

# Economics

Contact: Dorothy Petersen, Academic Coordinator  
 Phone: 314-935-5644  
 Email: [dottie@wustl.edu](mailto:dottie@wustl.edu)  
 Website: <http://economics.wustl.edu>

## Courses

### **ECON 1499 First-Year Seminar: Economics and Society**

Economics and Society is a first-year seminar, open to interested students, and is without prerequisites of any kind. Two to four topics will be chosen for in-depth discussion during the semester. Possible topics include, but are not limited to: inequality (domestic and international); globalization (pros/cons); big banks and their role in financial crises; wars and national security; health and disease; capitalism and socialism. The seminar seeks to spread economic literacy among tomorrow's opinion leaders, improve their ability to analyze social issues, help them explain their viewpoint to others, and understand different opinions. (The course cannot be used for Economics major/minor credit.) 3 units.

Credit 3 units. A&S IQ: SSC Art: SSC BU: BA EN: S

Typical periods offered: Spring

### **ECON 1501 Introduction to Microeconomics**

Determination of prices; distribution of national income; theory of production. For a thorough introduction to economics, Econ 1021 also should be taken.

Credit 3 units. A&S IQ: SSC, AN Art: NSM, SSC EN: S

Typical periods offered: Fall, Spring, Summer

### **ECON 1502 Introduction to Macroeconomics**

Business fluctuations: inflation, recession; monetary and fiscal policy; economic development. For a thorough introduction to economics, Econ 1011 should also be taken.

Credit 3 units. A&S IQ: SSC, AN Art: NSM, SSC EN: S

Typical periods offered: Fall, Spring, Summer

### **ECON 1971 Introductory Research Seminar in Microeconomics**

Exploration of principles of microeconomics in a seminar setting. Reading from primary sources by authors including Adam Smith, Thomas Schelling, and Kenneth Arrow. Internet exchanges of critiques and questions will take place prior to each class. Class will follow a question and answer format based on internet exchanges. Each student will produce and present a short research paper using economic concepts (including substitution, opportunity cost, market equilibrium). Paper topics address specific current economic questions such as: Are costs higher in poorer areas? Do injuries go up or down for university students with more restrictive alcohol policies? This course substitutes for Econ 1011 for all major and minor requirements. Enrollment limited to 20 students.

Credit 3 units. A&S IQ: SSC

### **ECON 1996 Economics Coursework Completed Abroad**

Credit 12 units.

### **ECON 1997 Economics Elective: 100-Level**

Credit 3 units. EN: H, S

### **ECON 1998 Economics Elective**

This course is used for transcribing Econ Elective units in use for EMA (AP macro)

Credit 3 units.

Typical periods offered: Fall, Spring, Summer

### **ECON 2196 Practical Applications**

Credit for Economics internships.

Credit 3 units.

Typical periods offered: Fall, Spring, Summer

### **ECON 2900 Internship**

Students may receive up to 3 units of credit for an unpaid internship. The internship must be approved by the Career Center and supervised by a faculty member. Note: See Career Center for further information. This course does not count toward the major or minor in Economics.

Credit 3 units.

Typical periods offered: Fall, Spring

### **ECON 2920 Undergraduate TA**

In this course, an advanced undergraduate can assist a faculty member in the teaching of an undergraduate Economics class. Students can enroll after their selection by a supervising faculty member, which occurs after an application (on the department website) is submitted and reviewed, perhaps in conjunction with an interview with the supervising faculty member. Students can enroll in only one section per semester. Students will be expected, at a minimum, to attend lectures and hold office hours. Specific grading duties will be determined by the supervising faculty member, in accord with Arts & Sciences policies. The typical number of units earned is 2, with the possibility of a maximum of 3, per semester. This course can be repeated for P/F credit. Prerequisite: instructor permission. Units: variable - 2 typical; 3 maximum.

Credit 3 units.

Typical periods offered: Fall, Spring

### **ECON 2970 Sophomore Research Seminar**

How do you find an economically-relevant research topic? What are the different types of economic papers? How do you write like an economist? This seminar is aimed to help sophomores develop research skills in economics. Work will consist of an original research paper to be completed by the student by the end of the semester under supervision of the instructor. The paper will describe an economic problem, survey the relevant research literature, and outline a contribution to the field.

Credit 3 units. EN: S

Typical periods offered: Fall

### **ECON 2996 Economics Course Work Completed Abroad**

Abroad Course Work

Credit 12 units.

Typical periods offered: Fall, Spring, Summer

### **ECON 2997 Economics Elective: 200-Level**

student will receive elective credit

Credit 3 units. EN: H, S

Typical periods offered: Fall, Spring, Summer

---

**ECON 3150 Introduction to Econometrics**

Econometrics is the development and application of statistical techniques for the measurement of economic phenomena. This course is your initial study of econometric theory and practice. Topics include: translation of economic theory into statistical models, statistical foundations of econometrics, preregression analysis bivariate and multiple regression techniques, hypothesis testing, multicollinearity, specification error, autocorrelation, errors in variables, identification, and simultaneous estimation. Prerequisites: Econ 1011, Econ 1021, and SDS 2200 (or equivalent).

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring, Summer

---

**ECON 3210 Money and Banking**

Money and the monetary system; money creation by the banking system; central bank functions; monetary theory and economic policy. Prerequisite: Econ 1011 & 1021.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Spring, Summer

---

**ECON 3220 Financial Markets and Analysis**

This course is a rigorous introduction to financial markets, financial institutions, and their purpose and functions in the economy. In financial markets, trade is essentially money now for money in the future. As such, financial decisions must often take into account future events, whether those be related to individual stocks, portfolios, or the market as a whole. This course explores the topics related to the level and structure of interest rates and of stock prices, portfolio choice, basic investment theory, and arbitrage pricing theory, among others. Prerequisites: Econ 1011 and Econ 1021.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Spring

---

**ECON 3230 Financial Intermediaries in the Market Economy**

Financial intermediaries, like all financial institutions, channel funds from those who wish to save to those who need to borrow. Examples include commercial banks, savings and loans, mutual funds and pension funds. At the micro level, these institutions expand opportunities by allowing savers to convert current income into future spending, and permitting borrowers to convert future income into current spending. At the macro level they spur economic growth by acting as a channel through which savings can finance investment. However, savers can lend directly to firms, so intermediaries must serve other functions as well. This course analyzes in detail the opportunities and risks presented by financial intermediaries, the larger economic benefits of having both direct and indirect methods of lending, and the need for regulation. We also consider the implications for these institutions of changes in communications technology and the growth and globalization of capital markets.

Credit 3 units.

---

**ECON 3290 Consumer Economics, Finance and Investment**

Course discusses principles of individual economic behavior relating to risks, lifestyles, time streams of income and expenditure, and taxes; and analyzes individual investment and spending decisions for insurance, pensions, various types of securities, real estate, savings, etc. Prerequisites: Econ 1011 & 1021.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall

---

**ECON 3310 Behavioral Economics**

Behavioral economics incorporates insights from psychology and other social sciences into economics, with the goal of increasing the realism and accuracy of standard economic models. Topics discussed include: risk, beliefs, overconfidence, limited attention, social preferences, emotions, self-control, frames, and nudges. The framework developed from these topics can be applied to wide-ranging concerns such as decisions about savings and consumption choices; financial market participation and credit card use; gambling; procrastination; charitable giving; and happiness. Students may have the opportunity to participate in in-class/lab experiments. Prerequisite: Econ 1011.

Credit 3 units. A&S IQ: SSC BU: BA EN: S

Typical periods offered: Summer

---

**ECON 3320 Health Economics**

Analysis of consumer demand for health care, medical technology, and the role of health insurance. Emphasis placed on behavior of the physician (whether he acts as an agent for the consumer or on his own behalf); on the use of paramedics, preventive care, outpatient care, and the general market organization of the health industry. The major concern will be the rising cost of health care and appropriate public policy responses. Prerequisite: Econ 1011.

Credit 3 units. A&S IQ: SSC Art: SSC BU: BA EN: S

Typical periods offered: Fall

---

**ECON 3345 Labor and the Economy**

Economic analysis of labor markets. Theory and policy applications of labor supply and labor demand; explanations of wage and income differentials; migration and immigration; discrimination; labor unions; unemployment. Prerequisite: Econ 1011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring, Summer

---

**ECON 3350 Environmental Policy**

Course will examine the relationship between environmental economics and environmental policy. The course will focus on air pollution, water pollution, and hazardous wastes, with some attention given to biodiversity and global climate change. The course will examine critically two prescriptions that economics usually endorses: (1) balancing of benefits against costs (e.g., benefit-cost analysis) and the use of risk analysis in evaluating policy alternatives; (2) use of market incentives (e.g., prices, taxes, or charges) or property rights instead of traditional command-and-control regulations to implement environmental policy. Prerequisite: Econ 1011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall

---

**ECON 3371 International Trade and Finance**

Concept of comparative advantage arguments for free trade and protectionism and balance of payments adjustment over fixed and flexible exchange rates. Prerequisites: Econ 103B and Econ 104B

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall

---

**ECON 3372 International Finance**

This course will present ideas and concepts pertaining to international macroeconomics and the global economy. Topics to be covered include: the balance of payments; exchange rate determination; international macroeconomics; and international macroeconomic policy and policy coordination. Particular attention will be paid to the role of the United States in the global macroeconomic arena. The material will be presented through a combination of lectures and case discussions. Prerequisite: Econ 104B.

Credit 3 units. A&S IQ: SSC BU: IS

Typical periods offered: Fall

---

### **ECON 3373 International Economics**

Explores consequences of economic integration from various perspectives in international trade: Ricardian, Heckscher-Ohlin, and the New International Trade Theories. Topics include patterns of trade, protectionism, international factor movements, balance of payments, exchange-rate determination, international policy coordination, the international capital market, multinational and international investments, and patterns of international business. Prerequisites: Econ 1011 and Econ 1021, or permission of instructor.

Credit 3 units. A&S IQ: SSC BU: IS

Typical periods offered: Fall

---

### **ECON 3375 Hierarchy and Organization in Economic Life**

Introduction to new institutional perspectives on problems of economic growth and transition. Basic issues in economic development discussed from a microeconomic perspective with attention paid to the role of political economy, credible commitment, institutional constraints, and the problem of high transactions costs. Material from the literature on industrial organization and management also used to show similarities between hierarchical issues both in political economy and within large firms. Discussion of transition economies of Central and Eastern Europe and transformation in the wealthiest economies, like the United States and Japan, as well as traditional questions of underdevelopment. Students required to submit several short and one or two longer essays for discussion and revision. Enrollment limited to 15 students. Prerequisite: Econ 103B. Credit 3 units. A&S IQ: SSC, WI

---

### **ECON 3380 Microeconomics of Public Policy**

We will explore the key public policy issues, with a focus on the prominent issues facing our country today. In particular, we have selected ten topics that will be investigated: poverty, crime, discrimination, big business, international trade, immigration, healthcare, education, energy and the environment. We will identify and objectively analyze the problems surrounding each of the issues, including their causes, consequences, and measurement. Prerequisite: Econ 1021.

Credit 3 units. A&S IQ: SSC, WI EN: S

---

### **ECON 3385 Business, Government, and the Public**

The increasingly complex interrelationships among business, government, and the public, focused on a set of major problems currently involving these relationships. Prerequisites: Econ 1011, 1021, and junior standing.

Credit 3 units. A&S IQ: SSC, AN

---

### **ECON 3390 Economics of Education**

Introduction to the various aspects of the economics of education. It applies the tools of economic analysis to educational policy and problem solving. Topics include cost-benefit analysis of education, the signaling vs. human capital debate, race and gender issues in education, education production functions, and financing education at the elementary, secondary, and post-secondary levels. Emphasis placed on individual and social choice in education. Prerequisite: Econ 103B

Credit 3 units. A&S IQ: SSC

Typical periods offered: Summer

---

### **ECON 3610 The Economics of the Law**

Course examines the principal findings of the scholarly literature on the application of economics to law, including such topics as public regulation of the market, concepts of property rights in law and economics, the effect of property rights assignment on income distribution, negligence, no-fault insurance, deterrence and the economic theory of remedies, evidence on the deterrent effect of punishment, and the economics of organized crime. Emphasis will be primarily on the application of theory to specific legal issues. Prerequisite: Econ 103B or permission of instructor.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall

---

### **ECON 3620 History of Economic Analysis**

The purpose of this course is to introduce students to some of the theories and doctrines that constitute the main paradigms from which economists and policy makers approach the world. Rather than focusing on the whole history of economic thinking, we will focus on practical issues, including questions such as the following: What determines the wage of labor? Why is monopoly considered a bad thing? At what level does an interest rate become usury? We will consider how these questions have been framed and answered at different points in time and in different cultures. Important components of this course are participation in in-class discussion and essays submitted on the practical issues discussed throughout the semester. Prerequisites: Econ 1011 and Econ 1021.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Spring

---

### **ECON 3630 Politics, Economics and Welfare**

Covers both theoretical and applied aspects of political economy: the justification of the state; problems of cooperation over public goods; intervention by government in the economy; questions of equality and efficiency; cooperation between states over common resources; trade, economic integration, international monetary stability and the operation of the global economy. Prerequisite: Econ 103B.

Credit 3 units. A&S IQ: HUM, SSC BU: BA, HUM

---

### **ECON 3631 Political Economy**

The course introduces students to the field of political economy. The approach is to apply the economic theory and concepts to political actors and behavior. Students are expected to learn: how economic and political forces may shape the incentives and constraint of political actors (e.g. voters and policy makers); the role of institutions in shaping both political behavior and policy outcomes. Prerequisite: Econ 1011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Spring

---

### **ECON 3632 International Political Economy**

The focus is on the political and economic relationships between nation states, considering both cooperation and conflict. We first consider the evolution of the international order since 1945, covering trade, monetary arrangements and commodity agreements. We also consider questions of hegemonic stability (based on the United States and Britain in the nineteenth and twentieth centuries). We conclude with a historical discussion of political economic relationships between Britain, France, Spain, and the United States in the eighteenth and early nineteenth centuries. Prerequisites: Econ 103B and Econ 104B.

Credit 3 units. A&S IQ: SSC BU: IS

---

**ECON 3640 American Economic History**

Basic theoretical concepts applied to analyze the changing structure and performance of the American economy from colonial times to the present. Prerequisites: Econ 1011 & 1021. Prior completion of, or current enrollment in, Econ 413 (or Econ 413W) is strongly recommended.

Credit 3 units. A&S IQ: SSC Art: SSC BU: BA EN: S

Typical periods offered: Spring

---

**ECON 3650 The Economics of Criminal Justice**

In this course, we will use the theoretical and empirical tools of economics to study the criminal justice system. By constructing models of how arrest/prosecution/conviction/sentencing/etc. decisions are made, we will evaluate these decisions for errors and especially for bias. We will also see how economists test hypotheses about the criminal justice system using the same types of natural experiments they use to study markets. Prerequisites: Econ 1011 and SDS 2200.

Credit 3 units. A&S IQ: SSC Art: SSC BU: BA EN: S

Typical periods offered: Spring

---

**ECON 3685 Economics of Social Policy**

Economic analysis of employment and income problems of the poor; public policy responses. Topics: the distribution of income in the United States, economic and social causes of poverty, education and technical change. Prerequisites: Econ 103B and 104B, or permission of instructor.

Credit 3 units. A&S IQ: SSC BU: ETH

Typical periods offered: Fall, Spring

---

**ECON 3690 Socio-Economic Perspectives on Inequality**

This course examines the definition and impact of social and economic inequality. Beginning with a review social, economic, and philosophical perspectives of inequality, the course considers the measurement of inequality, international comparisons of inequality, and policies designed to eliminate inequality. Students should be comfortable with methods of quantitative social science. Prerequisite: Econ 1011 is recommended.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Summer

---

**ECON 3710 Game Theory and Its Business Applications**

This course provides an introduction to game theory and its applications in real life economic decisions. Students will learn fundamental game theory concepts, including (but not limited to) Nash equilibrium, subgame perfect Nash equilibrium, etc. Students will also be exposed to how game theory can be applied to a wide variety of economic decisions: pricing, firm's decision of entering or exiting a market, etc. The ultimate goal of this course is to develop students' rational and game-theoretic thinking. Prerequisites: High-school mathematics, Econ 1011 or the equivalent. 3 units.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Summer

---

**ECON 3810 Economics of Sports**

The economics of sports focuses on the business aspects of professional and intercollegiate sports in the United States. Questions posed and addressed in this course include: do the benefits of publicly subsidized stadiums justify their costs; how do the four major sports differ in terms of the structure of their labor markets; how far away are Division I schools from Title IX compliance; are sports betting markets consistent with the theory of efficient markets; does the success of a school's intercollegiate sports program enhance alumni donations or the number of applications to that school; how can salary models be used to assist the determination of player value; how can attendance models be used to assist the marketing strategies of that

team or school. Additionally, the students will be able to meet some key members of the St. Louis sports scene, and will have an opportunity to assist with creating an economic impact analysis on a local sporting event. Prerequisite: Econ 1011.

Credit 3 units. A&S IQ: SSC EN: S

---

**ECON 3840 Economic Realities of the American Dream**

Exploration of the realities of economic life in the U.S. and how they correspond to the American Dream. Interdisciplinary perspectives from economics, sociology, and other areas of social inquiry. Emphasis on the consistency between empirical data and different concepts of the American Dream. Specific topics to include sources of economic growth and changing living standards, unemployment, impact of globalization on U.S. citizens, economic mobility, poverty and inequality, and social justice. Prerequisites: An introductory course in economics or sociology, or consent of the instructors. All students who pre-register will be put on the wait list. Students will receive an email immediately after pre-registration requesting more information.

Credit 3 units. A&S IQ: SSC, WI Art: SSC BU: BA EN: S

Typical periods offered: Fall

---

**ECON 3970 Junior Research Seminar**

Seminar for juniors to develop research skills. Work will consist of an original research paper to be completed by the student by the end of the semester under supervision of the instructor. The research topic should apply economic theory and data analysis skills. Students are encouraged to collect original data where feasible. Some group meetings may be scheduled but most of the contact will be in individual meetings by appointment with the instructor. Registration in this course is encouraged for students considering senior honors work in economics. Note that this course does not satisfy economics major requirements. Prerequisites: Econ 4011 and 4021 (concurrent registration is acceptable), junior standing, GPA of 3.3 or higher.

Credit 3 units. A&S IQ: SSC EN: S

---

**ECON 3996 Economics Coursework Completed Abroad**

student will receive study abroad credit

Credit 12 units.

Typical periods offered: Fall, Spring, Summer

---

**ECON 3997 Economics Elective: 300-Level**

student will receive elective credit

Credit 3 units. EN: H, S

Typical periods offered: Fall, Spring, Summer

---

**ECON 4001 Intermediate Microeconomic Theory**

Analytic theory of consumer and producer behavior under perfect and imperfect competition. Coverage of demand theory (indifference curves and utility functions) and preferences under uncertainty, including expected utility and risk aversion. Development of general equilibrium under pure exchange, including the concepts of competitive equilibrium and Pareto efficiency. Discussion of the role of time as it pertains to interest rates, discounting and net present value. Analysis of standard monopoly and simple oligopoly problems. Development of non-cooperative game theory, including strategic and extensive-form equilibria and Nash and sub-game perfect equilibria. Thorough training in intermediate theory would require both Econ 4011 and Econ 4021. Prerequisites: Econ 1011, Math 132, and concurrent enrollment in, or prior completion of, either Math 233 or Econ 493 (Mathematical Economics).

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

---

**ECON 4002 Intermediate Macroeconomic Theory**

National income and labor market measurement. Business cycle facts and consideration of alternative explanations for business cycle phenomena. Development of Solow growth model, along with theories of endogenous growth and an examination of reasons for differences in growth rates across countries. General equilibrium description of firms and consumers in labor and product markets. Implementation of monetary and fiscal policy, and exploration of the impact of policy changes on the macroeconomy. Prerequisites: Econ 1021 and Econ 4011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

**ECON 4150 Introduction to Econometrics With Writing**

Econometrics is the development and application of statistical techniques for the measurement of economic phenomena. This course is your initial study of econometric theory and practice. Topics include: translation of economic theory into statistical models, statistical foundations of econometrics, preregression analysis bivariate and multiple regression techniques, hypothesis testing, multicollinearity, specification error, autocorrelation, errors in variables, identification, and simultaneous estimation. The 3 writing assignments and the final paper will provide you an opportunity to formulate an economic model, estimate the model with appropriate data, and interpret the results. Prerequisites: Econ 4011 and Math 2200 or equivalent. PLEASE NOTE: Requests for on-line registration will be wait listed, and students will be enrolled according to Economics major/minor status and student level (e.g., priority to Level 8 Econ majors). Students should also select the A subsection.

Credit 3 units. A&S IQ: SSC, WI Art: SSC EN: S

Typical periods offered: Fall, Spring

---

**ECON 4151 Applied Econometrics**

Introduction to econometrics as it is applied in microeconomics. Emphasis is on hands-on implementation of the models covered in the course. Topics related to the analysis of microeconomic data include cross-section and panel data linear models and robust inference; instrumental variables estimation; simultaneous equation models; models for discrete choice; and truncation, censoring and sample selection models. Prerequisite: Econ 4011 and Econ 413 (Math 309 is recommended). Students should co-enroll in the A subsection.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

**ECON 4160 Topics in Econometrics: Microeconometrics**

This is a topics class in econometrics but with a strong focus on microeconometrics. This course has two main objectives: (i) Teach students various advanced theoretical econometric tools to the students and (ii) guide them through the process of writing a research paper that explores an empirical research question in economics using adequate econometrics tools. We will study theory and application of methods of data analysis developed for microdata pertaining to individuals, households and firms. More, precisely, We will study recent development of theory and methods for analyzing selective samples and analyzing discrete choice models. Prerequisites: Econ 4011 and (Econ 413, Econ 413W, or Econ 536). Math 309 recommended. Students should co-enroll in the A subsection. 3 units.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall

---

**ECON 4210 Topics in Financial Economics: Asset Pricing**

The objective of the course is to develop the basic economic models that can be used to study the valuation of different financial assets and to discuss how to confront the theory with the evidence from financial markets. The course will develop the basic model of investment

under uncertainty and discuss portfolio choices in static and dynamic settings as well as market equilibria and the impact of news on the forecast-ability of excess returns. The course will describe valuation in incomplete asset markets (e.g. arbitrage pricing theory) and the extension to the valuation of firms and real estate assets. Prerequisites: Econ 4011, Econ 4021 and Econ 413. 3 units.

Credit 3 units. A&S IQ: SSC Art: SSC

Typical periods offered: Fall

---

**ECON 4211 Topics in Financial Economics: Investments**

This course surveys recent developments in investments and portfolio management. The course aims to provide students with a structure for thinking about investment decisions from the perspective of a portfolio manager. We start by understanding fundamental concepts for investment theory: modern asset valuation and portfolio selection under uncertainty. We will proceed to investigate various sources of risk which financial institutions are exposed to, such as interest rate risk, credit risk and liquidity risk, and study how financial institutions manage these risks. The course will also introduce student to investment evaluation techniques. We will explore recent innovations in financial markets, as well as various frictions that arise in markets. Students will have the opportunity to apply concepts learned in class on a virtual investment and trading platform, StockTrak. Prerequisites: Econ 4011, Math/SDS 2200 (or Math/SDS 3200, Math/SDS 3211, QBA 120 and QBA 121, ESE 326.) or PolSci 363 with permission from instructor.

Credit 3 units. A&S IQ: SSC Art: SSC

Typical periods offered: Fall

---

**ECON 4212 Topics in Financial Economics**

The objective of the course is to develop the basic economic models that can be used to study the valuation of different financial assets and to discuss how to confront the theory with the evidence from financial markets. The course will develop the basic model of investment under uncertainty and discuss portfolio choices in static and dynamic settings as well as market equilibria and the impact of news on the forecast-ability of excess returns. The course will describe valuation in incomplete asset markets (e.g. arbitrage pricing theory) and the extension to the valuation of firms and real estate assets. Prerequisites: Econ 4011, Econ 4021 and Econ 413. 3 units.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall, Spring

---

**ECON 4220 Open Economy Macroeconomics**

This course will begin with a review of international trade theory, of the balance of payment accounts and their relationship to international borrowing and lending. We will then study the asset approach to exchange rates determination, exchange rate behavior in the short and in the long run, and the relationship of exchange rates with prices and output. The course will also explore monetary and fiscal policy under both fixed and floating exchange rates, macroeconomic policy coordination and optimum currency areas, international debt problems of developing countries and their relation to stabilization program. Prerequisite: Econ 4021.

Credit 3 units. A&S IQ: SSC Art: SSC BU: IS EN: S

Typical periods offered: Spring

---

**ECON 4230 The Economics of Financial Intermediation**

The structure and the role of banks have changed tremendously. The historically-traditional activity of granting loans and collecting deposits has evolved into a much richer and more complex set of financial contracts. The separation between financial asset trading activity and traditional commercial bank activity that was typical of the financial system in the period after the World War II also disappeared. Coincident with the evolution of financial institutions was the development of the asymmetric information model. The role of banks in the economy



can be explained with the tools developed in these models of the economics of information, as a microeconomic theory of banking does not exist when information is symmetric and markets are complete. The economics of information literature is also used to explain the evolution of financial institutions and markets, and to understand the consequences of that evolution for economic outcomes (such as economic development and financial crises) and for monetary policy choices (such as central bank interventions, regulations and changes in the payments system). Prerequisite: Econ 4011; Econ 4021 recommended, but not required.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Fall, Spring

---

#### **ECON 4240 Money & Monetary Policy**

We will explore several classic questions in the theory of money. What is money? What forms does money take? Why is money necessary-why is there a demand for money? What determines the supply of money? What is the debate on central versus free banking? Should banking be regulated, and, if so, why and how? What determines inflation? Should nations enter into fixed exchange rate regimes, or should they let the value of their monies be market-determined? What are the tensions that arise in fixed exchange rate regimes and common currency areas? How should policymakers view cryptocurrencies? Is a central bank digital currency desirable? These, and other questions, are explored within the context of theories that model the microfoundations of monetary exchange explicitly. PREREQUISITES: Econ 4011 and Econ 4021. 3 units.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Spring

---

#### **ECON 4250 Understanding the Financial Crisis**

The global financial crisis of 2007-2009 was the most severe since the Great Depression. The goal of the course is to provide tools to analyze key elements of this crisis. We will move from a corporate finance perspective - to understand the behavior of firms and financial institutions - to a macroeconomic perspective - to make this behavior in aggregate outcomes and policy responses. Topics covered include: The U.S. crisis in historical and international perspective; corporate finance of firms and banks in closed and open economy; monetary and fiscal policy intervention; the open economy dimension of the financial crisis; the European Sovereign Debt crisis.

Credit 3 units. A&S IQ: SSC Art: FAAM, SSC EN: S

Typical periods offered: Spring

---

#### **ECON 4280 Capital Market Imperfections and Entrepreneurial Finance**

Analysis of problems in capital markets for firm financing and institutional structures that address these problems. Investigation of asymmetric information between firms and potential investors and associated moral hazard and adverse selection problems that raise the cost of funds and constrain firm growth. Empirical tests for the presence of financing constraints on firms. A substantial portion of the course explores the role of venture capital, especially in the high-tech sector of the United States economy where venture capital is important for commercializing cutting-edge science. Prerequisite: Econ 4011. Econ 413 is recommended.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall

---

#### **ECON 4285 Applied Financial Modeling**

Topics in financial economics, including portfolio theory, the capital asset pricing model, the efficient markets hypothesis, and models of time-varying market volatility, with an emphasis on empirical applications of theoretical concepts using Microsoft Excel. Cultivation of practical programming skills is designed to complement application of economic theory to financial markets. Prerequisite: Economics 401 and 413.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Summer

---

#### **ECON 4290 Financial Markets, Institutions, and the Regulatory Challenge**

In-depth analysis of the operation of U.S. financial markets and the challenges faced by governments that regulate these markets. Emphasis on the role transaction costs, information problems, and rent-seeking behavior play in shaping the structure and evolution of financial markets and institutions. Specific applications to current policy debates, including U.S. vulnerability to financial crisis, deposit insurance reform, government-sponsored enterprises and systemic risk, racial discrimination in credit markets, and the potential role of market discipline in bank regulation. Prerequisite: Economics 402 or permission of instructor.

Credit 3 units.

Typical periods offered: Fall

---

#### **ECON 4310 Behavioral Economics and Experimental Economics**

Behavioral economics is an effort to incorporate ideas from psychology into economic models of behavior. We will focus on popular experimental anomalies, including the Allais and Rabin paradoxes, ultimatum bargaining, the centipede and public goods contribution games. We will examine the extent to which these are consistent with standard economic theory and how they may contradict it. The primary focus will be a critical examination of psychological theories of non-standard preferences including loss aversion, probability weighting, reciprocity, fairness and present bias. Theories of incorrect beliefs and systematic biases such as money illusion and procrastination will be covered. The class will include an introduction to experimental methods in economics, including hands-on experience in the MISSEL laboratory. A sound grounding in economic theory is essential to the course. You must have successfully completed Economics 4011, and should be acquainted with basic optimization theory, expected utility theory, risk aversion, discounting and basic game theory including dominance, Nash equilibrium and subgame perfection.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

#### **ECON 4311 Experimental Economics**

Survey of results and methods of laboratory experiments in economics and actual experiments. Experiments dealing with individual decision making will be followed by experiments dealing with interactive decision making. Discussion of experiments on public goods, coordination problems, bargaining, auctions and other issues, and also of experiments which test more basic assumptions on rational behavior. Part of the course devoted to the theoretical background which motivates these experiments.

Credit 3 units.

Typical periods offered: Spring

---

#### **ECON 4312 Game Theory and Social Behavior**

Game theory is the formal toolkit for analyzing situations in which payoffs depend not only on your actions (say, watching a baseball game), but also others' (e.g., whether you meet your friends at the game). In this course, you'll learn how to solve one-shot and repeated games using tools like Nash equilibrium, subgame perfection, Bayesian

Nash equilibrium, and the one-off deviation principle. We'll apply these insights to human social behavior?examining why people are altruistic, where our sense of social norms come from, and more. Along the way, discussion will leverage empirical data from lab and field experiments about how people actually behave. Thus, one of our objectives is to become familiar with experimental economics as well. Prerequisite: Econ 4011.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Spring

---

#### **ECON 4315 Market Design**

The objective of this course is to study how to design mechanisms to allocate scarce resources and how to create successful marketplaces. We will primarily consider two topics: (1) two-sided matching markets, such as the National Resident Matching Program and the Kidney Exchange for transplants, and (2) auctions used by Google, Facebook, etc. Time permitting, a third topic will be the problem of designing and regulating market platforms, such as the e-commerce markets run by eBay, Amazon, and Craigslist, and applications marketplaces run by Apple, Google, etc., as well as the electronic financial trading platforms run by the NYSE. Prerequisite: Econ 4011. 3 units.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

#### **ECON 4325 Public Finance**

The study of fundamental forms of market failure that provide the economic rationale for government action. The first third of the class examines market failure when an economy contains externalities and public goods and the general nature of public policies that address these issues. The second third addresses particular public policies, with a focus on their intended and unintended consequences and their costs. The final third addresses taxation. Topics include the measurement and evaluation of tax burdens, the federal personal income tax, tax evasion, and proposals for fundamental tax reform. Prerequisite: Econ 4011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall

---

#### **ECON 4326 Economics of Public Policy**

This course will cover the logic underlying the economics and politics of public policies concerning issues such as international trade, monetary policy, fiscal policy, market reforms, pollution control, economic inequality and the welfare state more generally. The general question we will address, using specific cases, is that of the role of markets and government in an economy. The course relies heavily on the concepts and methods of microeconomics and macroeconomics. There are many theories of how economic policies work and considerable debate as to what can be done and what should be done. We will examine the facts (past and present) and then examine the theories and their explanatory power. We will also organize the class into research groups that will address specific economic policies issues. Prerequisite: Econ 4011.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Spring

---

#### **ECON 4330 Innovation and Intellectual Property: Theory and Practice**

Innovation - that is: figuring out better and cheaper ways of satisfying human desires - is the key to improving our well being. It is not patient saving and accumulation that makes us so much better off than we used to be: capital accumulation is only the conduit through which the innovation juices flow. The question is what drives it? How come some societies are apparently much more innovative than others? How come we have the impression that most useful inventions took place in the last three centuries? Are there policies that help fostering innovation

and others that hurt? The course tries to address these questions. Economists have many theories of innovation, and some better than others. We will look at the theories, we will examine the facts (past and present), then we will go back to the theories and reconsider their explanatory power. With this background we approach the debate about Intellectual Property, what it is and what it is not good for, whose interests it serves and whose well being it thwarts. Prerequisite: Econ 4011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

---

#### **ECON 4335 Industrial Organization**

Theoretical and empirical analysis of the presence and value of competitive forces in the United States economy. Theories of industrial organization and development of criteria for performance of noncompetitive industries. Prerequisite: Econ 4011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

#### **ECON 4345 Labor Economics**

Economic analysis of labor markets. Theory and evidence on supply of and demand for labor, explanation of wage and income differentials; impact of education on human skills and productivity. Prerequisite: Econ 401 and Econ 413.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Spring

---

#### **ECON 4350 Economics of Environment and Resources**

Historical development of theory of scarcity and growth; conservation movements; concepts and facts of environmental externalities; contemporary ecological issues, public policies, and regulation. Prerequisite: Econ 401.

Credit 3 units. A&S IQ: SSC

---

#### **ECON 4360 Urban Economics**

Economic function of the city and the role of the city in a national economy. Local decision making; financing of local government expenditures. An analysis of selected urban problems, such as causes and effects of housing market segregation; decay and abandonment, landlord-tenant relations, crime, and urban transport systems. Prerequisite: Econ 4011.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall

---

#### **ECON 4370 International Trade**

Analysis of international trade from different perspectives: Ricardian, Heckscher-Ohlin, and new trade theories. Topics include patterns of trade, gains from trade, protectionism, international factor movements, political economy of trade policy, balance of payments, exchange-rate determination, and international investment. Rigorous application of microeconomic theory to trade issues and in-depth discussion of current international policy questions. Prerequisite: Econ 4011. Econ 413 is recommended.

Credit 3 units. A&S IQ: SSC BU: IS EN: S

---

#### **ECON 4372 International Finance: Theory and Policy**

Theory and policy of international finance: balance of payments accounting, balance of payments adjustment under fixed and flexible exchange rates, international financial cooperation. Prerequisites: Econ 402 with a B or better, Math 132 and 320.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall

---

**ECON 4385 Household Finance, Bankruptcy, and Credit**

Economic aspects of household financial decisions and survey of data on U.S. consumer financial conditions. Topics include inter-temporal decision making; the mathematics of amortizing debt; bankruptcy decisions and the legal process of bankruptcy; and the effect of asymmetric information on access to consumer credit. This is a writing intensive class, with multiple writing assignments, a term paper developed in three or four steps, with required revisions, and a class presentation based on the final paper. Prerequisite: Economics 401.

Credit 3 units. A&S IQ: SSC, WI EN: S

Typical periods offered: Fall, Spring, Summer

---

**ECON 4390 Economics of Education**

The economics of education involves analysis of the economic and social determinants and consequences of education. Because each person's education is an investment in human capital which allows the individual to contribute to society in a productive way, education becomes a crucial determinant of an economy's ability to achieve high growth with high wages, low unemployment and strong social cohesion. This course will address three essential topics from the wide-ranging field of the economics of education. The first is demand-side oriented and includes: (i) the measurement of the returns to education in the labor market (human capital theory; the central idea of education as human capital investment); and (ii) a characterization of the education production function, which relates the various inputs affecting a student's learning (schools, families, peers, neighborhoods, etc.) to measure outputs including labor market success, graduation rates and standardized test scores. The second important topic involves political economy and the supply side: the financing and provision of education. The third part of the course is devoted to the links between education and economic development, including cross-country differences in schooling, returns to schooling and per-capita income. Prerequisites: Econ 4011, Econ 4021, and Econ 413.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall

---

**ECON 4410 Macroeconomics of Inequality**

In this course, we study the driving forces of inequality across countries, across time, and across individuals within a country. We will define and measure inequality using standard measures of economic well-being, such as income, wealth, and consumption of market goods, and we will also consider broader measures such as health outcomes. Historical cross-country data, microdata, and specific case studies will be used to evaluate theories of the sources of inequality. Key variables to be evaluated include physical capital investment, education and human capital investment, technological progress, robotization, international trade, and financial markets, among others. Prerequisites: Econ 4011 and Econ 4021.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

**ECON 4420 Computational Macroeconomics**

This course provides a more in depth look into quantitative methods used in contemporary macroeconomic analysis. We will cover numerical methods used in dynamic optimization. In practice, we will apply these methods to solve two major models used in macroeconomic analysis, using both Excel and Matlab. The Neoclassical Growth Model and its variants are used to study aggregate trends and aggregate effects of government policy. The lifecycle model is used to examine questions involving decision-making over the lifecycle. We will learn how to use empirical observations for the purpose of calibrating model parameters and how to conduct policy evaluation in the context of calibrated models. Our policy evaluation will focus on fiscal policy (taxes) and social security issues. Prerequisites: Econ 4011 and Econ 4021.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

---

Typical periods offered: Spring

---

**ECON 4425 Macro Public Finance: Inequality, Redistribution, and Insurance**

This is an advanced undergraduate course on the macroeconomics of public finance, with a particular focus on the government's role in redistributing resources and providing insurance through the tax-and-transfer system and labor market policies. In the first (and longer) part we study inequality in income, wealth, and consumption as well as risks individuals face. We proceed to study how the U.S. welfare state redistributes resources and provides insurance. Most of the first part is then devoted to studying the trade-offs the government faces in the design of the welfare state. In the second part we focus specifically on imperfect labor markets and how institutions shape labor market outcomes. Prerequisites: Econ 4011 and Econ 4021.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Spring

---

**ECON 4460 Economics of Social Policy**

Credit 3 units.

---

**ECON 4480 Current Macroeconomic Issues**

Review and extension of macroeconomic models from Econ 4021 from a comparative perspective and use of these models to analyze current macroeconomic and policy issues. Topics include recession and recovery, long-term growth, saving and social security, investment, and monetary policy. Multiple writing assignments that emphasize critical analysis of theoretical perspectives and readings applied to current macroeconomic topics. Writing will be revised to improve logical structure, clarity, and style. Enrollment limited to 15 students with priority given to senior economics majors. Prerequisite: Econ 4021. All students who pre-register will be put on the wait list. Students will receive an email immediately after pre-registration requesting more information.

Credit 3 units. A&S IQ: SSC, WI Art: SSC EN: S

Typical periods offered: Fall, Spring

---

**ECON 4485 Seminar in Macro and Monetary Economics**

Topics chosen by instructor from modern empirical and theoretical research papers in macroeconomics. Student participation in class discussions of research papers is essential. Topics vary, but may include the link between capital markets, consumption and investment, imperfect competition and macroeconomic fluctuations, real business cycles models, and post-Keynesian macroeconomics. Prerequisites: Econ 4011, 4021, 413. PLEASE NOTE: Requests for on-line registration will be wait listed. Undergraduates must receive instructor permission to be enrolled. Graduate students should register for Econ 586B.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Fall

---

**ECON 4490 Modern Macroeconomic Research**

In-depth analysis of some major issues in current monetary and macroeconomic research. Topics include construction of aggregate measures of the money supply using microeconomic theory, the time consistency of monetary policy, non-linear economic models, and applications of chaos to economics. Students should be comfortable with the application of differential calculus to economic problems. Prerequisite: Econ 402.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall

---



---

#### **ECON 4510 Development Economics**

This course investigates issues related to the development of the economics of third-world countries. Topics include economic growth, poverty, corruption, and human capital accumulation, with an emphasis on education and health-related policies. The course provides an in-depth understanding of the role of the state and the impact of specific public policies designed to encourage development. Empirical examples are drawn from Asia, Latin America, and the African subcontinent. Prerequisites: Econ 4011 and Econ 413 or Econ 413W. Credit 3 units. A&S IQ: SSC Art: SSC EN: S  
Typical periods offered: Spring

---

#### **ECON 4520 Topics in Growth and Development**

This course highlights important empirical facts concerning growth and development in various countries at different development stages. Fundamental growth theory is then provided for explaining these facts systematically and for evaluating the consequences of commonly adopted development policies. Topics vary, but may include population, human capital and labor market development, R&D and innovation, finance and growth, modernization and industrial transformation, world income disparities and poverty problems, institutions and political economy issues, environmental and social factors, and international trade and economic integration. Prerequisites: Econ 4011 and Econ 4021. Credit: 3 units. Credit 3 units. A&S IQ: SSC Art: SSC EN: S  
Typical periods offered: Spring

---

#### **ECON 4521 Advanced Topics in Modern Economic Growth**

This course studies economic theories that explain the observed patterns of economic development across time and space. What explains the growth of the world economy since the Industrial Revolution? Why are the level and the growth rate of per-capita income so different across countries? What explains the decline of manufacturing, and its growth in the early stages of development? What are the determinants of inequality and risk faced by individuals in different countries? Theories featuring the role of investment in physical and human capital, technology, coordination, financial markets, and environmental variables will be presented. Theories will be evaluated using historical data and detailed case studies. This course is designed to complement Econ 472. Prerequisites: Econ 4011. Credit 3 units. A&S IQ: SSC EN: S  
Typical periods offered: Spring

---

#### **ECON 4530 Development Problems of Third World Countries**

Introduction to analysis of economic problems of third world countries; emphasis on economic growth and income distribution. Prerequisites: Econ 103B and 104B. Credit 3 units. A&S IQ: SSC

---

#### **ECON 4610 Economics of Law**

The course provides an introduction to the economic analysis of law. Mastery of basic economic approaches to the study of legal institutions is a valuable skill that benefits a broad range of students. The course will cover the fundamental contributions made by the economic approach in five core areas: Property, Contracts, Torts, Litigation and Crime. Time permitting we will cover other areas of the law such as Family, Privacy and Discrimination Law. About 50% of the course will be devoted to formal economic modeling of legal issues. Approximately 30% of the course will focus on empirical tests of the insights from the early theoretical contributions in the field and the theoretical models developed in class. The remaining 20% of the course will use classic legal cases to illustrate the real-world applications of the theoretical models developed in class. Prerequisite: Econ 4011. Econ 413 is recommended. Credit 3 units. A&S IQ: SSC

---

#### **ECON 4620 Western Economic History**

A detailed discussion of the circumstances surrounding the industrialization of the western world in the eighteenth and nineteenth century, with special attention given to Britain, France, and Germany. Various hypothesis regarding economic growth and development are examined in the light of the latest evidence and with the use of basic economic reasoning. Prerequisite: Econ 401, or Econ 103B and written permission of instructor. Credit 3 units. A&S IQ: SSC BU: IS  
Typical periods offered: Summer

---

#### **ECON 4630 Economic Systems in Theory and Practice**

Theory and practice of mercantilism, capitalism, and socialism. Historical and contemporary examples considered, with contemporary focus on Latin America, Eastern Europe, and Hong Kong. Primary emphasis on choices open to individuals; pecuniary and non-pecuniary prices paid to exercise those choices. Statistical evidence and case studies will be used. Course requirements include weekly written critique. Prerequisite: Econ 401. Credit 3 units. A&S IQ: SSC BU: BA, IS  
Typical periods offered: Fall

---

#### **ECON 4640 The Poverty of Nations**

This is a course that focuses on the failures of economic development and the extreme and persistent poverty we find in South Asia, Sub-Saharan Africa and other parts of the developing world, including major urban centers. What exactly is poverty? Who are the poor? How many of them are there? Why are they poor? What individual or collective actions can they (or we) take to improve their lot? Prerequisites: Econ 4011 and Econ 4021 or permission of instructor. Credit 3 units. A&S IQ: SSC EN: S  
Typical periods offered: Fall

---

#### **ECON 4650 Great Transformation**

This course asks the question, What brought about the Industrial Revolution and the emergence of the contemporary 'capitalist, market society'? In particular, is there a fundamental difference between the values, norms and cultures in pre-capitalist societies compared to post-Industrial Revolution societies? The answer to these questions depends on whether the Industrial Revolution represents an historical discontinuity - a Great Transformation turning-point - or whether, instead, there is more continuity in human history than the Great Transformation theory would have us believe. These questions are important as we try to determine whether the current market society is sustainable or whether (and where and when) we should expect a Great Transformation to emerge. The course will address these questions via readings from the best lessons of psychology, economics, anthropology and history, with a particular focus on data and empirical results. Classes will consist of a combination of lectures and class discussions, supplemented by individual- and group-based writing assignments. Prerequisites: Econ 4011 and Econ 4021 or permission of instructor. Credit 3 units. A&S IQ: SSC EN: S  
Typical periods offered: Fall

---

#### **ECON 4660 Historical Development of Economic Ideas**

Selected readings in the masterworks of economic literature: Adam Smith, Malthus, Ricardo, Mill, Jevons, Marshall, and others. Prerequisites: Econ 401 and 402. Credit 3 units. A&S IQ: SSC  
Typical periods offered: Fall, Spring, Summer

---

---

**ECON 4670 Political Economy of Regulation**

Focus on different forms of government intervention in the marketplace, including economic or traditional regulation, social regulation and antitrust activity. Theories of regulation and anti-trust are examined in conjunction with more applied industry case studies. Within the government, the interaction between bureaucratic agencies and Congress is explored in the development and implementation of regulatory policy. Prerequisite: Econ 401.

Credit 3 units. A&S IQ: SSC Art: SSC

Typical periods offered: Fall

---

**ECON 4710 Game Theory**

This course covers advanced applications of Game Theory in economics. Topics include expected utility, strategic-form and extensive-form games with perfect information, Bayesian games, infinitely repeated games, dominance, Nash equilibrium and its refinements. We apply these tools to study strategic situations in industrial organization, auctions, bargaining, voting, and signaling games. Prerequisites: Econ 4011 and SDS 2200.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall

---

**ECON 4720 Optimization and Economic Theory**

An introduction to mathematical optimization and its applications within economics. The course is designed for, and should be taken by, all undergraduates considering graduate study in economics, but all interested students are welcome. Prerequisites: Econ 4011 and Math 309 or permission of the instructor. Credit 3 units.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Spring

---

**ECON 4770 Decision Under Risk and Time**

This course covers topics on individual decision making, subject to risk and to inter-temporal considerations. The emphasis is on economic modeling, which combines both theory and reality. The course will begin by establishing a framework for analyzing preferences about risky outcomes. This framework will be applied to practical problems such as portfolio choice, asset pricing and insurance. The remainder of the course will consider decision-making in the long run, with focuses on the life-cycle consumption-versus-saving decision, the problem of time inconsistency and other real-world implications. Prerequisites: Econ 4011, Math 2200.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Fall

---

**ECON 4775 Economic Choices Under Uncertainty**

Theories of gambling, insurance, and other economic choices that increase or decrease exposure to risk. Prerequisite: Econ 401.

Credit 3 units. A&S IQ: SSC

---

**ECON 4780 Mathematical Economics**

Principal mathematical formulations used in economic analysis. Acquaints student with those aspects of economic theory typically formulated in mathematical terms. Prerequisites: Econ 401 and Math 132.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall

---

**ECON 4790 Advanced Topics in Economic Analysis**

Selected topics in economic theory, building on Econ 401 and/or 402. Topics vary with instructor. Prerequisites: Math 132 or 141, Math 320, and Econ 401 and Econ 402.

Credit 3 units. A&S IQ: SSC

Typical periods offered: Fall, Spring, Summer

---

**ECON 4830 Mathematical Economics**

The objective of this course is to develop the mathematical tools necessary for the study of intermediate micro- and macro-economic theory and the advanced electives in economics. The principal focus will be the calculus of multivariate functions (including total and partial differentiation), unconstrained and constrained optimization of multivariate functions, and implicit and inverse function rules. Time permitting, additional topics will be introduced. Economics majors and minors must take this course (or Math 233) prior to, or concurrently with, Econ 4011. Students who have taken, or are taking, Math 233 are encouraged to take this course as well. Prerequisites: Econ 1011 and Econ 1021, and Math 132.

Credit 1 unit. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

**ECON 4840 Introduction to STATA**

This short course introduces students to the data analysis and statistical software tools used in upper-level econometrics and applied economics courses. The course is designed to serve as a bridge between introductory econometrics and practical work with real-world databases. The course will be held in the computer classroom so that students can obtain hands-on experience with data preparation, workflow, and modeling using the Stata statistical software package. Emphasis throughout the course is placed on examples of applications in economics. PLEASE NOTE: 1. This course must be taken for a letter grade; the P/F and audit grade options are not available. 2. Students cannot use WebStac to add or drop this course after the first session -- contact [dottie@wustl.edu](mailto:dottie@wustl.edu) for scheduling issues. 3. The final exam will occur on the last day of class, per the course syllabus. Prerequisites: prior completion of, or concurrent enrollment in, Econ 413.

Credit 1.5 units.

Typical periods offered: Fall, Spring

---

**ECON 4841 Economic Analysis With Excel**

This mini course offers students the opportunity to master the advance functionality of Microsoft Excel, and to apply those skills to common economic, statistical, and financial problems. Even those familiar with the basic functioning of Excel may be surprised to learn how little of its full capability most users access. Though basic functions will be covered, our focus will be on leveraging Excel's more advanced functions, analytical tools, reporting templates, and linking features to manage multiple workbooks, manipulate data across files, automate tasks, and produce publication quality charts, tables, and graphs. In addition to providing hands-on experience using Excel's advanced capabilities, the course is designed to serve as a bridge between introductory econometrics and practical work with real-world datasets. The course will be held in the computer classroom so that students can obtain practical experience preparing data, managing workflow, and presenting results. Added emphasis throughout the course will be placed on examples with applications in economics. Prerequisites: prior completion of, or concurrent enrollment in, Econ 413 (or equivalent).

Credit 1.5 units.

Typical periods offered: Fall, Spring

---

**ECON 4850 Economic Analysis With Python**

Coming soon!

Credit 3 units.

Typical periods offered: Spring

---

**ECON 4960 Teaching Practicum in Economics**

Opportunity for undergraduates to assist in course instruction, tutoring, and preparation of problems, readings, and exam materials under supervision of faculty. Credit variable; maximum 3 units. Note: This course does not count toward the major or minor in Economics.

Credit 3 units.

Typical periods offered: Spring

---

**ECON 4970 Research in Economics**

Opportunity to work as part of a research project under faculty supervision. Note: this course does not count toward the major or minor in Economics. May be repeated for credit.

Credit 3 units. A&S IQ: SSC Art: SSC EN: S

Typical periods offered: Fall, Spring

---

**ECON 4980 Honors Seminar**

Advanced application of economic theory to policy problems. This is the first part of the two-course sequence for seniors writing an honors thesis, and it is taken in the fall semester of the senior year. This course may not be used to satisfy major requirements. Prerequisite: invitation into the Honors in Economics with Thesis track of the department's Honors Program.

Credit 3 units. A&S IQ: SSC EN: S

Typical periods offered: Fall

---

**ECON 4990 Study for Honors**

Independent reading and research under faculty direction leading to a Senior Honors Thesis. This is the second part of the two-course sequence for seniors writing an honors thesis, and it is taken in the spring semester of the senior year. This course may not be used to satisfy major requirements. Prerequisite: invitation into the Honors in Economics with Thesis track of the department's Honors Program.

Credit 3 units.

Typical periods offered: Spring

---

**ECON 4996 Economics Coursework Completed Abroad**

student will receive study abroad credit

Credit 12 units.

Typical periods offered: Fall

---

**ECON 4997 Economics Elective: 400-Level**

student will receive elective credit.

Credit 3 units. EN: H, S

Typical periods offered: Fall

---

**ECON 4999 Independent Work**

Prerequisites: senior standing and permission of the supervising faculty member. See Academic Coordinator for further details. Note: This course does not count toward the major or minor in Economics. Credit to be determined; maximum 6 units.

Credit 6 units.

Typical periods offered: Fall, Spring

---