

# ECONOMICS (COLLEGE OF ARTS AND SCIENCES)

## Courses

### **ECON 123 - The American Economy (3 Credits)**

Basic concepts, institutional foundations, structure of the private and public sector, labor markets; major economic problems.

### **ECON 221 - Principles of Microeconomics (3 Credits)**

The study of supply and demand, pricing and cost concepts, firm and consumer decision-making, market structure, and government policies.

### **ECON 222 - Principles of Macroeconomics (3 Credits)**

The study of gross domestic product, business cycles, economic growth, inflation, unemployment, and monetary and fiscal policy.

### **ECON 223 - Introduction to Economics (3 Credits)**

Introduction to economics principles for non-majors. Basics of supply and demand and government and monetary policy are covered in a non-technical manner. Not open to business or economics students. Credit not granted for both ECON 223 and ECON 221 or ECON 222.

### **ECON 224 - Introduction to Economics (3 Credits)**

The study of supply and demand, markets, household and firm decision-making, gross domestic product, inflation, unemployment, and government policies. Open to all students except business administration and economics majors.

### **ECON 301 - Money and Banking (3 Credits)**

The role of money in the market economy. Commercial banks, the Federal Reserve System, and monetary policy. Cannot be used to satisfy major requirements.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 303 - The International Economy (3 Credits)**

Survey of international economic issues and institutions, including trade and protectionism, global and regional trade agreements, trade balances and exchange rates, Japan, NAFTA, and the European Union.

**Prerequisites:** ECON 224.

**Graduation with Leadership Distinction:** GLD: Global Learning

### **ECON 311 - Issues in Economics (3 Credits)**

The nature and causes of major economic problems facing the nation and its communities, and policy alternatives designed to solve them. The philosophy and methodology of economics in social problem solving.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 321 - Intermediate Microeconomic Theory (3 Credits)**

Analysis of the economic behavior of households and firms. Production, consumption, price determination, and the degree of competition in markets.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224, MATH 122 or MATH 141.

### **ECON 322 - Intermediate Macroeconomic Theory (3 Credits)**

Analysis of the national economy as a whole. Money, output, employment, inflation, and international economic linkages.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224, MATH 122 or MATH 141.

### **ECON 329 - American Economic History (3 Credits)**

Growth and development of the American economy; applications of economic theory to economic history.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 336 - Introduction to Data Science for Economists (3 Credits)**

An introduction to the various types and sources of data used by economists and how to interpret such data to answer economic questions and support economic theory. Includes the uses of survey data, cross-sectional, time series, and panel data.

**Prerequisites:** C or better in ECON 221 and ECON 222 or ECON 224.

### **ECON 363 - Business Finance (3 Credits)**

The procurement and management of wealth by privately owned profit-seeking enterprises.

**Prerequisites:** ECON 221, ACCT 225, and 3 hours of statistics at the 200-level.

### **ECON 364 - Financial Institutions (3 Credits)**

A study of the functions and operations of financial institutions and their relationships to the commercial banking system and the general economy. Attention is devoted to savings institutions, insurance companies, rural and urban real estate credit, consumer credit, and associated topics.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 379 - Government Policy Toward Business (3 Credits)**

An analysis of public policy toward business in the United States. Emphasis is on the desirability of various policies in light of their consequences for the general welfare.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 399 - Independent Study (1-15 Credits)**

Contract approved by instructor, advisor, and undergraduate division head is required.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**Graduation with Leadership Distinction:** GLD: Research

### **ECON 402 - Money, Income, and Prices (3 Credits)**

A study of monetary standards, monetary theory, monetary policy, and the mechanism of international payments. Attention is devoted to questions of monetary problems, employment, and fiscal policy.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 406 - Labor Economics (3 Credits)**

A study of labor market institutions, trends in labor market activity, and the effects of government policy on the labor market. (Not open to majors in economics.)

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 408 - History of Economic Thought (3 Credits)**

A survey of economics from the ancient philosophers to the present; with emphasis on the mercantilist, physiocratic, classical, Marxian, Austrian, neo-classical, and institutional schools of economics.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

### **ECON 415 - Economics of American Industry (3 Credits)**

A study of the structure of selected American industries, of the development and concentration of economic power in the American economy, and of public policy toward industry.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 420 - Business Applications of Economic Forecasting (3 Credits)**

Analysis of business cycles and applications of forecasting techniques to project and interpret economic trends.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 421 - Engineering Economics (3 Credits)**

Decision making with respect to capital goods, with emphasis on such decision making in governmental activities and public utilities. Intended primarily for engineering students, the course emphasizes the types of investment decisions that engineers are often called upon to make.

**ECON 436 - Introductory Econometrics (3 Credits)**

The use of statistical techniques to analyze economic relationships. The emphasis is on the application of linear regression to real-world economic data.

**Prerequisites:** ECON 224, or ECON 221 and ECON 222; MGSC 291 or STAT 201; and MATH 122 or MATH 141.

**ECON 476 - Foundations of Capitalism (3 Credits)**

Examines the foundations of capitalism and why it has prevailed over alternative systems. Topics include the justification of private property, distribution of wealth, profit motive, source of wealth creation, and others.

**Prerequisites:** ECON 211 and ECON 222.

**ECON 499 - Internship in Economics (1-6 Credits)**

Supervised work experience of at least nine hours per week, to include one class meeting a month and individual consultation. Contract approval by instructor, advisor, and department chair is required. Cannot be used to satisfy major requirement.

**Prerequisites:** C or better in both ECON 321 and ECON 322, and cumulative GPA of 2.75.

**Graduation with Leadership Distinction:** GLD: Professional and Civic Engagement Internships

**ECON 500 - Urban Economics (3 Credits)**

An analysis of economic forces affecting urbanization and the economic processes influencing urban form and structure. Spatial concepts are considered in addition to traditional micro-economic and macro-economic concepts. Topic coverage includes: the economic origin of cities; urban functions and the urban economic base, land-use structure and urban form, and urban efficiency.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 503 - International Trade Economics (3 Credits)**

Theory of international specialization, commercial policy, customs unions, and the effects of trade liberalization and protectionism; economic growth and multinational enterprises.

**Prerequisites:** ECON 321.

**Graduation with Leadership Distinction:** GLD: Global Learning

**ECON 504 - International Monetary Economics (3 Credits)**

Exchange rate and balance of payments determination; purchasing-power parity; optimum currency areas, absorption, elasticity, monetary approaches, spot- and forward-exchange markets.

**Prerequisites:** C or better in ECON 322.

**Graduation with Leadership Distinction:** GLD: Global Learning

**ECON 505 - International Development Economics (3 Credits)**

Economic theories of growth in developing countries. Use of factor resources; role of social and economic institutions; use of financial trade policies for growth.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**Graduation with Leadership Distinction:** GLD: Global Learning

**ECON 506 - Labor Economics and Labor Markets (3 Credits)**

Economics of labor demand, labor supply, wage determination in competitive markets, migration, discrimination, unemployment, and labor unions. Theoretical models and empirical knowledge will be considered.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224; ECON 321.

**ECON 507 - Comparative Economic Systems (3 Credits)**

An analysis of the organization and operation of the world's major economic systems.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**Graduation with Leadership Distinction:** GLD: Global Learning

**ECON 508 - Law and Economics (3 Credits)**

Economic analysis and interpretation of the law. The economic effect of current law and optimal design of law to meet social objectives.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 509 - Economics of Sustainable Development (3 Credits)**

Exploration of the basic theory and practice of sustainable economic development. Topics include: environmental legislation, global agreements, sustainable development indicators, and economic strategies and methods to promote environmentally sound development.

**Prerequisites:** C or better in the following ECON 221 and ECON 222; or ECON 224; MATH 122.

**Graduation with Leadership Distinction:** GLD: Community Service

**ECON 510 - Experimental Economics (3 Credits)**

Exploration of the basic theory and techniques of experimental economics. Topics include: basic game theory, experimental design, and elements of behavioral economic thought.

**Prerequisites:** C or higher in ECON 321.

**ECON 511 - Senior Seminar in Economics (3 Credits)**

Philosophy and methodology of economics, perspectives on theory and empiricism, economic policy; individualized guided research.

**Prerequisites:** ECON 321, ECON 322, and ECON 436 with grade of C or higher.

**ECON 514 - The Economics of Terrorism (3 Credits)**

Focuses on the following aspects of terrorism: (1) its causes/determinants (historical, social, cultural, economic, political, and religious determinants); (2) the organizational and funding structure of terrorist groups; (3) the tactics and weapons of terrorist groups; (4) mobilization and recruitment within terror networks; and (5) counterterrorism methods. Restricted to: Business Majors and Economics Arts and Sciences Majors.

**Prerequisites:** C or better in ECON 321.

**ECON 515 - Industrial Organization (3 Credits)**

This course uses the tools of microeconomics and game theory to examine how firms compete and competition's impact on industry performance. Topics include: price discrimination, product differentiation, and oligopoly behavior.

**Prerequisites:** ECON 321.

**ECON 516 - Political Economy (3 Credits)**

This course covers fundamental models of collective decision making, studies their empirical relevance, and considers interactions between the economy and politics.

**Prerequisites:** C or better in ECON 221 and ECON 222 or C or better in ECON 224.

**ECON 520 - Economic Scholars I (3 Credits)**

This seminar course is designed to introduce students who have been accepted into the Econ Scholars program to economics research and real-world problem solving.

**Prerequisites:** B or better in ECON 321, ECON 322, and ECON 436.

**ECON 521 - Economic Scholars II (3 Credits)**

This seminar course continues the work from Econ Scholars I and is reserved for students who have been accepted into the Econ Scholars program. Students will be placed in teams and partnered with local businesses, government agencies, or economics faculty members to work on real-world projects and academic research.

**Prerequisites:** B or better in ECON 520.

**ECON 523 - Introduction to Mathematical Economics (3 Credits)**

Mathematical formulation of economic theories; the use of mathematics in the development and demonstration of economic relationships.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224; MATH 122, MATH 141, or the equivalent.

**ECON 524 - Essentials of Economics (3 Credits)**

A course designed to acquaint the student with the principles of operation of the American economic system. A survey course for social studies teachers in secondary schools.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 526 - Managerial Economics (3 Credits)**

A study of the application of the economic theory of profits, competition, demand, and costs to analysis of problems arising in the firm and in decision making. Price policies, forecasting, and investment decisions are among the topics considered.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 530 - The Economics of Education (3 Credits)**

Investment in human capital; the economic value of schooling; internal efficiency of schools; faculty compensation; equity and efficiency of school finance systems; financing higher education.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 531 - Health Economics (3 Credits)**

Applications of economic analysis to health care. Structure and behavior of health-care markets. Description of health care policy issues.

**Prerequisites:** C or better in ECON 221 and ECON 222, or ECON 224.

**ECON 532 - Research and Policy from Birth to Kindergarten (3 Credits)**

Applications of economic analysis to early childhood. Topics may include research and policy related to families, pregnancy, birth, and early childhood.

**Prerequisites:** C or higher in ECON 221, ECON 224, or equivalent; C or higher in STAT 201, STAT 206, or equivalent with a grade of C or higher.

**ECON 548 - Environmental Economics (3 Credits)**

An analysis of the economics aspects of environmental decay, pollution control, and natural resource use. Analysis of the ability of the market system to allocate resources efficiently when economic activity is accompanied by environmental damage. Discussion of alternative public policy approaches to pollution control and natural resource conservation.

**Prerequisites:** C or better in ECON 221 and ECON 222 or C or better in ECON 224.

**Cross-listed course:** ENVR 548

**ECON 555 - Game Theory in Economics (3 Credits)**

Game theory as used to understand decision making in business, economics, politics and other real-world environments. Topics covered include: basic terminology; strategic, extensive, and combinatorial models; and equilibrium strategy.

**Prerequisites:** ECON 321 or MATH 141 and STAT 201 or C or higher in STAT 206.

**ECON 562 - Public Finance (3 Credits)**

Theory and practice of taxation: public revenue, expenditure, and debt.

**Prerequisites:** C or higher in ECON 321.

**ECON 589 - Topics in Economics (1-3 Credits)**

Individual topics to be announced with title.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 594 - Advanced Econometrics (3 Credits)**

Advanced econometric methods including quasi-experimental methods, applications of machine learning to causal inference and economic forecasting, and related topics.

**Prerequisites:** C or better in ECON 436.

**ECON 621 - Survey of Contemporary Economic Theory (3 Credits)**

Neo-classical value and distribution theory combined with income and employment theory.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 690 - Quantitative Foundations for Business and Economics I (3 Credits)**

Calculus and classical optimization methods applied to problems in business and economic analysis; matrices, derivatives, and integrals in the analysis of both univariate and multivariate business and economic models.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 691 - Quantitative Foundations for Business and Economics II (3 Credits)**

Statistics and probability theory applied to problems of business and economic analysis.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224; MGSC 690 or ECON 690.

**ECON 692 - Quantitative Methods I (3 Credits)**

Probability and statistics necessary for graduate study in economics and business administration; estimation, hypothesis testing, regression, analysis of variance, and nonparametric methods.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224.

**ECON 694 - Quantitative Methods II (3 Credits)**

A study of decision models useful in business administration. Topics covered include linear programming, sensitivity analysis and duality, network models, integer programming, determinate and stochastic dynamic programming, inventory, and queues.

**Prerequisites:** ECON 221 and ECON 222, or ECON 224; ECON 692, mathematics and computer portion of Fundamental Business Skills or equivalent.