

# ECONOMICS (ECON)

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## **ECON 6010. Career Development Workshop. 1 Credit Hour.**

This workshop style class for economics majors focuses on strategies and skills for identifying career and graduate school pathways, conducting successful job and internship searches, and advancing in the workplace.

## **ECON 6011. Coding and Data Analysis for Economics I. 1 Credit Hour.**

This is the first in the series of three courses on data and empirical techniques used in economic analysis. Data cleaning, data management, and descriptive statistics methods are presented and applied to a variety of economics problems. The course prepares students for extensive use of statistical software to build data management skills and generate reports used in descriptive and explorative data analyses.

## **ECON 6012. Coding and Data Analysis for Economics II. 1 Credit Hour.**

This is the second in the series of three courses on data and empirical techniques used in economic analysis. The course focuses on advanced skills that include large data management and manipulation, relational data management, extensive vertical and horizontal summative and remerging techniques to prepare data sets for advanced statistical and econometric analyses.

## **ECON 6013. Coding and Data Analysis for Economics III. 1 Credit Hour.**

This is the third in the series of three courses on data and empirical techniques used in economic analysis. The course trains students to routinise their statistical programming and data analysis skills, such as analysis of variance, linear and logistic regression modelling, and evaluating model performance. This course is an ideal complement to Empirical Methods, various thesis-focused and other research-oriented courses.

## **ECON 6100. Economics and Strategy for Managers. 3 Credit Hours.**

A survey of microeconomic and macroeconomic concepts essential to the academic preparation of prospective managers. Economic theory used as a framework for contemporary managerial decision making.

## **ECON 6105. Macroeconomics. 3 Credit Hours.**

Macroeconomic theory, including determination of national income, employment, the general price level, and potential for economic growth. Sources of macroeconomic instability and stabilization policies.

## **ECON 6106. Microeconomic Analysis. 3 Credit Hours.**

Microeconomics, resource allocation decisions of households, businesses, and government agencies. Enables the student to understand and apply economic principles to consumer, business, and government decisions.

## **ECON 6110. Economics of Corporate Strategy. 3 Credit Hours.**

Applies microeconomic and macroeconomic theory to the development of modern corporate strategy, including organizational boundaries, market structure and competition, industry analysis, and competitive advantage.

## **ECON 6121. Research Methods. 3 Credit Hours.**

Introduces students to issues related to conducting research in economics. Topics include the derivation of empirical models from theoretical constructs, causality, experimental and non-experimental data, hypothesis testing, and policy analysis. Students also become familiar with electronic data sources and retrieval and are introduced to several professional software packages.

## **ECON 6130. Quantitative Methods in Economics. 3 Credit Hours.**

This course covers fundamental quantitative tools used in economic and econometric analysis, which includes topics in differential calculus, optimization, and linear algebra.

## **ECON 6140. Econometrics I. 3 Credit Hours.**

This course gives students the necessary background for taking courses in the econometrics sequence. Topics include descriptive statistics, continuous and discrete probability distributions, parameter estimation, one- and two-sample hypothesis testing, and bivariate regression models.

## **ECON 6150. Cost-Benefit Analysis. 3 Credit Hours.**

The application of economic, financial, and quantitative reasoning and tools to issues of resource allocation and policy, primarily in the public sector.

## **ECON 6160. Econometrics II. 3 Credit Hours.**

This course introduces advanced econometric methods on estimation and testing, including instrumental variable estimation, panel data analysis, limited dependent variable models, and simultaneous equation system. The course emphasizes applications of these techniques to real-world problems using professional software packages.

## **ECON 6161. Econometric Modeling and Forecasting. 3 Credit Hours.**

This course introduces techniques on economic and business forecasting, focusing on regression analysis and ARIMA models. Testing for unit roots and cointegration are also discussed. Professional software packages for forecasting are used in applications.

## **ECON 6162. Discrete Choice Econometrics. 3 Credit Hours.**

Focuses on econometric methods for which the dependent variable represents an "either-or" choice. Included in the set of topics are binary and multinomial logit, ordered choice, heteroskedastic extreme value, bivariate and multivariate probit, nested logit structures, discrete/continuous, and Poisson models. The course includes numerous applications using professional software programs.

## **ECON 6200. Money and Capital Markets. 3 Credit Hours.**

The role of money in the exchange process, Federal Reserve strategy, and the impact of monetary policy on financial markets and aggregate economic activity.

## **ECON 6250. Corporate Value Chains and Transfer Pricing. 3 Credit Hours.**

We analyze value chains that firms use to globally produce goods, services, and intangibles and apply microeconomic models to price and analyze value chain components.

## **ECON 6310. Public Economics. 3 Credit Hours.**

An examination of public goods, public decision making, voting, free riders, taxation principles, welfare, the Tiebout Hypothesis, budgeting, and fiscal policy.

## **ECON 6330. Urban and Regional Economics. 3 Credit Hours.**

Economics of regions, cities, and space. Theories of growth and location, effects of urbanization, agglomeration, and congestion. Public policy relating to urban and regional problems.

## **ECON 6341. Transportation Economics. 3 Credit Hours.**

Examines the economics of transportation markets, including resource allocation, economic welfare, government regulation, and public policy. Using an econometric case study approach, the course develops the necessary steps for testing hypotheses, analyzing the finding of recent studies, and exploring implications for the development and implementation of transportation policy.

**ECON 6360. Development Economics. 3 Credit Hours.**

Concepts and models of development and growth in Third World countries, emphasizing modeling and testing of recent changes in the Third World. Topics include economic growth, trade and globalization, poverty and inequity, migration, population growth, unemployment, agricultural development, the environment, and the role of the market versus the state.

**ECON 6380. Economics of Natural Resources and the Environment. 3 Credit Hours.**

Explores how economics can address a variety of environmental issues ranging from climate change to local pollution. Topic areas include externalities and the social costs of pollution, valuation of non-market goods, climate change policy (emissions taxes and cap-and-trade), management of renewable resources (fisheries and forests), extraction of exhaustible resources (minerals and fossil fuels), and more. Focuses on global, regional, and local environmental policy.

**ECON 6431. Strategic Economics for Global Enterprise. 3 Credit Hours.**

This course uses economic tools to examine strategic aspects of competition and collaboration in an integrated global market. Topics include the determinants and changes in the boundaries of global firms, competitive advantage and value creation, the nature of global markets, and strategic positioning in the global market place.

**ECON 6440. The Economics of Technology, Innovation, and Entrepreneurship. 3 Credit Hours.**

This course explores the impact that innovation, technology progress, and R&D activities have upon a firm's pricing and output behavior. Based upon computer case studies, biotechnology, and telecommunications sectors, the course further analyzes the economic role that firm size and entrepreneurial opportunities play in technological development and innovation.

**ECON 6450. Topics in African American Entrepreneurship. 3 Credit Hours.**

Explores African-American entrepreneurship from the ante-bellum period to the present. Implications of economic and socio-political developments are given particular attention, including the urbanization of blacks, the rise of benevolent societies following slavery, institutionalization of Jim Crow segregation, desegregation, and affirmative action's role in an emerging class of black entrepreneurs.

**ECON 6460. Industrial Organization. 3 Credit Hours.**

This course examines modern theories of the firm, market power, and competitive strategy. Game theory is employed throughout the course.

**ECON 6510. Economics of Health and Health Care. 3 Credit Hours.**

A critical survey of the current theoretical and empirical issues involving the economics of health and health care.

**ECON 6610. Seminar in Economic Policy. 3 Credit Hours.**

Interprets current economic problems and policies using fundamental economic principles.

**ECON 6620. History of Economic Thought. 3 Credit Hours.**

Economists who interpreted and influenced the development of capitalism and socialism over the last two centuries.

**ECON 6650. International Economics and Policy Analysis. 3 Credit Hours.**

Explores international economic issues. The first part examines aspects of international trade, including specialization and exchange, strategy, labor and capital movements, preferential trading arrangements, and economic development. The second part analyzes international finance, including exchange rates, open economy macro policies, Eurocurrency markets, and the international monetary system.

**ECON 6704. Introduction to Global Development. 3 Credit Hours.**

This course introduces students to the goals, theories and key institutional actors involved in the field of Global Development.

**ECON 6XXX. Economics Elective. 1-21 Credit Hours.****ECON 7000. Master's Thesis. 1-21 Credit Hours.****ECON 7004. Mathematics for Economists. 3 Credit Hours.**

Topics include matrix algebra, limits and open sets, implicit functions and their derivatives, quadratic forms and definite matrices, unconstrained and constrained static optimization, dynamic optimization and economic applications.

**ECON 7012. Microeconomic Theory I. 3 Credit Hours.**

The topics covered in this course are axiomatic theory of consumer behavior, consumer choice, classical demand theory, aggregate demand, choice under uncertainty, producer theory and partial equilibrium analysis.

**ECON 7013. Microeconomic Theory II. 3 Credit Hours.**

The subject areas in this course are general equilibrium, welfare economics, externalities, public goods, economics of information and inter-temporal dynamic analysis.

**ECON 7015. Game Theory. 3 Credit Hours.**

Static and dynamic games of complete and incomplete information, and mechanism design. Economic applications include Cournot, Bertrand and Stackelberg duopolies, voluntary provision of public goods, auctions, procurement contracts and time inconsistency issues.

**ECON 7022. Econometrics I. 3 Credit Hours.**

This course is a comprehensive introduction to mathematical statistics principles underlying statistical analyses in economics. It covers probability theory, expectation, sampling, asymptotic results, the main families of probability distributions studied in economics, estimation and hypothesis testing.

**ECON 7023. Econometrics II. 3 Credit Hours.**

Linear and nonlinear regression analyses, hypothesis testing, ordinary and generalized least squares, instrumental variables estimation, the generalized method of moments, the method of maximum likelihood, methods for stationary time series, unit roots and cointegration, and specification testing.

**ECON 7025. Empirical Research Methods. 3 Credit Hours.**

Topics include up-to-date theory for data analysis, including time series, cross section and panel, and empirical applications using panel data, time series data and cross-sectional data.

**ECON 7026. Microeconomet Analysis. 3 Credit Hours.**

Focus on empirical microeconomic methods, including binary, multinomial, and ordered response models, and event history models. Topics include sampling, estimation, and model interpretation.

**ECON 7031. Microeconomics of Innovation. 3 Credit Hours.**

Historical evolution of institutions that promote innovation, knowledge as a public good, prizes and intellectual property rights as incentive mechanisms, models of cumulative innovation, patent and copyright enforcement and litigation, private versus public funding, and the effects introduced by network externalities and globalization issues.

**ECON 7032. Macroeconomics of Innovation. 3 Credit Hours.**

Macroeconomic factors that lead to technological change, the roles played by technological innovation and knowledge spillovers as promoters of economic growth, and the scope for fiscal and monetary policies to foment research and development and hence economic growth.

**ECON 7102. Environmental Economics I. 3 Credit Hours.**

Topics include externalities, property rights, incentive design, emission taxes, tradable emission permits, renewable and nonrenewable resources, innovation incentives originating with environmental regulations and globalization, trans-boundary pollutants within and across nations, international environmental agreements, and the globalization impacts on the environment.

**ECON 7103. Environmental Economics II. 3 Credit Hours.**

Empirical course, built upon the theoretical topics covered in Environmental Economics I. Students are given an in-depth coverage of key empirical papers in environmental economics, either papers that have tested several hypotheses derived from theoretical models or papers that are advancing knowledge in the field, generating empirical results for which no theory yet exists.

**ECON 7111. Industrial Organization I. 3 Credit Hours.**

Topics include market structures and the strategic behavior of firms (monopoly, oligopoly, imperfect competition), research and development, adoption of new technologies, regulations, procurement, antitrust law and competition policy.

**ECON 7112. Industrial Organization II. 3 Credit Hours.**

Empirical course that trains students to empirically examine the theoretical issues arising in Industrial Organization I. Students are taught about how to use existing data, collect and compile their own datasets and use frontier methods in empirical Industrial Organization to test hypotheses that originate from the theories related to pricing, product and process innovation, among others.

**ECON 7121. International Economics I. 3 Credit Hours.**

Topics include Ricardian and Heckscher-Ohlin models, extensions to many goods and factors, trade in intermediate inputs and wages, increasing returns, gains from trade and regional agreements, import tariffs and dumping, import quotas and export subsidies, political economy of trade policy and trade and endogenous growth. It also examines the relationship between international trade, foreign direct investment and technological innovation and diffusion.

**ECON 7122. International Economics II. 3 Credit Hours.**

Empirical extension of International Economics I, which surveys the empirical literature and presents the key empirical results related to the topics discussed in the theoretical course. It also discusses frontier empirical work in the field, empirical studies that go beyond the testable hypotheses originated with theory.

**ECON 7130. Research Development and Presentation Workshop. 3 Credit Hours.**

Lecture topics include instructions on writing research papers in Economics and presenting their work. Contents of presentations and research undertaken by students depend on students' research interests. Students receive personalized feedback on research and presentations.

**ECON 7131. Development Economics I. 3 Credit Hours.**

This course covers important topics in development economics research and policy such as UN sustainable development goals, human resource investments, poverty and inequality, armed conflict and its impact on well-being and household decision-making. The course introduces students to latest theoretical developments as well as to empirical methods used in the field.

**ECON 7132. Development Economics II. 3 Credit Hours.**

This course covers emerging issues in development economics with a focus on the roles of individuals, families, institutions and policies. The class emphasizes a connection between economic modeling of agents' behavior and relevant empirical methods.

**ECON 8801. Special Topics. 1 Credit Hour.****ECON 8802. Special Topics. 2 Credit Hours.****ECON 8803. Special Topics. 3 Credit Hours.****ECON 8910. Special Problems. 1-21 Credit Hours.****ECON 8990. Special Problems. 1-21 Credit Hours.****ECON 8997. Teaching Assistantship. 1-9 Credit Hours.**  
For graduate students holding teaching assistantships.**ECON 8998. Research Assistantship. 1-9 Credit Hours.**  
For graduate students holding research assistantships.**ECON 9000. Doctoral Thesis. 1-21 Credit Hours.**