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 251H. 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. Determinants of Gross National Product, unemployment, inflation and economic growth. National income accounting and fiscal policy. Aggregate demand, supply management and monetary policy.

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 monopoly. Welfare economics, general equilibrium, externalities, and public goods.

252H  Macroeconomics and Public Policy  
Fall, Spring, 3(3-0) P: (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. Intership and Summer. 3(3-0) P: EC 201 and MTH 124 or MTH 132 or MTH 152H or LB 118) RB: EC 202 Not open to students with credit in EC 251H. Theories of consumer choice, production, cost, perfect competition, and monopoly. Welfare economics, general equilibrium, externalities, and public goods.

301  Intermediate Microeconomics  
Fall, Spring, Summer. 3(3-0) P: EC 201 and MTH 124 or MTH 132 or MTH 152H or LB 118) RB: EC 202 Not open to students with credit in EC 251H. 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: EC 251H and EC 252H Not open to students with credit in EC 252H. National income accounting. Determination of aggregate output, employment, price level, and inflation rate. Policy implications.

306  Comparative Economic Systems  
Fall, Spring. 3(3-0) P: (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: EC 201 or EC 251H Not open to students with credit in EC 410. 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.

330  Money, Banking, and Financial Markets  
Fall, Spring, Summer. 3(3-0) P: (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) P: (EC 201 or EC 251H) 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: (EC 201 or EC 251H) and (EC 202 or EC 252H) Not open to students with credit in EC 440 or EC 441. Comparative advantage. Costs and benefits of trade. International economic policies. Balance of payments. Foreign exchange markets. The international monetary system. Contemporary trade and international currency issues.

360  Private Enterprise and Public Policy  
Fall, Spring, Summer. 3(3-0) P: 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.

370  Economics of Sports  
Summer. 3(3-0) P: EC 201 or EC 251H Economic analysis of sports teams, leagues, and institutions. Strategic considerations, demand and pricing, betting markets, optimal compensation for athletes, the market for superstars, anti-trust and public finance issues.

380  Labor Relations and Labor Market Policy  
Fall, Spring, Summer. 3(3-0) P: EC 201 or EC 251H Not open to students with credit in EC 480. Development, functions, legal framework, and economic effects of unions and collective bargaining. Institutions and economic impacts of government programs. Minimum wages, workers’ compensation, unemployment insurance, and antidiscrimination policies.

391  Special Topics in Economics  
Fall, Spring. 3(3-0) P: (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: 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: (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.

404  Behavioral Economics (W)  
Fall. 3(3-0) P: (MTH 124 or MTH 132 or MTH 152H) and completion of Tier I writing requirement and (EC 301 or EC 251H) Evidence of systematic departures from classical behavioral assumptions of economics. Translation of psychological principles into formal models of economic behavior. Analysis of topics such as risky choice, choices over time, and systematic deviations from rationality behavior.

406  Economic Analysis of Russia and the Commonwealth of Independent States (W)  
Spring of even years. 3(3-0) P: (EC 202 or EC 252H) and (EC 301 or EC 251H) and Completion of Tier I Writing Requirement 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 (W)  
Fall. 3(3-0) P: (EC 202 or EC 252H) and (EC 301 or EC 251H) and Completion of Tier I Writing Requirement 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 (W)  
Fall of even years. 3(3-0) P: (EC 202 or EC 252H) and (EC 301 or EC 251H) and Completion of Tier I Writing Requirement Population growth, agriculture, and urbanization. Dependence on primary exports and import protection. Inequality and populist orthodox policy cycles. Hyperinflation, international debt crises, and adjustments. United States policy interests and interventions.

413  Economic Analysis of Asia (W)  
Spring of odd years. 3(3-0) P: (EC 202 or EC 252H) and (EC 301 or EC 251H) and Completion of Tier I Writing Requirement 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.
414 Economic Analysis of Sub-Saharan Africa (W)  
Fall of odd years. 3(3-0) P: (EC 202 or EC 252H) and (EC 301 or EC 251H) and Completion of Tier I Writing Requirement  
African economic development in historical perspective. 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: (EC 202 or EC 252H) and (EC 251H or EC 301), and (MTH 124 or MTH 152H or LB 118) and (STT 315 or STT 421 or STT 430 or STT 441)  

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

425 Law and Economics (W)  
Fall. 3(3-0) Interdepartmental with Finance. Administered by Economics. P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement  
Application of economic analysis to the law. Property rights, takings, the Coase Theorem. The economics of regulation, crime and punishments, liability law, and public choice.

435 Public Expenditures (W)  
Fall. 3(3-0) P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement  

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

438 Urban Economics (W)  
Fall. 3(3-0) P: (EC 202 or EC 252H) and (EC 301 or EC 251H) and Completion of Tier I Writing Requirement  
Economic analysis of cities and urban regions. City growth or contraction, land-use patterns, transportation systems, housing and housing policies, functioning of local governments, policy responses to crime, pollution and poverty.

440 International Trade (W)  
Fall. 3(3-0) P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement  
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 (W)  
Spring. 3(3-0) P: (EC 251H or EC 301) and (EC 252H or EC 302) and Completion of Tier I Writing Requirement  
Neoclassical and modern theories pertaining to balance of payments and exchange rate determination. Macroeconomic performance under alternative exchange rate regimes. Contemporary issues involving international monetary arrangements.

450 Economics of Environmental Policy (W)  
Spring. 3(3-0) P: (EC 301 or EC 251H) and Completion of Tier I Writing Requirement  

460 American Industry: Structure and Behavior (W)  
Fall, Spring. 3(3-0) P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement  
Market structure and performance. Empirical analysis of market definition, concentration, product differentiation, vertical integration, innovativeness, collusion, and entry deterrence.

480 Analysis of Labor Markets (W)  
Fall, Spring. 3(3-0) P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement  
Labor supply and demand. Human capital, search, migration, and labor turnover. Analysis of unemployment and wage growth. Structure of wages, including economics of discrimination.

485 Economics of Education (W)  
Fall, Spring. 3(3-0) P: (EC 301 or EC 251H) and Completion of Tier I Writing Requirement  
The intersection of economics and education with a focus on U.S. education policy. Human capital, education production, and education reforms.

490 Independent Study  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P: (EC 202 or EC 252H) and (EC 251H or EC 301) R: Approval 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) P: A student may earn a maximum of 9 credits in all enrollments for this course. P: (EC 251H or EC 301) and (EC 252H or EC 302) and (MTH 124 or MTH 152 or MTH 152H) R: Approval of department. Advanced work in specialized topics of economics.

495 Economics of Poverty and Income Distribution (W)  
Fall. 3(3-0) P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement  

498 Economics of Health Care (W)  
Fall of odd years. 3(3-0) P: (EC 251H or EC 301) and Completion Tier I Writing Requirement  

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

810 Institutional and Behavioral Economics  

812A Microeconomics I and its Mathematical Foundations  
Fall. 3(3-0) Administration with Agricultural, Food, and Resource Economics. Administered by Agricultural, Food, and Resource Economics or the Department of Economics or in the Department of Finance or approval of department. Decision theory under certainty and under uncertainty. Demand theory. Production and general equilibrium in competitive markets. Social choice. Mathematical foundations, reviewing analysis and linear algebra.

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

813A Macroeconomics I  
Fall. 3(3-0) R: Open only to doctoral students in the Economics major or the Department 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 and its Mathematical Foundations  
Spring. 4(3-2) P: EC 812A  
Open to doctoral students in the Department of Economics. Spring and Fall of odd years. 3(3-0) P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement  
820A Econometrics IA
Fall. 3(3-0) Interdepartmental with Statistics and Probability. Administered by Economics. R: Open only to doctoral students in the Economics major or the Department of Agricultural Economics or the Business Administration major or approval of department. Statistical tools for econometrics. Applications of statistical tools, including probability distributions, estimation, hypothesis testing, and maximum likelihood to econometric problems.

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

821A Cross Section and Panel Data Econometrics I
Fall. 3(3-0) Interdepartmental with Agricultural Economics and Finance and Statistics and Probability. Administered by Economics. P: EC 820B SA: EC 821A
Analyses of systems of equations, panel data models, instrumental variables and generalized method of moments, M-estimation, quantile regression, maximum likelihood estimation, binary and multinomial response models, Tobit and two-part models, and other selected topics.

821B Cross Section and Panel Data Econometrics II
Spring. 3(3-0) Interdepartmental with Agricultural Economics and Finance and Statistics and Probability. Administered by Economics. P: EC 820B SA: EC 821B
Analyses of quasi-maximum likelihood estimation, count data models, fractional response models, duration models, sample selection and attrition, stratified sampling, estimating treatment effects, stochastic frontier models, and other advanced topics.

822A Time Series Econometrics I
Fall. 3(3-0) Interdepartmental with Agricultural Economics and Finance and Statistics and Probability. Administered by Economics. P: EC 820B SA: EC 822A
Analyses of time series regression, stationary time series analysis, ARIMA models, Wold decomposition, spectral analysis, vector autoregressions, generalized method of moments, functional central limit theorem, nonstationary time series, unit root processes, cointegration, and other advanced topics.

822B Time Series Econometrics II
Spring. 3(3-0) Interdepartmental with Agricultural Economics and Finance and Statistics and Probability. Administered by Economics. P: EC 822A
Analyses of multivariate time series, time series volatility models, long memory, nonlinear time series models, and other advanced topics.

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

829 Economics of Environmental Resources
Spring. 3(3-0) Interdepartmental with Agricultural Economics and Community Sustainability and Forestry and Fisheries and Wildlife. Administered by Agricultural Economics, Food, and Resource Economics. RB: Undergraduate intermediate microeconomics, calculus, and statistics SA: AEC 829 Economics principles, theoretical models, and empirical methods related to environmental problems and policy interventions. Applications to air, land, water, forests, energy, fish and wildlife, and climate change, including in developing countries.

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

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

835 Public Expenditures
Fall. 3(3-0) P: 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: EC 812A

840 International Trade: Theory and Commercial Policy
Fall. 3(3-0) P: 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.

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

850 Growth, Development, and Human Resources
Fall. 3(3-0) P: 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: 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: 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: EC 812A

880 Labor Economics I
Fall. 3(3-0) P: EC 812A and EC 820B
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: EC 812A and EC 820B

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. R: Approval of department. Faculty guided research projects.

911 Strategic Behavior in Economic Environments
Fall. 3(3-0) P: 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: 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.

923 Advanced Environmental and Resource Economics
Fall. 3(3-0) Interdepartmental with Agricultural Economics, Food, and Resource Economics and Forestry. Administered by Agricultural Economics, Food, and Resource Economics. RB: (AFRE 829 or concurrently) and EC 812A SA: AEC 923 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.
925 Advanced Natural Resource Economics  
Spring. 3(3-0) Interdepartmental with Agricultural, Food, and Resource Economics. Administered by Agricultural, Food, and Resource Economics. RB: EC 812A and AFRE 820 SA; AEC 991H, AEC 925. 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.

950 Research Seminars in Advanced Topics in Economics I  
Fall. 1(1-0) R: Open to doctoral students in the Department of Economics. Current research topics in Applied Economics I.

951 Research Seminars in Advanced Topics in Economics II  
Spring. 1(1-0) R: Open to doctoral students in the Department of Economics. Current research topics in Applied Economics II.

992 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.

999 Doctoral Dissertation Research  
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students. Doctoral dissertation research.