

# ECONOMICS (ECON)

ECON Class Schedule (<https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/ECON>)

## Courses

### **ECON 101 Introduction to Economics credit: 4 Hours.**

General survey of the operation of the economic system; emphasizes the determination of the level of national income, the pricing and allocation of products, and factors of production under existing conditions in the United States. This is an honors course limited to students currently enrolled in the Chancellor's Scholar Program. Credit is not given for ECON 101 if credit has been earned in both ECON 102 and ECON 103.

This course satisfies the General Education Criteria for:  
Social Beh Sci - Soc Sci

### **ECON 102 Microeconomic Principles credit: 3 Hours.**

Introduction to the functions of individual decision-makers, both consumers and producers, within the larger economic system. Primary emphasis on the nature and functions of product markets, the theory of the firm under varying conditions of competition and monopoly, and the role of government in prompting efficiency in the economy. Credit is not given for ECON 102 and ACE 100.

This course satisfies the General Education Criteria for:  
Social Beh Sci - Soc Sci

### **ECON 103 Macroeconomic Principles credit: 3 Hours.**

Introduction to the theory of determination of total or aggregate income, employment, output, price levels, and the role of money in the economy. Primary emphasis on monetary and fiscal policy, inflation, unemployment, economic growth, and international economics.

This course satisfies the General Education Criteria for:  
Social Beh Sci - Soc Sci

### **ECON 198 Economics at Illinois credit: 1 Hour.**

An introductory course intended to help students explore the various fields of economics. Presents brief introductions to various faculty members within the Department of Economics at Illinois and an overview of their respective fields. Enrollment limited to undergraduate Economics majors only. Approved for S/U grading only.

### **ECON 199 Undergraduate Open Seminar credit: 0 to 5 Hours.**

Approved for both letter and S/U grading. May be repeated.

### **ECON 202 Economic Statistics I credit: 3 Hours.**

Introduction of basic concepts in statistics including the presentation of data, descriptive statistics, probability theory, discrete and continuous distributions, sampling distributions, estimation, and hypothesis testing. The approach of the class includes both learning the concepts behind basic statistics and also how to apply these concepts in "real-life" situations. Utilizes a practical project format. To complete the Business Statistics sequence, students must also complete ECON 203. Credit is not given for ECON 202 if credit for a college-level introductory statistics course such as PSYC 235, SOC 280, or STAT 100 has been earned. Prerequisite: Credit or registration in one of MATH 220, MATH 221, MATH 234.

This course satisfies the General Education Criteria for:  
Quantitative Reasoning I

### **ECON 203 Economic Statistics II credit: 3 Hours.**

Continuation of ECON 202. Builds upon point and interval estimation as well as hypothesis testing skills first introduced in ECON 202. Utilizes a practical project format to extend the student skill set to include simple and multiple linear regression and time series techniques. Prerequisite: ECON 202; one of MATH 220, MATH 221, MATH 234.

### **ECON 210 Environmental Economics credit: 3 Hours.**

Same as ACE 210, ENVS 210, NRES 210, and UP 210. See ACE 210. This course satisfies the General Education Criteria for:  
Social Beh Sci - Soc Sci

### **ECON 220 Intl Economic Principles credit: 3 Hours.**

Principles-level course in international economics for non-majors. The first half of course, international trade, covers such topics as comparative advantage, protectionism (tariff and nontariff), impact on income distribution, and industrial policies. The second half, international finance, covers topics such as balance of payments, exchange-rate determination, currency crises, dollarization, and macroeconomic policy in an open economy. Issues relating to globalization will be covered in both halves. Prerequisite: ECON 101; or ECON 102 (or ACE 100) and ECON 103. Credit in ECON 220 is not applicable toward graduation in the Economics Major.

### **ECON 302 Inter Microeconomic Theory credit: 3 Hours.**

Microeconomic analysis including value and distribution theory; analysis of the pricing of the factors of production integrated in a micro-general equilibrium context which builds towards explaining the resource allocation process. Prerequisite: ECON 102 or equivalent. MATH 220, MATH 221, MATH 234 or equivalent.

### **ECON 303 Inter Macroeconomic Theory credit: 3 Hours.**

The modern theory of the determination of the level and rate of growth of income, employment, output, and the price level; discusses alternate fiscal and monetary policies to facilitate full employment and economic growth. Prerequisite: ECON 102, ECON 103. Recommended: MATH 125; one of MATH 220, MATH 221, MATH 234.

### **ECON 397 Senior Research I credit: 2 to 4 Hours.**

Research and readings course for students majoring in economics; may be taken by students in the college honors program in partial fulfillment of the honors requirements. Prerequisite: Cumulative grade-point average of 3.0 or honors in the junior year, or consent of instructor; senior standing.

### **ECON 398 Senior Research II credit: 2 to 4 Hours.**

Research and readings course for students majoring in economics; may be taken by students in the college honors program in partial fulfillment of the honors requirements. Prerequisite: Cumulative grade-point average of 3.0 or honors in the junior year; senior standing.

### **ECON 399 Undergraduate Open Seminar credit: 0 to 9 Hours.**

Independent study course covering topics not treated by regular course offerings. This class does not satisfy departmental graduation requirements. Approved for both letter and S/U grading. May be repeated. Prerequisite: Junior or senior standing. ECON 101 or equivalent is recommended. ECON 102 or equivalent is recommended.

### **ECON 411 Public Sector Economics credit: 2 to 4 Hours.**

Economic analysis of government tax and expenditure policies; topics include public good and externality theory, public choice theory, income distribution, cost-benefit analysis, principles of taxation, tax incidence, economic effects and optimal structures of major taxes, and taxation in developing economies. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

**ECON 414 Urban Economics credit: 3 or 4 Hours.**

Analyzes the urban economy. Topics include: economic reasons for the existence of cities; the theory of urban spatial structure; the effects of taxation on housing decisions; the economics of freeway congestion; economics analysis of local public goods and services; economic analysis of rent control, slum policies and land-use controls. Same as FIN 414. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302.

**ECON 420 International Economics credit: 2 to 4 Hours.**

Introduction to the theory of international trade and finance with selected application to current problems of trade policy, balance of payments adjustment, the international monetary system, and globalization issues. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent, or consent of instructor; ECON 303 is recommended.

**ECON 440 Economics of Labor Markets credit: 2 to 4 Hours.**

Studies the microeconomic determinants of labor demand and supply, economic effects of unions, and macroeconomic labor market problems. Same as LER 440. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent.

**ECON 450 Development Economics credit: 2 to 4 Hours.**

Analyzes the economic problems associated with newly developing nations; emphasizes their economic structures, their factor scarcities, and their programs for development. Not open for graduate credit to graduate candidates in economics. 3 undergraduate hours. 2 or 4 graduate hours. Graduate credit is not given for both ECON 450 and ECON 550 or ECON 551. Prerequisite: ECON 102 and ECON 103 or equivalent. ECON 302 strongly recommended.

**ECON 451 Program Evaluation in Developing Economies credit: 3 or 4 Hours.**

Advanced economics course on microeconomic issues in developing countries with particular attention to empirical analyses and methodologies to address fundamental theoretical and policy relevant questions. Focus is on topics within health and education, although papers may cover other topics. An original empirical research paper is required, applying ideas and concepts covered in class. Class alternates between lectures (discussing new ideas or concepts and assigned readings) and lab (applying concepts to actual data using Stata). 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 203 and ECON 302 or equivalents; for undergraduate students only: Completion of campus Composition I general education requirement. Junior Standing Required. Priority registration provided to Economics Majors. This course satisfies the General Education Criteria for: Advanced Composition

**ECON 452 The Latin American Economies credit: 2 to 4 Hours.**

Focuses on the economic history of the region, the recent industrialization process and its impact, the role of the state and foreign capital, the impact of the recent privatization processes, inflation and stabilization policies, and issues surrounding the distribution of income. Same as ACE 452. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 102 or ECON 103. ECON 302 or ECON 303 strongly recommended.

**ECON 462 Macroeconomic Policy credit: 2 or 3 Hours.**

Analyzes current macroeconomic policy issues, problems, and techniques; discusses various policy techniques including monetary, fiscal, incomes, and exchange rate policies, and their effectiveness for treating inflation, unemployment, productivity, resource and exchange rate problems. May emphasize current issues in developed economies or in emerging market economies. 3 undergraduate hours. 2 or 3 graduate hours. Prerequisite: ECON 303 or equivalent.

**ECON 465 Mathematical Economics credit: 2 to 4 Hours.**

Introduction to game theory with applications to economics; emphasizes the analysis of static and dynamic games with or without complete information. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: One of MATH 125, MATH 225, MATH 415; MATH 241 or equivalent; ECON 302.

**ECON 469 Economics of Risk credit: 3 or 4 Hours.**

Exploration of economic decisions under uncertainty. Includes expected utility theory and non-expected utility theory; applications to individual decision problems in investment and insurance; general equilibrium in markets under uncertainty, including problems generated by asymmetric information; measurement of risk; the value of information obtained before a decision. 3 or 4 undergraduate hours. 3 or 4 graduate hours. Prerequisite: ECON 302 or equivalent; one of MATH 220 or MATH 221 or equivalent.

**ECON 471 Intro to Applied Econometrics credit: 2 to 4 Hours.**

Introduction to specification, estimation, prediction and evaluation of econometric models, emphasizing the interplay between statistical theory and economic applications. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 203 or equivalent; ECON 302 or ECON 303.

**ECON 480 Industrial Comp and Monopoly credit: 2 to 4 Hours.**

Analyzes the ways firms and markets are organized, how they interact, outcomes of various types of firm behavior and performance of markets, and causes and types of market failure. Particular emphasis on the contribution of game theory as the equilibrium concept in oligopoly settings. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302.

**ECON 481 Govt Reg of Economic Activity credit: 2 to 4 Hours.**

Analysis of economic bases, policies, and consequences of government regulation of economic activity. Reasons for government intervention in market behavior, methods of government intervention, and outcomes are studied. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or consent of instructor.

**ECON 482 Health Economics credit: 3 or 4 Hours.**

Economic analysis of the health care industry to explain the demand for and supply of medical care. Includes analysis of behavior of consumers, producers, and insurers; and public policies to regulate the industry and to provide services for the poor and elderly. 3 undergraduate hours. 4 graduate hours. Prerequisite: ECON 302 is recommended.

**ECON 483 Econ of Innovation and Tech credit: 2 to 4 Hours.**

Examines the economic factors shaping innovation and technical change since the industrial revolution with emphasis on the economic relationship between science and technology and the role of government in technical change. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 102 or equivalent; ECON 302 or consent of instructor.

**ECON 484 Law and Economics credit: 2 to 4 Hours.**

Applications of economic theory to problems and issues in both civil and criminal law and the effect of legal rules on the allocation of resources; includes property rights, liability and negligence assignment, the use of administrative and common law to mitigate market failure, and the logic of private versus public law enforcement. 3 undergraduate hours. 2 or 4 graduate hours. Prerequisite: ECON 302 or equivalent.

**ECON 490 Topics in Economics credit: 3 or 4 Hours.**

Treatment of special topics in economics. 3 undergraduate hours. 4 graduate hours. May be repeated in the same term to a maximum of 6 undergraduate hours or 8 graduate hours. May be repeated in separate terms to a maximum of 9 undergraduate hours or 8 graduate hours. Prerequisite: ECON 302 or consent of instructor.

**ECON 500 Microeconomics credit: 4 Hours.**

Emphasizes microeconomic theory; principal topics include a review of value and distribution theory, the theory of choice by households and firms, general microeconomic theory, and theoretical developments of current interest. Credit is not given for both ECON 500 and ECON 528. Graduate credit for both ECON 302 and ECON 500 is given only upon recommendation of the student's adviser and approval by the Department of Economics. Prerequisite: ECON 102 or equivalent. MSPE Graduate Student Standing.

**ECON 501 Macroeconomics credit: 4 Hours.**

Emphasis on macroeconomic theory; principal topics include a review of Keynesian macroeconomic theory, formal growth theory, and selected business cycle theory. Credit is not given for both ECON 501 and ECON 529. Graduate credit for both ECON 303 and ECON 501 is given only upon recommendation of the student's adviser and approval by the Department of Economics. Prerequisite: ECON 102 and ECON 103 or equivalent. MSPE Graduate Student Standing.

**ECON 502 Economic Statistics credit: 4 Hours.**

Classical statistics and regression analysis; descriptive statistics, probability and point and interval estimation; decision theory; variance analysis; and linear regression and least-squares estimates. Prerequisite: A course in statistics or consent of instructor. MSPE Graduate Student Standing.

**ECON 503 Econometrics credit: 4 Hours.**

Develops a general methodological basis for searching for quantitative economic knowledge; integrates and gives operational content to the topics of economic, statistical, and econometric theory. Prerequisite: ECON 502, or equivalent. MSPE Graduate Student Standing.

**ECON 504 Time Series Analysis in Econ credit: 4 Hours.**

Modern time series analysis techniques for handling economic data which arises in a happenstance fashion through time and their application to specific economic problems. Prerequisite: ECON 503 or STAT 578, or equivalent. MSPE Graduate Student Standing.

**ECON 505 Introduction to Game Theory credit: 4 Hours.**

Applications of game theory. Introduction to basic static games and dynamic games with particular attention to applying these games to real world situations. Prerequisite: MATH 415; ECON 500 and ECON 501, or equivalent. MSPE Graduate Student Standing.

**ECON 507 Computable G E Modeling credit: 4 Hours.**

Discusses problems and methods of building social accounting matrices and computable general equilibrium (CGE) models; provides hands-on experience with CGE models with a series of PC-based exercises. The exercises demonstrate a number of techniques for constructing CGE models and show applications of these models to a variety of economic policy problems in developing countries such as food subsidies, international trade restrictions, foreign debt, and sectoral investment priorities. Prerequisite: ECON 500 and ECON 501 or equivalent; MATH 220 or MATH 221, or equivalent. MSPE Graduate Student Standing.

**ECON 510 Economics of Taxation credit: 4 Hours.**

Theoretical and empirical analysis of the impact of taxation on the economic system; topics include tax equity and excess burden, incentive effects of taxation, tax incidence, structure of major types of taxes (income, consumption, and wealth), normative tax analysis, and taxation in developing economies. Prerequisite: ECON 302 or equivalent. MSPE Graduate Student Standing.

**ECON 511 Public Goods Theory credit: 4 Hours.**

In-depth analysis of the theory of public goods; includes public goods and externality theory, public choice, theory of cost-benefit analysis, optimal income redistribution, and fiscal federalism. Prerequisite: ECON 302 or equivalent. MSPE Graduate Student Standing.

**ECON 513 International Trade credit: 4 Hours.**

The pure theory of international trade, general equilibrium income and welfare, tariffs, the theory of policy ranking, strategic trade policy, customs unions, international trade law and the WTO. Prerequisite: ECON 302 and ECON 303, or equivalent. MSPE Graduate Student Standing.

**ECON 514 International Financial credit: 4 Hours.**

Examines the balance of payments, exchange rate, capital flows and international monetary system; fiscal and monetary policy in open economies. Prerequisite: ECON 302 and ECON 303, or equivalent. MSPE Graduate Student Standing.

**ECON 516 Monetary Theory credit: 4 Hours.**

Micro- and macroeconomic theories of the supply of and demand for money; money substitutes and their significance; review of current empirical research; money in closed economy, macroeconomic, and static general equilibrium models; and analysis of inflation and unemployment. Prerequisite: Consent of instructor. MSPE Graduate Student Standing.

**ECON 517 Monetary Policy credit: 4 Hours.**

Theories of money; money in dynamic models; money in open economy macroeconomic models; stabilization policy; and international aspects of monetary theory. Prerequisite: Consent of instructor. MSPE Graduate Student Standing.

**ECON 519 Development and Growth Policy credit: 4 Hours.**

Review and analysis of the theories and patterns of growth in developed and underdeveloped economies; the process and impact of import substitution industrialization; trade and economic development; the role of the state and privatization in the development process; agricultural stagnation and modernization. Prerequisite: ECON 500 and ECON 501 or consent of instructor. MSPE Graduate Student Standing.

**ECON 527 Business International Econ credit: 4 Hours.**

Provides the business student with a working knowledge of the principles of international economics, issues in the current international business environment, U. S. and international trade law, and current policy issues and debates. Considers the basic causes and consequences of international trade, the foreign exchange market and theory of exchange rate determination, the U. S. trade deficit, the international monetary system, and antidumping and countervailing duty law, copyright and patent infringement law, the General Agreement on Tariffs and Trade, the rudiments of strategic trade theory, and selected policy issues varying by year. Prerequisite: Familiarity with intermediate microeconomics at the level of ECON 302.

**ECON 528 Microeconomics for Business credit: 4 Hours.**

Microeconomics for professional business students. Shows relevance of value and distribution theories for business managers. Includes demand and supply theory, consumer choice, production and cost theory, industrial structure, and wage and capital theory. Intended for students in the Master of Business Administration program. Credit is not given for both ECON 528 and either ECON 302 or ECON 500. Prerequisite: Enrollment is often restricted to students in specialized programs.

**ECON 529 Macroeconomics for Business credit: 4 Hours.**

Development of short run macroeconomic models. Analysis of private sector behavior functions, and government policy alternatives. Extensions for open economy models and growth models. Intended for students in the Master of Business Administration program. Credit is not given for both ECON 529 and either ECON 303 or ECON 501. Prerequisite: Enrollment is often restricted to students in specialized programs.

**ECON 530 Microeconomic Theory I credit: 4 Hours.**

Emphasizes microeconomic theory particularly theory of the consumer, theory of the firm, general equilibrium analysis and welfare analysis. Also, covers uncertainty in general equilibrium and informational economics. Prerequisite: ECON 302 and ECON 303 or equivalent.

**ECON 531 Macroeconomic Theory I credit: 4 Hours.**

Introduces students to a variety of dynamic general equilibrium models that currently dominate the study of growth and economic fluctuations. These models include: neoclassical growth models, overlapping generations models, CAPM models, search models, and endogenous growth models. In covering these models, the course also seeks to develop a set of techniques for students to use. These techniques include discrete time optimization, continuous time optimization, dynamic programming and model calibration. Prerequisite: ECON 302 and ECON 303, or equivalent; calculus.

**ECON 532 Econometric Analysis I credit: 4 Hours.**

Theoretical treatment of economic statistics. Covers probability theory, set theory, asymptotic theory, estimation and hypothesis testing. Prerequisite: A course in statistics or consent of instructor.

**ECON 533 Microeconomic Theory II credit: 4 Hours.**

Focusses on information and incentives in economic problems. Topics include non-cooperative games, dynamic games, mechanism design, auctions, matching and networks. Prerequisite: ECON 530, or equivalent; calculus.

**ECON 534 Macroeconomic Theory II credit: 4 Hours.**

Development of modern macroeconomic theory, including disequilibrium theory, optimal short-term stabilization measures, and monetary, fiscal, incomes, and exchange rate policies; large-scale econometric models; linear and neoclassical growth models; aggregate distribution theory; money, capital movements, trade, and growth; optimal growth models; and exhaustible resources and growth. Prerequisite: ECON 531.

**ECON 535 Econometric Analysis II credit: 4 Hours.**

Part 1: The construction of econometric models; characteristics of models and choice of estimating methods; and estimates of parameters by various methods. Part 2: Bayesian statistics and decision theory. Prerequisite: ECON 532 or equivalent.

**ECON 536 Applied Econometrics credit: 4 Hours.**

Focus on specification, estimation, prediction and evaluation of econometric models. Covers instrumental variable estimation, simultaneous equation models, non-linear models, discrete choice models and quantile regression methods. Prerequisite: ECON 532 and ECON 535.

**ECON 540 Labor Economics I credit: 4 Hours.**

Survey of recent trends in the labor force, of real and money earnings, and of the distribution of national income used as the basis for a critical economic analysis of contemporary English and American wage theory. Same as LER 540. Prerequisite: ECON 302 and ECON 303.

**ECON 541 Labor Economics II credit: 4 Hours.**

Economic issues and implications involved in hours of work, employment and unemployment, and trade union institutionalism (the impact of the trade union upon the basic institution of a free enterprise economy); emphasis in all cases on the development of appropriate public policy. Same as LER 541. Prerequisite: ECON 302 and ECON 303.

**ECON 542 Collective Bargaining credit: 4 Hours.**

Same as LER 542. See LER 542.

**ECON 543 Workplace Dispute Resolution credit: 3 or 4 Hours.**

Same as LAW 665 and LER 543. See LER 543.

**ECON 545 Econ of Ed, Hlth & Hum Capital credit: 4 Hours.**

Same as EOL 518. See EOL 518.

**ECON 546 Gen Equ Env Tax Policy credit: 4 Hours.**

Same as FIN 519. See FIN 519.

**ECON 547 Urban Economics credit: 4 Hours.**

Examines the microeconomic theory of urban land-use and spatial structure (static and dynamic models); analyzes externalities caused by traffic congestion; normative and positive analysis of the provision of local public goods; and public policy issues (i.e., slums and urban decline, pollution). Prerequisite: ECON 530 and ECON 533.

**ECON 548 Adv Natural Resource Economics credit: 4 Hours.**

Same as ACE 510, ENVS 510, and NRES 510. See ACE 510.

**ECON 549 Environmental Economics credit: 4 Hours.**

Examines both theory and policy applications in the environmental area; selectively reviews the literature to provide a framework for understanding the relevant economic relationships and the criteria appropriate for policy assessment; emphasizes the characteristics of major environmental problems and policy choices; and considers the valuation of environmental amenities and the conflict between environmental quality and growth. Same as ACE 516. Prerequisite: ECON 302 or consent of instructor.

**ECON 550 Econ of Development and Growth credit: 4 Hours.**

Theories of economic development and growth. Covers the role of agriculture, trade, manufacturing, human capital, genetics, geography and culture in growth. Prerequisite: ECON 533 and ECON 534, or equivalent.

**ECON 551 Topics in Development Econ credit: 4 Hours.**

Analyzes the newly developing economies, with emphasis on institutional factors affecting development and economic policy relating to development. Prerequisite: ECON 535 or equivalent.

**ECON 553 Demand/Supply/Firms/Households credit: 4 Hours.**

Same as ACE 502. See ACE 502.

**ECON 555 Topics in Microeconomics I credit: 4 Hours.**

Study at an advanced level of one or more of the following possible topics: economics of externalities, advanced aggregate economic theory, theory of central planning, investment theory, consumer behavior theory, capital theory, welfare economics, inflation theory, income distribution theory, or other topics. May be repeated. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

**ECON 556 Topics in Microeconomics II credit: 4 Hours.**

Studies quantitative techniques useful in economic analysis and decision making; single and systems of difference and differential equations; dynamic programming; Pontryagin maximum principle; interaction of multiplier and accelerator; von Neumann model; Turnpike theorem; growth models; and control systems. Prerequisite: MATH 415; ECON 533 and ECON 534, or equivalent.

**ECON 557 Topics in Microeconomics III credit: 4 Hours.**

Studies bounded rationality and learning in economics. Topics include evolutionary learning in models. Prerequisite: MATH 415, ECON 533 and ECON 534 or equivalent.

**ECON 562 Topics in Macroeconomics I credit: 4 Hours.**

Study at an advanced level of one or more of the following possible topics: economics of externalities, advanced aggregate economic theory, theory of central planning, investment theory, consumer behavior theory, capital theory, welfare economics, inflation theory, income distribution theory, or other topics. May be repeated. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

**ECON 572 Political Economy credit: 4 Hours.**

Microeconomic analysis of political decision making processes. Includes social choice, models of political competition, game-theoretic analysis of political institutions and lobbying. Same as PS 548. Prerequisite: ECON 530 or equivalent, or instructor's consent.

**ECON 574 Econometrics I credit: 4 Hours.**

Estimation of parameters for single-equation models; tests of hypotheses and confidence regions for regression models; large-sample theory in single-equation models; and Bayesian statistics in regression models. Prerequisite: MATH 415 and STAT 400.

**ECON 575 Econometrics II credit: 4 Hours.**

Considers the specification of models with systems of simultaneous equations; identification problem, distributed lag models, K-class estimators, maximum likelihood estimators, three-stage least-squares, and effects of specification errors. Prerequisite: ECON 574.

**ECON 576 Time Series credit: 4 Hours.**

Models and techniques used in the analysis of time series data. Covers univariate and multivariate time series. non-stationary time series, cointegration and error corection, structural breaks and non-linear time series models. Prerequisite: ECON 535 or STAT 578, or equivalent.

**ECON 577 Topics in Econometrics credit: 4 Hours.**

Examines some standard econometric problems from the Bayesian perspective and compares Bayesian and classical inference. Prerequisite: ECON 574.

**ECON 578 Large Sample Theory credit: 4 Hours.**

Same as STAT 575. See STAT 575.

**ECON 580 Industrial Organization credit: 4 Hours.**

Theory of the organization of markets and firms, behavior of firms, functioning of competitive systems, and performance of markets.

**ECON 581 Govt Regulation of Industry credit: 4 Hours.**

Microeconomic and econometric analyses of market failure and government response in selected industries; topics include economic effect of regulation, bureaucratic behavior, optimal policy, and strategies for regulatory reform. Prerequisite: ECON 530; ECON 580; or consent of Instructor.

**ECON 582 Empirical Ind Organization credit: 4 Hours.**

Empirical Methods in Industrial Organization. Topics include: detection of anticompetitive behavior; estimation techniques that allow for product differentiation, endogenous entry and intertemporal decision-making; estimation and testing of auctions and other asymmetric information models.

**ECON 585 Topics in International Econ credit: 4 Hours.**

Frontier advanced topics in international economics; subject matter varies. May not be repeated for credit. Prerequisite: ECON 533 and ECON 534, or consent of instructor.

**ECON 590 Individual Study and Research credit: 0 to 4 Hours.**

Directed reading and research. Approved for both letter and S/U grading. May be repeated.

**ECON 598 Workshop and Research Seminar credit: 2 Hours.**

Workshops are offered in all areas of specialization in which graduate students are writing Ph.D. dissertations. The specific format varies, but in general workshop sessions include presentations by graduate students of thesis research, by faculty members of their current research, and by occasional outside speakers. Approved for S/U grading only. May be repeated. A minimum of 4 hours of ECON 598 is required of all students in the Ph.D. program. Prerequisite: Admission to the Department of Economics Ph.D. program.

**ECON 599 Thesis Research credit: 0 to 16 Hours.**

Preparation of thesis required of all students writing master's or doctoral theses in economics. Approved for S/U grading only. May be repeated.