user fees, and various interventions for HIV/AIDS.

Attribute: EDAM.

ECON 5600. Health and Development. (3 Credits)

This course introduces students to the field of health and development. The objective is to cover a range of theoretical and empirical topics relevant to understanding health and health-care policies in developing countries. Microeconomic techniques are used to understand the demand and supply of health, the measurement of health over the human life cycle (in-utero, early childhood, adolescence, working-age population, aging population), and the role of public policy in improving the demand and supply of health over the human life cycle. In this interdisciplinary course, students will be exposed to studies from many related fields, in particular development studies, public health, and disability studies. For select topics, students will learn how to measure and analyze data that contributes to health policy debates (related to subsidies, incentives, insurance, and others) in developing countries. The course is aimed toward students interested in understanding health and health-care policies in developing countries. Attributes: EDAM, PSIC.

ECON 5700. Mathematical Methods in Economics I. (3 Credits)

The primary objective of this course is to provide incoming Ph.D. students with solid mathematical foundations necessary for the first-year sequence of theory and econometric courses. This course is designed on the presumption that students will have already been exposed to some of this material in previous studies.

ECON 5710. Mathematical Analysis in Economics. (3 Credits)

Economists use models to analyze economic issues, and these models are usually expressed as sets of relationships that take a mathematical form. This course teaches students the core set of mathematical tools and techniques used in constructing and solving economic models. It will mainly develop the mathematical tools of calculus and matrix algebra and demonstrate how these tools may be used in economic analysis. Topics covered include matrices, determinants, and inverse matrices; calculus (differential and integral) and comparative statics; exponential and logarithmic functions; optimization of functions of one variable, and unconstrained and constrained optimization of functions of several variables.

Attribute: IPED.

ECON 5730. Econometrics and Finance Using R - Part I. (3 Credits)

This course will introduce students to R software, which they will use to work through statistical applications in economics and finance, as well as other fields.

Attribute: EDST.

ECON 5735. Econometrics and Finance Using R - Part 2: Topics. (3 Credits)

In this course, students will continue the analysis of problems in economics and finance using econometrics in R software, focusing on various topics. The course provides instruction in both econometrics and empirical implementation using R.

ECON 5740. GIS Mapping: Stata and R Prog. (3 Credits)

This course studies the mapping of long data sets into geographical information systems (GIS) by programming SATA and R.

ECON 5750. Game Theory. (3 Credits)

In this course, we examine economic and social networks and their corresponding economic effects. We cover the measurement and common regularities of social network properties and popular models of network formation. We apply these tools to topics of interest which may include labor markets; the spread of infectious diseases; the spread of financial information; the spread of new technologies, fads, and fashions; marketing; social norms; game theory and other strategic interactions; immigration and social capital; and industrial organization. Attributes: EDST, PSIC.

ECON 5755. Behavioral Economics: Theories and Applications. (3 Credits)

Behavioral Economics introduces psychologically realistic and institutionally relevant assumptions grounded in observed behavior (from lab and field experiments) to improve the explanatory power of economic models. To that end, we will focus on introducing and building theories with behaviorally relevant assumptions that have applications to areas such as savings behavior, addiction, labor supply, fairness concerns, and social pressure, among others.

Prerequisite: ECON 6010.

ECON 5760. Computational Macroeconomics/Finance. (3 Credits)

The aim of this course is to explore methods used to compute numerical solutions to dynamic stochastic general equilibrium (DSGE) models with applications to both macroeconomics and finance. The course begins with a rigorous exploration of numerical methods including function approximation, numerical differentiation and integration, non-linear equations, numerical optimization, and the simulation of multivariate Markov processes. Utilizing these tools, we will pursue solution methods such as perturbation methods, discrete state space methods, and parameterized expectations.

Attribute: EDST.

ECON 5771. Project Assessment. (3 Credits)

Uses the logical framework analysis frequently mandated by USAID to design a results based system to monitor and evaluate small community development projects.

Attribute: HUCB.

ECON 5808. Microfinance and Migration. (3 Credits)

Migration, access to credit (microfinance), and remittances can create employment and education opportunities for poor families, particularly women. Interdisciplinary case studies from Mexico, the Dominican Republic, the Bronx, Amsterdam, Nigeria, China, Bangladesh, and India show how race, class, and gender affect employment outcomes. Attributes: CEED, CENS, HULI.

ECON 6010. Microeconomic Theory I. (3 Credits)

This course covers a variety of topics, including methodology, theory of consumer behavior and demand, theory of production and factor prices under varying market structures, and welfare economics. Attribute: IPED.

ECON 6020. Macroeconomic Theory I. (3 Credits)

This course introduces students to the foundation of contemporary macroeconomics and equips them with the relevant analytic techniques for understanding advanced macroeconomic research. The first section of Macro I will be focused on tools for understanding the economy at an aggregate level. The remaining sections will apply those tools to a dynamic general equilibrium model of the economy and consider questions about economic growth. A framework for understanding basic fiscal policy in a dynamic general equilibrium context will be discussed as well. The last section of the course introduces frictions into the dynamic general equilibrium model to allow us to understand business cycles and the impact of monetary policy on unemployment and inflation. Attributes: ASDM, IPED.

ECON 6030. Global Managerial Economics. (3 Credits)

This course focuses on the application of economic theory and decision science tools by global firms to find optimal solutions to managerial decisions problems. The topics covered are new managerial theories of organizations in the globalized world of today, as well as the theory and estimation of demand, production, and costs, and their relationship to output and prices under various market structures.

ECON 6080. Capstone Project in Economics. (3 Credits)

The goal of this class is to sharpen students' skills in economics and data science by designing and implementing a capstone project. Through this class, students should gain a deep understanding of state-of-the-art data science technologies and current knowledge. Students are required to finish a large capstone project and are expected to present and write one or more research papers in this class.

ECON 6081. Economics Practicum. (3 Credits)

In this course, students will gain experience applying the knowledge and skills acquired in their coursework and laboratory sessions. Students are responsible for arranging a practicum/internship with a business or organization related to economics and data science.

ECON 6085. Master's Thesis in Economics I. (3 Credits)

Students have the option to pursue a master's thesis. This course serves as the first of the two required courses for completing an M.S. thesis. Students are responsible for finding a thesis advisor and collaboratively selecting a thesis topic. The work undertaken should sufficiently demonstrate the student's mastery of the subject matter. Additionally, an oral defense is mandatory as part of the completion process. Mutually Exclusive: CISC 6080, CISC 6081, ECON 6080, ECON 6081.

ECON 6086. Master's Thesis in Economics II. (3 Credits)

Students have the option to pursue a master's thesis. This course serves as the second of the two required courses for completing an M.S. thesis. Students are responsible for finding a thesis advisor and collaboratively selecting a thesis topic. The work undertaken should sufficiently demonstrate the student's mastery of the subject matter. Additionally, an oral defense is mandatory as part of the completion process.

Mutually Exclusive: CISC 6080, CISC 6081, ECON 6080, ECON 6081.

ECON 6240. Financial Economics. (3 Credits)

This course is a study of the fundamental methods and pricing techniques in financial economics. The course studies the valuation of fixed income securities, stocks, and derivative contracts. Additionally, an analysis of asset pricing and financial market structure will be covered. **Attributes:** EDFI, IPED.

ECON 6310. Monetary Policy. (3 Credits)

This course covers the impact, transmission, and incidence of monetary policy, central bank control of the money supply, rational expectations, and the effectiveness of monetary policy. Attribute: EDST.

ECON 6320. Monetary Theory. (3 Credits)

This course is designed as an advanced macroeconomics course for students interested in pursuing monetary or macroeconomics topics beyond core topics in a graduate course. The course develops a baseline, simplified, general equilibrium model with money and then considers a fully specified New Keynesian general equilibrium model. The course covers a number of traditional issues in monetary theory: price and wage rigidity as well as unemployment. It also covers recent issues: financial frictions and search frictions in the labor market. **Attribute:** EDST.

ECON 6340. Financial Theory. (3 Credits)

The theory of financial decision-making, risk and risk aversion, advanced asset pricing models, and empirical regularities of financial markets will be covered in this course.

Attribute: EDFI.

Prerequisites: ECON 6710 or ECON 6700.

ECON 6440. Development Economics. (3 Credits)

The objective of this course is to provide students with an understanding of the causes and consequences of economic deprivation. In this course, the household is the major unit of analysis. The course covers topics in poverty, health, education, program evaluation (randomized control trials and selected non-experimental evaluation methods), microfinance, and the interplay between development and psychology. We will draw lessons from policy experiments in developing countries to understand what "works" and what does not.

Attributes: EDAM, IPED, PSIC.

ECON 6460. Agriculture and Development. (3 Credits)

The objective of this course is to provide students with an understanding of agricultural economics, including food security and environmental issues.

Attributes: ABGS, CEED, CENS, EDAM, HULI, IPED, PSEV, PSIC.

ECON 6470. Growth and Development. (3 Credits)

A survey of growth models and statistical evidence to determine what causes growth rate to vary among countries and over time. Topics include the source of economic growth, growth with balance of payments adjustments, capital inflows and growth, and north-south growth models. Growth models and statistical evidence are surveyed to determine what causes growth rates to vary among countries and over time. Topics include the sources of economic growth, growth with balance of payments adjustment, capital inflow and growth, and North-South growth models.

Attributes: EDST, INST, IPED, ISIN. Prerequisites: ECON 5710 or ECON 5700.

ECON 6480. Environmental and Resource Economics. (3 Credits)

This course considers environmental protection and natural resource management as elements of international policy development and planning.

Attributes: EDAM, GSSE, HULI, IPED, PSIC.

ECON 6490. Foreign Aid and Development. (3 Credits)

This course examines the economic and political roles of foreign aid in development. Economic topics may include economic growth, agricultural development, food aid, the environment, health, education, and emergencies. Political topics may include alliance building, conflict resolution, and governance.

Attributes: CEED, CENS, GSSC, HULI, INST, IPED, ISIN, PSIC.

ECON 6510. International Trade. (3 Credits)

The objective of this course is to provide students with an understanding of various topics involving international trade, including absolute and comparative advantage; factor price equalization and important trade theorems; empirical tests of the Leontief Paradox; factor growth; technical progress in a simple, open economy; tariffs in large and small countries; effective protection; theory of second best; and theory of customs unions.

Attributes: EDST, IPED.

ECON 6530. International Economics of Growth and Development. (3 Credits)

International Economics of Growth and Development studies those aspects of development that are related to international economics. Subjects covered can include the connection between economic growth and international trade, the terms of trade and economic development, export instability and economic development, import substitution versus export promotion, international labor migration, and international capital flows.

Attribute: EDST.

ECON 6560. International Finance. (3 Credits)

The purpose of this course is to cover the various topics concerning international finance, including the balance of payments; the foreign exchange market; the nature, disturbance, and readjustments of the balance of payments; capital exports and the theory of transfer; development of international economic institutions and the world economy; flexible exchange rates; purchasing power parity; covered interest arbitrage; short-term capital movements; and the efficiency of the foreign exchange market.

Attributes: EDST, INST, IPED, ISIN.

ECON 6700. Mathematical Methods in Economics II. (3 Credits)

This course covers advanced mathematical techniques used in economics, including exponential and logarithmic functions, integration, multivariate and equality-constrained optimization, dynamic equations and systems of dynamic equations, as well as more advanced optimization techniques.

ECON 6910. Applied Econometrics. (3 Credits)

Basic techniques of econometric theory, including applications in consumer theory, theory of the firm, and in macroeconomics, as well as a review of statistical methods. Some computer work is assigned. **Attributes:** DATA, IPED.

ECON 6950. Financial Econometrics. (3 Credits)

This course covers hypothesis testing and modeling with respect to financial data.

Attributes: ASDM, DATA.

ECON 6970. Applied Microeconometrics. (3 Credits)

The primary goal of the course is to improve students' ability to conduct high-level empirical research, combining economics, econometrics, and data. The course will specifically cover instrumental variables estimation, regression discontinuity, propensity score matching, control function approach, randomized control trials, static panel data models, and dynamic panel data models. The course is intended to be particularly useful for advanced Ph.D. students and master's students planning to write or currently writing a thesis. The course will mainly draw on a series of high-quality journal publications from the field of applied microeconomics that use the aforementioned applied econometric techniques for causal inference.

Attribute: EDAM.

Prerequisite: ECON 6910.

ECON 6990. Topics in Econometric Theory. (3 Credits)

The purpose of this course is to provide Ph.D. students with the econometric tools they need for dissertation work. The main topic for this course will rotate among a variety of advanced econometrics topics such as time series econometrics, nonparametric econometrics, and machine learning, among others.

Attribute: EDST.

Prerequisites: ECON 7910 and ECON 7920 (may be taken concurrently).

ECON 6999. Research in Economics Capstone. (1 Credit)

This is a required course that facilitates the writing process of the capstone research paper for students completing an M.A. program in economics. The research paper provides an opportunity to write a piece of academic work in which the student is expected to demonstrate the ability to formulate a research question, facility in the use of empirical techniques, and the ability to convey results clearly in writing. **Prerequisites:** ECON 6010 and ECON 5710.

ECON 7010. Microeconomic Theory II. (3 Credits)

This course covers the foundations of contemporary microeconomic theory at the advanced graduate level. We develop an axiomatic model of static consumer choice, then add uncertainty and the ability to make trade-offs through time. We further consider the underpinnings of production and outcomes of (often strategic) interaction of firms and consumers, and limiting cases. Although all capable and interested students are welcome, the course will focus on preparing Ph.D. students for their comprehensive exam in microeconomic theory.

ECON 7020. Macroeconomic Theory II. (3 Credits)

Macroeconomics II is focused on the dynamic behavior of households, firms, and the aggregate economy. The course consists of three parts. The first part focuses on the theory of consumption behavior and savings at the individual and aggregate level. The second part of the course investigates overlapping-generations models (OLG) focusing on both endowment and production economies. Finally, the course reviews real business cycle theory and concludes by exploring some relatively recent developments in the formulation and computation of heterogeneous agent models.

Prerequisite: ECON 6020.

ECON 7590. Applied Health Economics. (3 Credits)

This course will survey theoretical and empirical research in health economics, with a focus on learning how to convincingly answer important empirical questions. We will draw on methods commonly used in a wide range of applied research, including instrumental variables, difference-in-differences, regression discontinuity, and structural econometrics. Topics will include the human capital model of health, social and environmental determinants of health, the functioning of health care markets, including insurance, pharmaceutical, and provider markets and especially in the United States, and the role of health care policy. The course is aimed toward students interested in conducting research in health economics, industrial organization, or applied microeconomics more generally.

Prerequisites: ECON 6010 and ECON 7010 and ECON 6970.

ECON 7910. Econometrics I. (3 Credits)

This class will begin with an exploration of the properties required to obtain causality in econometrics. We will focus largely on the theoretical properties of conditional expectations operators and basic asymptotic theory applied to ordinary least squares (OLS), two-stage least squares (2SLS), and nonlinear methods such as discrete response models.

ECON 7920. Econometrics II. (3 Credits)

This course focuses on an advanced treatment of select topics in econometrics, including sophisticated simultaneous equation estimation, asymptotic distribution theory, time series analysis, forecasting, and Bayesian inference.

Prerequisite: ECON 7910.

ECON 7990. Tutoring for Economics and Statistics. (1 Credit)

Guidance for Ph.D. students beginning tutoring and developing content for tutorial sections.

ECON 7995. Teaching Introductory Economics. (0 Credits)

This course is intended for graduate-student teaching fellows (TF). It provides training in all aspects of teaching introductory courses in macro and microeconomics. The faculty instructor will visit each teaching fellow's classroom to observe and offer advice on the TF's lecture style and technique. Participants in this course will meet periodically to discuss all aspects of teaching, including the preparation of a syllabus, the use of instructor software, writing and grading exams, and developing assessments.

ECON 7996. Teaching Beyond Intro Econ. (1 Credit)

Guidance for experienced Ph.D. student instructors in the classroom.

ECON 8100. Economics Internship. (0.5 Credits)

The Economics Internship course provides Economics graduate students the opportunity to accumulate relevant professional experience and practical training that they may need.

ECON 8570. Topics in Open Economy Macroeconomics. (3 Credits) This course continues discussion from from Ph.D. Macro II and International Finance on advanced international macro topics, such as exchange rate dynamics, international financial flows, global business

Prerequisites: ECON 6560 and ECON 6020.

cycles, and others.

ECON 8600. Research and Writing in Economics. (3 Credits)

The course will aim to help students develop key skills for economics research. These skills will be imparted through lectures, discussions, presentations, and homework assignments, and as part of a research paper the students will be required to prepare and present. The course will also provide a forum for students to present and discuss ideas, literature reviews, and methodologies.

ECON 8700. Research Methods & Design. (3 Credits)

This course will aid students in developing their dissertation work and perfecting their presentation and interview skills. It will cover new software for aiding dissertation work, Latex and Beamer, and data presentation strategies. It is intended for Ph.D. students who have completed their comprehensive exams and the Research and Writing course.

Prerequisite: ECON 8600.

ECON 8999. Independent Study. (0 to 4 Credits)

ECON 9999. Dissertation Direction. (1 Credit)

ECON MTNC. Maintenance-Economics. (0 Credits)