Website (http://www.northeastern.edu/cssh/economics)

William T. Dickens, PhD
University Distinguished Professor and Interim Chair
301 Lake Hall
617.373.2882
617.373.3640 (fax)
econ@northeastern.edu

Economics is the study of how societies produce and exchange goods and services to satisfy needs. Undergraduates may study economics to develop specialized analytical skills useful in today's complex labor market. Economics is distinguished among the social sciences by having a systematic normative as well as a positive framework for evaluating public policy. The major in economics is also a good foundation for graduate studies in advanced economics, public policy, law, or business.

Macroeconomics, which focuses on the overall economy, deals with such problems as inflation, unemployment, growth and instability, economic development, and governmental monetary and fiscal policies.

Microeconomics examines the economic behavior of individuals, households, firms, industries, and trade among countries. It seeks to assess the economic effects of market power and environmental damage and analyzes the economic aspects of natural resources, poverty, health, income distribution, trade unions, crime, and government regulation.

Courses in economics cover international trade; the behavior of families, firms, and industries in the market economy; the environmental costs of growth; and the economic aspects of natural resources, poverty, health, labor market discrimination, trade unions, crime, and governmental oversight. International and comparative perspectives are emphasized, most directly in courses in studies of the developing world and economic history.

Students may pursue a BA, a BS, or a minor in economics. Additionally, economics majors in their junior year may qualify for admission to the PlusOne program that combines the BA or BS with a master's degree in economics (requires an additional 16 semester hours of course work). The department also offers combined majors with business administration, environmental studies, international affairs, mathematics, philosophy, computer science, and political science.

Graduates may find jobs in major corporations; financial institutions; nonprofits; NGOs; or federal, state, and local governments. Their work may involve planning and forecasting, assessing labor needs, and undertaking financial studies. They may estimate consumer demand for new products, conduct research, teach, or provide specialized consulting services.

Academic Progression Standards
The following are the requirements to progress in the major:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1115</td>
<td>Principles of Macroeconomics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1116</td>
<td>Principles of Microeconomics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1231</td>
<td>Calculus for Business and Economics</td>
<td>4</td>
</tr>
</tbody>
</table>

The following four core courses should be completed by the end of sophomore year (ECON 2560 required for BS majors only):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2315</td>
<td>Macroeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2316</td>
<td>Microeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2350</td>
<td>Statistics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2560</td>
<td>Applied Econometrics</td>
<td>4</td>
</tr>
</tbody>
</table>

Within two semesters of completing the above courses, BA majors should complete:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 3520</td>
<td>History of Economic Thought</td>
<td>4</td>
</tr>
</tbody>
</table>

For BA/BS majors, grades earned in the following five core courses must average to a 2.000 grade-point average (GPA) or better.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1115</td>
<td>Principles of Macroeconomics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1116</td>
<td>Principles of Microeconomics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2315</td>
<td>Macroeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2316</td>
<td>Microeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>ECON 2350</td>
<td>Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

After admission to the major, all required economics courses must be taken in the day college.

PlusOne Program (MA) in Economics
The PlusOne program in economics offers an opportunity for the best of Northeastern's undergraduate economics majors to complete both the undergraduate degree program (BS or BA) and the professional program (MA) in economics in less time than if the programs were completed sequentially. Students apply no later than junior year, after all core economics classes have been completed, and begin taking master's course work in their senior year. One additional year of graduate study is required to complete the master's program. Students interested in this option should consult with the departmental undergraduate and graduate directors.

Programs

Bachelor of Arts (BA)
- Economics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/economics/economics-ba)
- International Affairs and Economics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/international-affairs/economics-ba)
- Political Science and Economics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/political-science/political-science-economics-ba)

Bachelor of Science (BS)
- Economics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/economics/economics-bs)
- Computer Science and Economics (http://catalog.northeastern.edu/undergraduate/computer-information-science/computer-information-science-combined-majors/economics-bs)
- Cybersecurity and Economics (http://catalog.northeastern.edu/undergraduate/computer-information-science/computer-information-science-combined-majors/cybersecurity-economics-bs)
• Economics and Business Administration (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/economics/economics-business-administration-bs)

• Economics and Mathematics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/economics/economics-mathematics-bs)

• Economics and Philosophy (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/economics/economics-philosophy-bs)

• Environmental Studies and Economics (http://catalog.northeastern.edu/undergraduate/science/marine-environmental/environmental-studies-economics-bs)

• Political Science and Economics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/political-science/political-science-economics-bs)

• Politics, Philosophy, and Economics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/interdisciplinary/politics-philosophy-economics-bs)

Minor

• Economics (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/economics/economics-economic-minor)

Accelerated Programs

See Accelerated Bachelor/Graduate Degree Programs (http://catalog.northeastern.edu/undergraduate/social-sciences-humanities/economics/economics-business-administration-bs)

Courses

Economics Courses

ECON 1000. Economics at Northeastern. 1 Hour.

Intended for freshmen in the College of Social Sciences and Humanities. Introduces freshmen to the liberal arts in general; familiarizes them with their major; helps them develop the academic skills necessary to succeed (analytical ability and critical thinking); provides grounding in the culture and values of the University community; and helps them develop interpersonal skills—in short, familiarizes students with all skills needed to become a successful university student.

ECON 1115. Principles of Macroeconomics. 4 Hours.

Introduces macroeconomic analysis. Topics include the flow of national income, economics growth and fluctuation, the role of money and banking, and monetary and fiscal policies. Emphasizes the development of conceptual tools to analyze the economic problems facing modern society.

ECON 1116. Principles of Microeconomics. 4 Hours.

Focuses on development of basic theory of demand, supply, and market price. Explores applications to selected microeconomic problems, such as basic monopoly and competition, and other issues that relate to the role of the pricing system in resource allocation and income distribution.

ECON 1125. Recitation for ECON 1115. 0 Hours.

Provides small-group discussion format to cover material in ECON 1115.

ECON 1126. Recitation for ECON 1116. 0 Hours.

Offers small-group discussion format to cover material in ECON 1116.

ECON 1230. Healthcare and Medical Economics. 4 Hours.

Enables students to recognize the relevance of economics to health and medical care and apply economic reasoning to understand health-related issues better; to understand the mechanism of healthcare delivery in the United States within broad social, political, and economic contexts; to explore the changing nature of health and medical care and its implications for medical practice, medical education and research, and health policy; and to analyze public policy in health and medical care from an economic perspective.

ECON 1240. Economics of Crime. 4 Hours.

Covers economic analysis of crime and the criminal justice system. Topics include theoretical and empirical analysis of the economic causes of criminal behavior, the social costs of crime and its prevention, and the design of enforcement policies.

ECON 1260. Contested Issues in the U.S. Economy. 4 Hours.

Covers many of the contested economic issues that the United States faces as a nation—the size of government, the national debt, the war on drugs, national healthcare, taxation, and many more. An important social system in any society is the economic system—the allocation of scarce resources. In the large and complex economy of the United States, there is controversy over what goods and services are produced and how they are distributed. To understand the nature and causes of these issues requires a course where theory is a tool of analysis, not the focus. Economics is not value free. Attention is given to the role of ethics and how our moral values shape policy. Course topics vary from semester to semester.

ECON 1281. Economics of the Creative Industries. 4 Hours.

Presents an overview of the economic aspects of creative industries. Examines the production and consumption of creative goods and services. Topics include consumer demand, economic models of nonprofit and for-profit production of creative goods, competition and market structure, artists and other creative workers as members of the labor force, productivity issues in the performing arts, government support for the creative sector, and the role and impact of public and private subsidies.

ECON 1290. History of the Global Economy. 4 Hours.

Covers ideological biases in economics; the extent of global disparities around 1800; evolution of global disparities since 1800; evolution of international integration and international trading and monetary regimes, 1800–2000; theories explaining global disparities: classical, neoclassical, Marxist, neo-Marxian, and structuralist; import-substituting industrialization: Latin America, Asia, and Africa; international debt crises: nineteenth and twentieth centuries; the new global regime; structural adjustment: GATT (General Agreement on Tariffs and Trade) and WTO (World Trade Organization); and socialist interlude: a socialist experience and transition to capitalism.

ECON 1291. Development Economics. 4 Hours.

Covers ideological biases in economics; origins of the Industrial Revolution; the evolution of global disparities, and how markets, imperialism, and racism affected this process; theories of growth: neoclassical, institutional; growth and structural change; growth and demographic change; growth, income distribution, and welfare; development policies: import-substitution vs. outward-orientation; growth based on primary exports and the socialist experience and transition to capitalism.
ECON 1292. Economic History of the Middle East. 4 Hours. 
Provides an historical account of the economies of the Middle East from the sixth century C.E. to the present. Conceives of the area between the Nile and Oxus as forming the core of the Middle East; besides the core, the region includes Turkey and North Africa. Identifies the major economic and demographic trends in the region, or segments of the region, to examine the ecological bases of the economies and the connection between political history and the economic trends and to understand the ways in which economies of the region articulated with other major economic regions including Europe, West Africa, and the economies of the Indian Ocean. Studies the systems of government and laws, agriculture, commerce, and manufacturing.

ECON 1293. European Economic History. 4 Hours. 
Covers European economic history from ancient times to the twentieth century. A brief survey of early Greek and Roman economic life provides the context for more in-depth analysis of medieval, mercantilist, and modern economic institutions. Emphasis is on the role of technology, trade, and natural resources in the development of modern European economies.

ECON 1915. Introductory Selected Topics in Macroeconomics. 4 Hours. 
Covers selected topic matter in the field of macroeconomics. The specific topic is chosen by the instructor. May be repeated up to three times.

ECON 1916. Introductory Selected Topics in Microeconomics. 4 Hours. 
Covers selected topic matter in the field of microeconomics. The specific topic is chosen by the instructor. May be repeated up to three times.

ECON 1990. Elective. 1-4 Hours. 
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ECON 2315. Macroeconomic Theory. 4 Hours. 
Presents several theoretical approaches to the study of short-run economic instability and long-run growth. Uses conceptual and mathematical tools to examine what economists believe to be the major determinants of fluctuations in employment and price level, as well as the rate of economic growth. The theoretical models are used to evaluate the operation and impact of various macroeconomic policy tools.

ECON 2316. Microeconomic Theory. 4 Hours. 
Examines supply-and-demand analysis, various elasticity concepts and applications, theories of demand and production, and derivation of cost curves. Analyzes pricing and output behavior in the several market structures with their welfare and the pricing of resources.

ECON 2350. Statistics. 4 Hours. 
Discusses basic probability, descriptive statistics, estimation techniques, statistical hypotheses, sampling, analysis of variance, correlation, and regression analysis in the context of economics. Computer applications are an integral part of the course.

ECON 2560. Applied Econometrics. 4 Hours. 
Examines research methods used by practicing economists. Discusses typical problems from applied areas of economics including choice of modeling framework, problems of data collection, review of estimation techniques, interpretation of results, and development of static and dynamic adaptive policy models. A research paper utilizing computer applications is an integral part of the course.

ECON 2990. Elective. 1-4 Hours. 
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ECON 3404. International Food Economics and Policy. 4 Hours. 
Covers basic concepts in economic and political dimensions of food production, consumption, and trade, with particular emphasis on the global food system. Topics include market and consumption analysis, the agriculture and food industries, types of food policy and other political instruments related to food, and how these affect consumer food choices, environment, diet, nutrition, and health. Discusses and analyzes factors driving the rapid evolution of the way food is produced, processed, distributed, and consumed, and its implications, in the context of the global food environment. Reviews current empirical evidence on the world food situation and discusses issues such as hunger, food security, obesity, and food safety.

ECON 3405. A Critique of Capitalism. 4 Hours. 
Examines the origins, workings, successes, and failures of capitalism, defined as an economic system where capital is mostly privately owned and markets generally solve economic problems. Examines, in addition, several variants of private-ownership economies including slavery, feudalism, land-tenancy, putting-out system, and self-employment. Also examines some alternatives to capitalism, such as command socialism, market socialism, worker-ownership of capital, cooperatives, Islamic economy, and Christian economy.

ECON 3406. Critical Perspectives on Economics. 4 Hours. 
Examines the assumptions, concepts, theories, tools, and tests employed by neoclassical economics; identifies the biases and limits of these methods; and explores alternative economic approaches that might overcome these failings. Also develops an ethical critique of markets, the profit motive, corporations, efficiency, innovation, and economic growth. Offers students an opportunity to develop critical perspectives on neoclassical economics and other approaches to economics.

ECON 3410. Labor Economics. 4 Hours. 
Emphasizes an economic analysis of the labor market, the labor force, and wages and earnings. Explores the differences that have existed and currently exist in the labor market with regard to race, ethnicity, and gender and the theories behind why they have existed and continue to exist. Covers supply, development, and efficient use of human resources; demand for labor by businesses and industries; wage inequality and its determinants; changing occupational and industrial structure; nature, causes, and incidence of unemployment; economic impact of unions; and influence of related labor-market institutions and relevant public policies including minimum wages, wage subsidies, and earned-income tax credits; health and safety regulations (OSHA); and antidiscrimination and affirmative action policies and programs.

ECON 3412. Women's Labor and the Economy. 4 Hours. 
Introduces economic models of dating, marriage, divorce, and childbirthing with the goal of understanding the dramatic changes in family structure that have occurred over the past 60 years. Focuses on women's behavior in the labor force: the labor force participation and poverty and antipoverty programs (as the majority of America's poor are in families headed by women). Discusses theories, evidence, and policy remedies for wage differences between men and women with emphasis on policy topics such as pro-marriage and fertility initiatives, welfare reform, the earned income tax credit, affirmative action, the marriage tax, parental leave, and childcare support.
ECON 3414. Economics of Human Capital. 4 Hours.
Explores theoretical and empirical treatment of economic issues related to investments in human capital including formal education (preschool through postsecondary), vocational education, on-the-job training, work experience and government-sponsored employment and training programs, and their impacts on individuals and society. Emphasizes studies of public policies to promote human capital investments including cost-effectiveness analysis and benefit-cost analysis for determining the effectiveness of investments in literacy, education, and training from a private and social standpoint.

ECON 3420. Urban Economic Issues. 4 Hours.
Studies urban growth and development, focusing on economic analysis of selected urban problems such as housing, poverty, transportation, education, health, crime, and the urban environment. Discusses public policies related to such problems.

ECON 3422. Economics of Transportation. 4 Hours.
Covers transportation and land-use patterns; externalities; special costs and social benefits of various modes of transportation, ownership, regulations, and financing of various modes of transportation; and economics of new technology in transportation.

ECON 3423. Environmental Economics. 4 Hours.
Applies the tools of economics to environmental issues. Explores taxonomy of environmental effects; externalities; the commons problem; taxation, regulations, marketable permits, and property rights as a solution; measuring benefits of cleaner air and water, noise abatement, and recreational areas; global issues including tropical deforestation and acid rain; and the relevance of economics to the environmental debate.

ECON 3424. Law and Economics. 4 Hours.
Focuses on how an understanding of the law is furthered by an awareness of the economic background against which it operates. Draws from economic principles, developing concepts such as efficiency, property rights, regulation, and income distribution. Uses mathematical notation to model the incentives created by various legal rules. Solutions to cost minimization and utility maximization problems reveal whether particular laws induce economic agents to act in a manner consistent with the social optimum. Applications of these ideas may include health and safety, the environment, the legal services and insurance industries, and zoning and land use, among others.

ECON 3425. Energy Economics. 4 Hours.
Introduces theoretical and empirical perspectives on energy demand and energy supply. Energy is vital to modern economies. Emphasizes the role markets play in determining how to use energy and its sources and the scope for public policy to address market imperfections. Discusses oil, natural gas, coal, nuclear power, and renewable energy (such as hydro-, wind, and solar power). Covers the public policy issues around greenhouse gas emissions and energy security.

ECON 3440. Public Finance. 4 Hours.
Presents an overview of the economics of government and the role of public policy. Develops guidelines to determine which economic activities are best performed by government and which are not. Also examines the impact of tax policies on efficiency, economic growth, and equity. Topics include market failures, public choice, the personal income tax, the corporate tax, sales tax, and taxation of capital and wealth, and options for reform of the tax structure. Major spending programs such as social security and education and healthcare are analyzed.

ECON 3442. Money and Banking. 4 Hours.
Covers the nature and functions of money, credit, and financial markets in the modern international economy. Analyzes financial markets and institutions, central banking, and the effects of interest and foreign exchange rates on the real economy.

ECON 3460. Managerial Economics. 4 Hours.
Explores the application of economic principles to the solution of managerial decision-making problems in areas such as demand estimation, cost estimation and control, pricing and marketing strategies, employee incentives, financing of capital investments, and responses to government regulation and taxation. Case studies and simulation models are typically used as pedagogical tools.

ECON 3462. Bubbles, Busts, and Bailouts: Market and Regulatory Failures in the Financial Crisis. 4 Hours.
Investigates economic and financial bubbles together with the busts and bailouts that usually follow. Analyzes how and why bubbles form in markets such as housing and stocks, emphasizing the financial crisis of 2007–2008 but covers others as well. Also examines the lasting effects on markets and the economy from the collapse of such bubbles and the need for bailouts and other policies that are often used. Applies a range of perspectives to identify the market failures and regulatory failures that can cause bubbles—failures of assumptions about information, about incentives, and about oversight. Includes perspectives from microeconomics, behavioral economics, finance, and public policy.

ECON 3470. American Economic History. 4 Hours.
Covers the economic history of the United States from the colonial period to the present. Includes studies of the development of major economic institutions and the effects of technological change. Examines economic reasons for the spread of an industrial market economy in the nineteenth century and the successes and failures of this economy in the twentieth century.

ECON 3481. Economics of Sports. 4 Hours.
Investigates what economics has to say about sports as an economic activity: what tools of economic analysis apply to sports, whether sports require different economic tools, what the evidence has to say about key questions. Focuses on professional team sports, although some attention is paid to college sports and to individual professional sports.

ECON 3490. Public Choice Economics. 4 Hours.
Studies public choice economics—the scientific analysis of government behavior—and is divided into two parts: institutional political economy and social choice theory. Public choice economics applies this neoclassical economic analysis to political issues such as rent seeking, tax reform, logrolling, voting behavior, the function of government, the intersection between public and private interests, and federalism. The point of departure from political science is that economists have based this analysis on the assumption that utility functions do not change once a person enters the realm of public service and that the argument of their utility functions is still their own self-interest and not the interest of the social system in which they operate.

ECON 3520. History of Economic Thought. 4 Hours.
Traces the evolution of Western economic thought. Covers several important periods and schools of economic thought including mercantilism, physiocracy, classical, Marxist, neoclassical, and Keynesian. Emphasizes the relationship between historical changes in society and economic thought, focusing on changes in the types of questions economists ask and the analytical tools they use.

ECON 3915. Intermediate Selected Topics in Macroeconomics. 4 Hours.
Covers selected topic matter in the field of macroeconomics. The specific topic is chosen by the instructor. May be repeated up to five times.

ECON 3916. Intermediate Selected Topics in Microeconomics. 4 Hours.
Covers selected topic matter in the field of microeconomics. The specific topic is chosen by the instructor. May be repeated up to five times.

ECON 3990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.
ECON 4654. Comparative Economics. 4 Hours.
Describes the uniqueness of modern market economies in terms of social institutions that serve limited economic ends. Begins with a presentation of traditional economic analyses of the advantages and disadvantages of market economies. Examines these theories in light of evidence from economic anthropology regarding the evolution of market institutions and from the problems encountered in contemporary transitional economies as they move from command to market institutions.

ECON 4635. International Economics. 4 Hours.
Covers Ricardian and neoclassical theories of trade; trade policies; tariffs, quotas, voluntary export restraints, and customs union; global trade regime; GATT (General Agreement on Tariffs and Trade) and WTO (World Trade Organization); balance-of-payments accounts; foreign exchange markets; monetary and portfolio balance approaches to external balance; fixed or flexible exchange rates; and international monetary system.

ECON 4640. Financial Economics. 4 Hours.
Introduces students to the theory of investments, including the principles of risk and return, the theory of portfolio selection, asset pricing models such as the capital asset pricing model (CAPM) and arbitrage pricing theory (APT), valuation of stocks, bond pricing and the term structure of interest rates, and options (what they are and how to use them). Geared toward nonbusiness majors who are interested in a rigorous course in finance.

ECON 4653. Mathematics for Economics. 4 Hours.
Introduces basic tools of mathematics, matrix algebra, differential and integral calculus, and classical optimization, with special reference to economic applications. Computer applications are an integral part of the course.

ECON 4680. Competition Policy and Regulation. 4 Hours.
Presents an analytic framework and empirical study of how the structure of industries and the conduct of sellers affect performance. Includes examples and case studies from both the “old economy” and the “new economy.” Examines antitrust as a public policy designed to promote better market performance.

ECON 4681. Information Economics and Game Theory. 4 Hours.
Offers an advanced course on the economics of information, including moral hazard and adverse selection; game theory; and mechanism design. Formally considers alternative solution concepts, such as Nash equilibrium and rationalizability for simultaneous move and sequential move games under complete information about payoffs and preferences, as well as solution concepts, such as Bayesian-Nash equilibrium to analyze selection, screening, and incentives in games of incomplete or asymmetric information. Covers optimal incentives or mechanism design, including the optimal design of contracts, auctions, and other mechanisms. Prior exposure to game theory recommended.

ECON 4692. Senior Economics Seminar. 4 Hours.
Incorporates aspects of real-world and academic experiences of students into an analytical context, enabling students to demonstrate their ability to apply economic concepts, methodology, and data to economic issues and problems of personal and philosophical significance.

ECON 4915. Advanced Selected Topics in Macroeconomics. 4 Hours.
Covers selected topic matter in the field of macroeconomics. The specific topic is chosen by the instructor. May be repeated without limit.

ECON 4916. Advanced Selected Topics in Microeconomics. 4 Hours.
Covers selected topic matter in the field of microeconomics. The specific topic is chosen by the instructor. May be repeated without limit.

ECON 4965. Undergraduate Teaching Experience 1. 4 Hours.
Provides an opportunity for qualified undergraduate students to serve as undergraduate teaching assistants. Requires various assignments closely directed by the assigned course instructor. These may include holding office hours, light grading, maintaining the records for the course, proctoring—but not solely administering—exams and quizzes, holding recitation/tutorial sessions, and (very) limited lecturing or leading class discussions. Requires minimum overall GPA of 3.333 and grade of A– or better in course assignment; permission to enroll is further subject to the availability of an appropriate course assignment and instructor.

ECON 4970. Junior/Senior Honors Project 1. 4 Hours.
Focuses on in-depth project in which a student conducts research or produces a product related to the student's major field. Combined with Junior/Senior Project 2 or college-defined equivalent for 8 credit honors project. May be repeated without limit.

ECON 4971. Junior/Senior Honors Project 2. 4 Hours.
Focuses on second semester of in-depth project in which a student conducts research or produces a product related to the student's major field. May be repeated without limit.

ECON 4990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

ECON 4991. Research. 4 Hours.
Offers an opportunity to conduct research under faculty supervision.

ECON 4992. Directed Study. 1-4 Hours.
Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor. May not be substituted for requirements leading to a BA or BS in economics. Requires approval of department chair. May be repeated without limit.

ECON 4994. Internship. 4 Hours.
Offers students an opportunity for internship work. May be repeated without limit.

ECON 4996. Experiential Education Directed Study. 4 Hours.
Draws upon the student's approved experiential activity and integrates it with study in the academic major. Restricted to those students who are using the course to fulfill their experiential education requirement. May be repeated without limit.

ECON 5105. Math and Statistics for Economists. 4 Hours.
Offers an intensive study of the statistical methods and techniques and mathematical fundamentals necessary for quantitative economics. Statistical topics include descriptive statistics, probability theory, fundamentals of estimation and hypothesis testing, and regression and correlation analysis. Mathematical topics include linear algebra and differential and integral calculus. Computer applications are an integral part of the course.

ECON 5110. Microeconomic Theory. 4 Hours.
Presents a survey of microeconomic theory at the beginning graduate level. Topics include theories of the consumer, firm, and market (including input and output markets), welfare economics, and market failures. Includes applications of theory to public policy questions in such fields as industrial organization and public finance. Requires knowledge of undergraduate microeconomic theory.

ECON 5120. Macroeconomic Theory. 4 Hours.
Examines theories of the short-run determination of output, employment, and prices, and long-run economic growth. Presents alternative macroeconomic models. Also consists of applied case study analysis of the theoretical models presented in class. Requires knowledge of undergraduate microeconomic theory.
ECON 5140. Applied Econometrics. 4 Hours.
Offers an intensive study of econometric techniques applied to cross-section, time-series, and panel data. Applies the fundamentals of econometrics to analyzing structural economic models, forecasting, and policy analysis. Computer applications and an empirical research project are an integral part of the course.

ECON 5291. Applied Development. 4 Hours.
Focuses on major macroeconomics policy questions for developing countries in an open economy context. Combines theoretical foundations with institutional analysis and empirical evidence. Begins by developing a macroeconomic framework to analyze short-term macroeconomic adjustment and concludes with long-term growth, emphasizing the effects of financial integration and capital account regulations on macroeconomic performance in developing countries. Approaches macroeconomic policy issues from a political economy perspective on macroeconomics. Empirical data and country experiences help assess the validity of theoretical propositions and explain the complexity of development trajectories. Requires previous course work in macroeconomic theory.

ECON 5292. Gender and Development Economics. 4 Hours.
Examines topics at the intersection of women's empowerment and economic development from an economic perspective. Introduces potential explanations for the gender inequalities in the context of developing countries as well as the role of public policy in addressing such disparities. Studies microeconomics topics such as education gaps, fertility, family planning, HIV/AIDS, marriage dynamics and intrahousehold allocation of resources, female labor outcomes and migration, as well as conflict and domestic violence. Offers students an opportunity to apply basic economic theory associated with each topic as well as the research methodologies used in recent empirical papers. Students with an econometrics background have a better understanding of the empirical papers. Requires previous course work in microeconomic theory and in statistics.