ECONOMICS

Department of Economics
College of Social Science

201  Introduction to Microeconomics
Fall, Spring, Summer. 3(3-0) Not open to students with credit in EC 252H.
Economic institutions, reasoning and analysis. Consumption, production, determination of price and quantity in different markets. Income distribution, market structure and normative analysis.

202  Introduction to Macroeconomics
Fall, Spring, Summer. 3(3-0) Not open to students with credit in EC 252H.

210  Economics Principles Using Calculus
Fall. 3(3-0) P:M: MTH 133 or MTH 153H or MTH 126 Not open to students with credit in EC 201 or EC 202.
A combined microeconomic and macroeconomic course. Emphasis on topics of interest in engineering and management, such as discounting, cost-benefit analysis, innovation, externalities, and the role of government regulation.

251H  Microeconomics and Public Policy
Fall, Spring. 4(4-0) Not open to students with credit in EC 301.
Theories of consumer behavior, production and cost. Output and price determination in competition and monopolies. Welfare economics, general equilibrium, externalities, and public goods.

252H  Macroeconomics and Public Policy
Fall, Spring. 3(3-0) P:M: (EC 201 and EC 301) or EC 251H Not open to students with credit in EC 302.
Theory of national income, unemployment, inflation and economic growth and its application to economic analysis and policy.

293  Cooperative Education for Business Students
Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. Interdepartmental with Accounting and Finance and Hospitality Business and Management and Marketing and Supply Chain Management. Administered by Marketing and Supply Chain Management.
Approval of department. Integration of pre-professional educational employment experiences in industry and government with knowledge and processes taught in the student's academic program. Educational employment assignment approved by the Department of Marketing and Supply Chain Management.

301  Intermediate Microeconomics
Fall, Spring, Summer. 3(3-0) P:M: EC 201 in EC 252H.
Theories of consumer choice, production, cost, perfect competition, and monopoly. Welfare economics, general equilibrium, externalities and public goods.

302  Intermediate Macroeconomics
Fall, Spring. Summer. 3(3-0) P:M: EC 201 and EC 202 Not open to students with credit in EC 252H.

306  Comparative Economic Systems
Fall. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H)
Characteristics and functions of economic systems. Alternative patterns of economic control, planning, and market structure. Theories, philosophies, and experiences associated with capitalism, socialism, and mixed economies.

310  Economics of Developing Countries
Spring. 3(3-0) P:M: EC 201 or EC 251H
Overview of economic patterns and policy issues of developing countries such as modern economic growth and structural transformation, state controls versus markets, poverty and human welfare, investments in human resources, and trade and industrialization.

320  Analysis of Economic Data
Fall, Spring. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H) R: Not open to students in the Department of Accounting or Department of Finance or School of Hospitality Business or Department of Management or Department of Marketing and Supply Chain Management.

330  Money, Banking, and Financial Markets
Fall, Spring. Summer. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H)
Money markets and financial intermediation. Money, the Federal Reserve System, and monetary policy. Regulation of money markets.

335  Taxes, Government Spending and Public Policy
Fall, Spring. Summer. 3(3-0) Interdepartmental with Environmental Economics and Policy. Administered by Economics.
P:M: EC 201 or EC 251H SA: PRM 335 Not open to students with credit in EC 435 or EC 436.
Economics of the public sector. Public goods, externalities, design and incidence of the tax system. Equity and efficiency effects of government programs.

340  Survey of International Economics
Fall, Spring. Summer. 3(3-0) P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H)
Not open to students with credit in EC 440 or EC 441.

360  Private Enterprise and Public Policy
Fall, Spring, Summer. 3(3-0) P:M: EC 201 or EC 251H
Effects of antitrust, economic regulation, and other public policies on competition, monopoly, and other market problems in the United States economy.

380  Labor Relations and Labor Market Policy
Fall, Spring. Summer. 3(3-0) P:M: EC 201 or EC 251H

391  Special Topics in Economics
Fall, Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P:M: (EC 201 or EC 251H) and (EC 202 or EC 252H) R: Approval of department.
Special topics supplementing regular course offerings.

401  Advanced Microeconomics
Fall, Spring. 3(3-0) P:M: EC 251H or EC 301
Economics of uncertainty and incomplete information. Game theory and theories of oligopoly. Transaction costs. Advanced topics in welfare economics, general equilibrium, externalities, and public goods.

402  Advanced Macroeconomics
Fall, Spring. 3(3-0) P:M: (EC 251H or EC 301) and (EC 252H or EC 302)
Consumption, investment, and monetary theories. The role of expectations. Theories of economic growth and cycles. Stabilization policies.

406  Economic Analysis of Russia and the Commonwealth of Independent States
Spring of even years. 3(3-0) P:M: (EC 202 or EC 252H) and (EC 251H or EC 301)
Analysis of structure and performance of planning, transition economy, and post-transition economy in Russia and the Commonwealth of Independent States (CIS) with focus on micro foundations of macroeconomic outcomes.

410  Issues in the Economics of Developing Countries
Fall. 3(3-0) P:M: (EC 202 or EC 252H) and (EC 251H or EC 301)
Topics in development economics, such as growth, technological change, structural transformation, poverty and inequality, investment in human resources, trade, international capital flows, and the political economy of policy formation and governance.

412  Economic Analysis of Latin America
Fall of even years. 3(3-0) P:M: (EC 202 or EC 252H) and (EC 251H or EC 301)

413  Economic Analysis of Asia
Spring of odd years. 3(3-0) P:M: (EC 202 or EC 252H) and (EC 251H or EC 301)
Development of agriculture, industry, labor markets, and trade in some of the following: India and South Asia, China, the Pacific Rim countries, and Japan. Productivity, income distribution, finance, and planning.
Economics—EC

414 Economic Analysis of Sub-Saharan Africa
Fall of odd years. 3(3-0) P:M: (EC 202 or EC 252H) and (EC 251H or EC 301)
African economic development in historical perspec-
tive. Contemporary development issues including
agricultural policies, industrial development, foreign
trade and aid, human resource investments, AIDS,
and the political economy of economic and political
policies and reforms.

420 Introduction to Econometric Methods
Fall, Spring. 3(3-0) P:M: (EC 202 or EC 252H) and
(ES 251H or EC 301) and (MTH 124 or MTH 132 or MTH 152H) and
(STT 316 or STT 421 or STT 430 or STT 441)
Specification, estimation, and interpretation of eco-
nometric models. Evaluation of current quantitative
work in economics.

421 Advanced Econometric Methods
Spring of even years. 3(3-0) P:M: (EC 420)
Panel data methods, instrumental variables, limited
dependent variables, time series analysis, and other
advanced topics.

425 Law and Economics
Fall. 3(3-0) Interdepartmental with Finance.
Administered by Economics. P:M: EC 251H
or EC 301
Application of economic analysis to the law. Proper-
ty rights, takings, the Coase Theorem. The econom-
is of regulation, crime and punishments, liability
law, and public choice.

435 Public Expenditures
Fall. 3(3-0) P:M: EC 251H or EC 301
Expenditure theory. Objectives and rationale of
government activity in the market system. Efficiency
criteria in government decision-making. Public
choice. Cost benefit analysis.

436 Public Revenues
Spring. 3(3-0) P:M: EC 251H or EC 301
Principles and theory of efficiency and the incidence
of taxation. Income and sales taxes and other major
revenue sources.

440 International Trade
Fall. 3(3-0) P:M: EC 251H or EC 301
Neoclassical and modern theories regarding trade
patterns and commercial policies. Applications of
theory to United States policy. Contemporary issues
involving international trade of goods, services, and
productive factors.

441 International Finance
Spring. 3(3-0) P:M: (EC 251H or EC 301)
and (EC 252H or EC 302)
Neoclassical and modern theories pertaining to
balance of payments and exchange rate determina-
tion. Macroeconomic performance under alternative
exchange rate regimes. Contemporary issues in-
volving international monetary arrangements.

460 American Industry: Structure and
Behavior
Fall, Spring. 3(3-0) P:M: EC 251H or EC 301
Market structure and performance. Empirical analy-
sis of market definition, concentration, product dif-
ferentiation, vertical integration, innovativeness, collu-
sion, and entry deterrence.

480 Analysis of Labor Markets
Fall, Spring. 3(3-0) P:M: EC 251H or EC 301
Labor supply and demand. Human capital, search,
migration, and labor turnover. Analysis of unem-
ployment and wage growth. Structure of wages,
including economics of discrimination.

489 Senior Seminar for Policy and Applied
Economics Majors (W)
Fall. 3(3-0) P:M: (EC 251H or EC 301) and
(EC 320 and completion of Tier I writing re-
quirement) R: Open only to seniors in the
Policy and Applied Economics major.
Capstone course for policy and applied economics
majors. Reading and discussion concerning se-
lected economics topics. Preparation and presenta-
tion of student research project.

490 Independent Study
Fall, Spring, Summer. 1 to 3 credits. A stu-
dent may earn a maximum of 3 credits in all
enrollments for this course. P:M: (EC 202 or
EC 252H) and (EC 251H or EC 301) R: Ap-
proval of department.
Research and reading course for students interested
in doing independent work in economics under
faculty supervision.

491 Advanced Topics in Economics
Fall, Spring. 3(3-0) A student may earn a
maximum of 9 credits in all enrollments for
this course. P:M: (EC 251H or EC 301) and
(EC 252H or EC 302) and (MTH 124 or
MTH 132 or MTH 152H) R: approval of de-
partment.
Advanced work in specialized topics of economics.

495 Economics of Poverty and Income
Distribution
Fall. 3(3-0) P:M: EC 251H or EC 301
Theory of the distribution of income and wealth.
Concepts and measurement of welfare. Definitions
of poverty. Effects of public and private programs on
the poor.

498 Economics of Health Care
Fall of odd years. 3(3-0) P:M: EC 251H or
EC 301
Economic factors in determining health care costs,
utilization, quality, and efficiency. Demand and
insurance. Comparative health care systems. Public
policy issues.

499 Senior Seminar for Economics Majors
(W)
Fall, Spring. 3(3-0) P:M: (EC 251H or EC
301) and (EC 252H or EC 302) and (EC 420
and completion of Tier I Writing require-
ment) R: Open only to seniors in the
Department of Economics.
Capstone course for economics majors. Reading and
discussion concerning selected economics topics.
Preparation and presentation of student
research project.

801 Mathematical Applications in Economics
Fall. 3(3-0) RB: MTH 124 or MTH 132 R:
Open only to master's students in the De-
partment of Economics. Open only to gradu-
ate students in the Department of Agricul-
tural Economics and doctoral students in the
Business Administration major or approval of
department.
Applications of mathematical tools in economic
analysis. Matrix algebra, derivatives, partial deriva-
tives, optimization, integration and linear differential
equations.

805 Microeconomic Analysis
Fall. 3(3-0) R: Open only to master's stu-
dents in the Department of Economics.
Open only to graduate students in the De-
partment of Agricultural Economics and doc-
tor students in the Business Administration major
or approval of department. Not open to
students with credit in EC 812A.
Microeconomic theory with calculus. Production,
costs, demand, markets, general equilibrium and
welfare theory.

807 Applied Microeconomic Analysis
Spring. 3(3-0) P:M: EC 805
Applications of microeconomic theory taken from
public finance, labor economics, international trade,
and industrial organization.

809 Macroeconomic Analysis
Spring. 3(3-0) P:M: EC 801 Not open to stu-
dents with credit in EC 813A.
Closed- and open-economy macroeconomic theory
with calculus. Inflation, unemployment, growth,
business cycles, consumption, investment, and
money demand. Policy debates and macroeconomic
forecasting.

810 Institutional and Behavioral Economics
Fall. 3(3-0) Interdepartmental with Agricul-
tural Economics and Resource Develop-
ment. Administered by Agricultural Econom-
ics.
Relationships among institutions, individual and
collective actions, and economic performance.
Public choice, property rights, and behavioral theo-
ries of firms and bureaucracies.

811A Mathematical Applications in Economics
Fall. 2(2-0) R: Open only to doctoral stu-
dents in the Economics major or the De-
partment of Agricultural Economics or the
Business Administration major or approval
of department. C: EC 812A concurrently.
Applications of mathematical tools in economic
analysis for Ph.D. students. Matrix algebra, deriva-
tives, partial derivatives, optimization, integration
and linear differential equations.

811B The Structure of Economic Analysis
Fall. 2(2-0) P:M: EC 811A SA: EC 811 C:
EC 813B concurrently.
Static and dynamic decision models in economics.
Concepts of equilibrium, stability, comparative stat-
ics and duality.

812A Microeconomics I
Fall. 3(3-0) C: EC 811A concurrently.
Consumption theory, including choice under uncer-
tainty. Theory of production in perfectly competitive
markets. General equilibrium in the presence of
perfect competition. Efficiency properties of competi-
tive equilibria.

812B Microeconomics II
Spring. 3(3-0) P:M: EC 812A
Introduction to social choice. Market failure, includ-
ing externalities, public goods, imperfect information
and market power.

813A Macroeconomics I
Fall. 3(3-0) R: Open only to doctoral stu-
dents in the Economics major or the De-
partment of Agricultural Economics or the
Business Administration major or approval of
department.
Static and dynamic macroeconomic models. Search
asset pricing, new classical theories of business
cycles and growth. Rational expectations and the
government budget constraint.
813B  Macroeconomics II
Spring. 3(3-0) P:M EC 813A C: EC 811B concurrently.
New classical theories of business cycles and growth. Theories of price and wage rigidities, search, imperfect competition, and credit rationing in macroeconomic models. Asset pricing.

816  Economic Thought II
Spring. 3(3-0)

818  Introduction to Econometrics
Spring. 3(3-0)
The single equation regression model. Properties of least-squares estimators under various specifications. Multicollinearity, heteroskedasticity, serial correlation, and generalized least squares.

820A  Econometrics IA
Fall. 3(3-0) Interdepartmental with Agricultural Economics and Statistics and Probability. Administered by Economics. P:M: STT 430 R: Not open to doctoral students in the Economics major. SA: EC 820

820B  Econometrics IB
Fall. 3(3-0) P:M EC 811A and EC 820A

821  Econometrics II
Fall. 3(3-0) Interdepartmental with Agricultural Economics and Statistics and Probability. Administered by Economics. P:M: EC 820A and EC 820B

822  Econometrics III
Spring. 3(3-0) Interdepartmental with Agricultural Economics and Statistics and Probability. Administered by Economics. P:M: EC 820A and EC 820B
Dynamic models and time series data. ARMA models. ARCH models. Unit roots, cointegration and error correction. Rational expectations models.

823  Applied Econometrics
Fall. 3(3-0) P:M: EC 820A and EC 820B) or (STT 430 and EC 816)
Problems of estimating models and testing hypotheses from economic theory. Applications of various econometric models to economic problems and policy analysis.

824  Advanced Topics in Econometrics
Spring of even years. 3(3-0) P:M: EC 820A and EC 820B and EC 821 and EC 822 R: Open only to doctoral students in the Economics major or approval of department. Advanced study in a specialized topic in econometrics.

829  The Economics of Environmental Resources
Spring. 3(3-0) Interdepartmental with Community, Agriculture, Recreation and Resource Studies and Agricultural Economics and Forestry and Fisheries and Wildlife and Park, Recreation and Tourism Resources. Administered by Agricultural Economics.
RB: Graduate Status
Economic principles related to environmental conflicts and public policy alternatives. Applications to water quality, land use, fish and wildlife, conservation, development, and global environmental issues.

830  Advanced Macroeconomics and Monetary Theory
Fall. 3(3-0) P:M EC 812B and EC 813B

831  Problems in Monetary Theory and Policy
Spring. 3(3-0) P:M: EC 813A and EC 820A
Topics on macroeconomics with a strong applied emphasis.

835  Public Expenditures
Fall. 3(3-0) P:M: EC 812A
Allocative and distributional effects of public expenditure. Public goods and externalities. Selected topics in public expenditure analysis such as cost-benefit analysis, fiscal federalism, mechanism design, public choice, and general equilibrium models.

836  Public Revenues
Spring. 3(3-0) P:M: EC 812A

840  International Trade: Theory and Commercial Policy
Fall. 3(3-0) P:M: EC 812A
Commodity composition of trade. Welfare and distributional effects of measures such as tariffs, quotas, and export subsidies. International economic policy. Regional and multilateral trade policy.

841  Exchange Rates and Capital Flows
Spring. 3(3-0) P:M: EC 812A and EC 813A

843  Advanced Topics in International Trade
Spring. 3(3-0) P:M: EC 812A and EC 812B and EC 840
Selected topics in international trade.

844  Open Economy Macroeconomics
Fall. 3(3-0) P:M: EC 813A and EC 813B

850  Growth, Development, and Human Resources
Fall. 3(3-0) P:M: EC 812A
Theoretical and empirical models of the microeconomics of development, focusing on household and individual behavior related to investment in human resources and its consequences.

851  Microeconomics Dynamics in Development
Spring. 3(3-0) P:M: EC 812A and EC 813A
Theoretical and empirical models of the microeconomics of development, focusing on land, labor, credit and insurance markets. Analysis of household and individual responses to risk, dynamic decisions with respect to savings, consumption and labor supply, and models of learning. EC 851 is designed to be a continuation of EC 850.

860  Market Structure and Behavior
Fall. 3(3-0) P:M: EC 812A
The consequences of concentration and entry conditions. Theory of the firm as it relates to size, scope, integration, and motivation. Static market behavior. Antitrust treatment of cartels and mergers.

861  Dynamic Market Behavior and Performance
Spring. 3(3-0) P:M: EC 812A

880  Labor Economics I
Fall. 3(3-0) P:M: EC 812A and (EC 820B or EC 818)
Labor supply and measurement of the labor force. Labor demand. Mobility, turnover, and migration. Equalizing wage differentials. Trade union growth, goals, bargaining and effects.

881  Labor Economics II
Spring. 3(3-0) P:M: EC 812A and (EC 820B or EC 818)

895  Graduate Reading in Economics
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
Faculty guided research projects.

911  Strategic Behavior in Economic Environments
Fall. 3(3-0) P:M: EC 812B
Topics in cooperative and non-cooperative game theory. Applications include: oligopoly and bargaining theories, strategic voting and principal agent models, endogenous coalition formation, signalling, strategic trade, and auctions theories.

912  Risk, Uncertainty and Information
Spring. 3(3-0) P:M: EC 812A and EC 812B
RB: EC 812A
Effects of risk in economic environments. Topics include: expected utility theory, risk aversion, stochastic dominance, mean-variance models, state preference models, general equilibrium models with risk, information theory.
Advanced Environmental and Resource Economics
Fall. 3(3-0) Interdepartmental with Agricultural Economics and Forestry and Park, Recreation and Tourism Resources and Resource Development. Administered by Agricultural Economics. RB: AEC 829 and EC 812A
Advanced economic theory of environmental management and policy. Treatment of externalities and market and non-market approaches to environmental improvement. Topics in conservation and sustainable economic growth. Applications to research and policy.

Advanced Natural Resource Economics
Spring. 3(3-0) Interdepartmental with Agricultural Economics and Forestry and Park, Recreation and Tourism Resources and Resource Development. Administered by Agricultural Economics. RB: EC 812A and AEC 829 and FOR 866 SA: AEC 991H
Economic theory of managing nonrenewable and renewable resources, including optimal use, the incentives for use under decentralized markets, and public policy design. Analysis of the co-evolution of economic and ecological systems.

Research Seminars in Advanced Topics in Economics
Fall, Spring. 1(1-0) A student may earn a maximum of 2 credits in all enrollments for this course.
Current research topics in applied economics.

Advanced Topics in Economics
Fall of odd years. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: EC 811A and EC 811B and EC 812A and EC 812B and EC 813A and EC 813B and EC 820A and EC 820B R: Open only to doctoral students in the Economics major or approval of department.
Advanced work in a specialized topic in economics.

Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open only to doctoral students in the Economics major.
Doctoral dissertation research.