# **ECONOMICS (ECON)**

### ECON 1050 Introductory Economics (4 semester hours)

Accelerated introduction to both microeconomics and macroeconomics. Supply and demand, elasticity, and theories of production, cost, competition, monopoly, and other market structures. Aggregate supply, aggregate demand and Keynesian Cross analysis, and discussion of GDP, national income, inflation, and unemployment. This course substitutes for ECON 1100 and ECON 1200 wherever one or both are stated as prerequisites. University Core fulfilled: Explorations: Understanding Human Behavior.

## ECON 1100 Introductory Microeconomics (4 semester hours)

Analysis of behavior of individual economic agents including consumers and firms. Supply and demand, elasticity, theory of production, and cost. Pricing and output decisions under competition, monopoly, and other market forms. University Core fulfilled: Explorations: Understanding Human Behavior.

## ECON 1200 Introductory Macroeconomics (4 semester hours)

Analysis of inflation, unemployment, and gross national product. Money and banking, Keynesian and Monetarist economics, government policy toward money supply, spending, the national debt, and exchange rates. University Core fulfilled: Explorations: Understanding Human Behavior.

## ECON 1900 Linked Learning Community (1 semester hour)

This course examines the history of European and North American societies and cultures through the lens of science and nature from the sixteenth century to the present, tracing the history of ideas about science and nature in relation to broader social, economic, and political changes and demonstrating the inseparability of science and social context. University Core fulfilled: Explorations: Historical Analysis and Perspectives.

ECON 1998 Special Studies (1-4 semester hours)

ECON 1999 Independent Studies (1-4 semester hours)

## ECON 2300 Introductory Statistics (4 semester hours)

An introduction to the modern methods of analyzing sample data. Topics include descriptive statistics, probability theory, binomial and normal distributions, estimation, hypothesis testing, and simple regression analysis. Recommended: MATH 112 or MATH 131 or concurrent enrollment. University Core fulfilled: Foundations: Quantitative Reasoning.

## ECON 2900 Linked Learning Community (1 semester hour)

This course deepens students' understanding of the Department of Economics, the University and college life. As students continue to foster relationships with their peers, they will continue to develop their understanding of economics as a discipline, meet with students, faculty and alumni, and be exposed to additional resources available on campus. Prerequisites: ECON 1900. Credit/No Credit only.

ECON 2998 Special Studies (1-4 semester hours)

ECON 2999 Independent Studies (1-4 semester hours)

## ECON 3100 Intermediate Microeconomics (4 semester hours)

Microeconomic theory applied to the private sector. Indifference curves, utility theory, Slutsky equation, individual and market demand, technology, cost minimization, cost curves, consumer and producer surplus, efficiency, perfect competition, monopoly, price discrimination, classical oligopoly theory, game theory including Nash equilibrium, resource markets. Prerequisites: A grade of at least B- in ECON 1050 and a grade of at least B- in MATH 112 or of at least C in MATH 131.

#### ECON 3200 Intermediate Macroeconomics (4 semester hours)

Macroeconomic analysis: The determination of national income and output and their components, employment, the price level (and inflation), interest rates, and long-term economic growth. An introduction to business cycle theory, monetary theory, balance of payments, and exchange rates. A study of economic policies to achieve goals and the limits of such policies. Prerequisites: A grade of at least B- in ECON 1050 and a grade of at least B- in MATH 112 or of at least C in MATH 131. University Core fulfilled: Flag: Writing.

### ECON 3220 Money and Banking (4 semester hours)

The role of monetary matters in the economy. The organization, operation, and impact of money, banks and nonbank financial intermediaries, and financial markets in the economy. The impact of these on the determination of interest rates, the price level, and economic activity. The role of central bank and regulatory agency policies in financial markets and the economy. Prerequisite: ECON 1050.

## ECON 3300 Econometrics (4 semester hours)

Analysis of the linear regression model and its practical applications in economics, finance, marketing, and other areas of business.

Material covered will be the two variable model, hypothesis testing, forecasting, functional forms of regression models, regression using dummy explanatory variables, multiple regression, autocorrelation, heteroscedasticity and multicollinearity. Emphasis is placed on the application of the techniques covered in the course to the solution of real world problems. Prerequisites: ECON 1050 and ECON 2300. University Core fulfilled: Flags: Information Literacy, Quantitative Reasoning.

## ECON 3380 Economic Geography (4 semester hours)

Using geographical information systems to test spatial economics and classical locational theories, we explore economic activity and worldwide patterns of trade. Prerequisite: ECON 1050.

# ECON 3400 U.S. Economic History (4 semester hours)

Historical study of the economic growth and institutional development of the U.S. economy from the colonial era to the twentieth century. Topics may include: the economic ramifications of the American Revolution and the Constitution, the economics of slavery, industrialization, and the origins of the Great Depression. Prerequisite: A grade of at least B- in ECON 1050.

## ECON 3410 World Economic History (4 semester hours)

A study of the comparative historical development of the world's regions that examines why some countries have developed while others have not. Considers cultural and geographical factors as well as the central role of institutions; different forms of institutions, such as social norms, laws, and regulations; and their effect on economic behavior and performance. Uses models, data and primary sources to understand history. Prerequisite: ECON 1050.

## ECON 3480 Economics of Film and Fiction (4 semester hours)

Economics is everywhere. It's in business. It's in government. It's in our personal lives. This course utilizes contemporary and classic film and literature to illustrate fundamental concepts in economics through real-life illustration of economics. Classroom discussions and assignments are facilitated through a series of questions that explore economic theories in practice and their applications all around us. The course explores whether concepts are or are not presented correctly and the potential negative consequences of an erroneous presentation of economic concepts in film and fiction. Prerequisite: ECON 1050.

#### ECON 3520 The Economics of Giving (4 semester hours)

The economics of giving is the analysis of non-market voluntary transfers of scarce resources, the reasons for their existence, their relations with market transactions, the public provision and funding of goods and services, and the resulting allocations. Considers the motives for giving and the magnitude of voluntary transfers and their evolution over time. Applies the theories of giving to gift-giving, family transfers, volunteering for charities, and public redistribution. Using the tools of economics, sociology, and psychology, among others, this course presents a wide view of the field of giving, reciprocity, and, more generally, altruism. Prerequisite: ECON 1050.

## ECON 3560 Urban Economics (4 semester hours)

A survey of the policy and theoretical issues that are raised when economic analysis is applied in an urban setting. Topics include urbanization and urban growth housing markets, location decisions of households and firms, transportation, urban labor markets, the local public sector, and discrimination. Prerequisite: ECON 1050. University Core fulfilled: Integrations: Interdisciplinary Connections.

## ECON 3580 Sports Economics (4 semester hours)

Introduction to the economics of professional sports. Strategic behavior, demand and sports revenue, market for sports broadcasting, team cost, profit and winning, sports market outcomes, market for talent and labor relations, stadium building, antitrust and competition policy. Review of current issues in the research on sports economics. Prerequisite: ECON 1050.

## ECON 3600 Financial Economics (4 semester hours)

Practical application of financial theory in both a certain and uncertain environment. Focus on capital budgeting, financial structure, cost of capital, and dividend policy. Prerequisite: ECON 1050.

## ECON 3620 Managerial Economics (4 semester hours)

Provides a solid foundation of economic understanding for use in managerial decision making. It focuses on optimization techniques in the solution of managerial problems. Prerequisite: ECON 1050.

## ECON 3660 Personal Finance (4 semester hours)

This course is a comprehensive coverage of consumer finance. Topics are consumer credit, consumer spending, and investing for the short run and the long run. Housing and real estate investing, personal financial planning, and various investment vehicles such as equity, fixed rate of return instruments, annuities, and insurance, as well as the fundamentals of tax planning are addressed. The emphasis is on evaluating choices and understanding the consequences of decisions in terms of opportunity costs. Prerequisite: ECON 1050.

## ECON 3700 International Trade (4 semester hours)

Analysis of classical and modern theories of international trade and their relation to internal and external equilibria. Income and monetary factors, commercial policies affecting international trade. Resource movements, regional economic integration. Prerequisite: ECON 1050.

## ECON 3720 International Finance Theory (4 semester hours)

Introduction to foreign exchange markets and the determination of exchange rates. Understanding balance of payments accounts, enacting policies to affect the current account, and examining balance of payments crises. Overview of international policy coordination and the international monetary system. Application of theory to current international issues. Prerequisite: ECON 1050.

## ECON 3750 Global Poverty (4 semester hours)

This course is about the challenges posed by massive and persistent poverty across the world from primarily an economics perspective. Topics include the global debates about poverty and inequality, the ethics of global citizenship, and public policy solutions to alleviate poverty. Prerequisite: ECON 1050.

## ECON 3850 Internships in Economics (2 semester hours)

Students must secure a qualifying internship according to the National Association of Colleges and Employers (NACE) criteria and requires instructor approval. The internship must cover at least 100 hours of work time during the semester; up to 25 hours can be completed over the summer. An internship agreement must be signed by the instructor and student prior to the Friday of the second week of the semester. May only be taken once. Prerequisite: ECON 1050.

## ECON 3950 Research Experience in Economics (1-4 semester hours)

In this one- to four-unit course, the student will have the opportunity to work closely with a professor on a research project in economics, either independently or collaboratively. In this capacity, the student will receive training in data collection, how to analyze and interpret the results from data, how to perform appropriate literature reviews, how to build and calibrate economic models, and/or how to edit papers in economics. The student will also be assessed at various stages of the course using suitable techniques such as weekly meetings, assignments, and a written report. Prerequisites: ECON 1050. Credit/No Credit or Letter Grade.

# ECON 3990 Linked Learning Community for Transfer Students (1 semester hour)

This course introduces transfer students to the Department of Economics, the University, and college life. While establishing relationships among their peers, students will gain an overview of economics as a discipline, meet with students, faculty, and alumni, and be exposed to opportunities available on campus.

# ECON 3991 Linked Learning Community for Transfer Students (1 semester hour)

This course deepens transfer students understanding of the Department of Economics, the University and college life. As students continue to foster relationships with their peers, they will continue to develop their understanding of economics as a discipline, meet with students, faculty and alumni, and be exposed to additional resources available on campus.

## ECON 3998 Special Studies (1-4 semester hours)

ECON 3999 Independent Studies (0-4 semester hours)

## ECON 4100 Advanced Microeconomics (4 semester hours)

A selection of several advanced topics in microeconomics such as general equilibrium theory, welfare economics, public economics, contract theory, information theory, risk and uncertainty, inequality, or externalities. Includes more advanced coverage of topics in Microeconomics. Prerequisite: ECON 3100 with a grade of at least C-.

## ECON 4120 Economics and Ethics (4 semester hours)

Economics and Ethics examines the roles and effects of ethics on economic analysis, behavior, and institutions. These issues arise, for example, in matters of charity, labor markets, and taxation. This course treats both descriptive and prescriptive theories as well as evidence on ethics from behavioral and experimental economics. It covers standard philosophical theories and connects them to empirical evidence and real world decision-making. Prerequisite: ECON 3100 with a grade of at least C-. University Core fulfilled: Integrations: Ethics and Justice.

## ECON 4140 Game Theory (4 semester hours)

Game Theory is the study of strategic interaction. This course will focus on analyzing these interactions and predicing equilibrium outcomes. Topics to be covered include utility theory, rationality, simultaneous and sequential move games, Nash equilibrium, backward induction, repeated games, and games of incomplete information. Prerequisite: ECON 3100 with a grade of at least C-.

## ECON 4160 Environmental Economics (4 semester hours)

Environmental Economics deals with the use of society's scarce environmental resources. Economic theory and analysis are applied to various environmental issues, including pollution, sustainable development, clean air, and quality of life. Prerequisite: ECON 3100 with a grade of at least C-. University Core fulfilled: Integrations: Interdisciplinary Connections

### ECON 4180 Economics of Education (4 semester hours)

This course investigates economic issues related to education. Topics include the decision to invest in education and how this decision is affected by various factors, the labor market for teachers and what motivates teachers, and student incentives and loans. The course will cover how different empirical methods are used to answer economics of education questions. Prerequisites: ECON 3100 and ECON 3300, both with a grade of at least C-.

## ECON 4200 Advanced Macroeconomics (4 semester hours)

Dynamic aspects of macroeconomics. The course develops tools of dynamic analysis. Topics include economic growth, labor market and unemployment, national savings and investment, the stock market and bubbles, fiscal policy and sustainability of public debt, monetary policy and inflation, and financial crises (such as debt crises, bank runs, currency crashes). Prerequisite: ECON 3200 with a grade of at least C-.

# ECON 4340 Experimental and Behavioral Economics (4 semester hours)

Experimental methods of research in economics. Basic experimental concepts, induced value theory, individual decisions, game theory, market experiments, auctions, bargaining, public choice. Prerequisite: ECON 3100 and ECON 3300, both with a grade of at least C-.

## ECON 4480 Market Design (4 semester hours)

Investigates the efficiency and incentives of real-world markets, such as auctions and matching. Analyzes the mechanisms that assign objects to individuals, match trading partners, and determine prices as well as the information structure. Explores markets from a theoretical, empirical, and experimental perspective. Considers different design approaches and economists' role as designers. Prerequisites: ECON 3100 with grade of at least C-.

# ECON 4500 Industrial Organization (4 semester hours)

Analysis of firm behavior. Classical models of perfect competition, monopoly and oligopoly. Game theory including dominant strategy, Nash and subgame perfect equilibrium. Price discrimination, antitrust policy and regulation. Prerequisite: ECON 3100 with a grade of at least C-.

## ECON 4520 Political Economy (4 semester hours)

The elections, institutions, and actors that determine important policy outcomes. The inefficient outcomes arise and the lessons that can be learned from those failures of voters and institutions. Half the class will focus on the United States, and the other half will consider these issues in a comparative perspective. Prerequisite: ECON 3100 with a grade of at least C-.

#### ECON 4540 Labor Economics (4 semester hours)

Modern theories of market and non-market behavior relating to issues of labor and the determination of wages, salaries, and perquisites. Empirical evidence and public policy considerations are always relevant. Topics may include: education, poverty, discrimination, internal job ladders and management systems, collective bargaining, and unemployment. Prerequisites: ECON 3100 and ECON 3300, both with a grade of at least C-.

#### ECON 4560 Law and Economics (4 semester hours)

This course will explore the field of law and economics. We will use standard microeconomic tools to examine torts, contracts, and property law, as well as the theory and empirical evidence on criminal behavior. Prerequisites: ECON 3100 and ECON 3300, both with a grade of at least C-. University Core fulfilled: Integrations: Interdisciplinary Connections; Flag: Quantitative Literacy.

## ECON 4580 Health Economics (4 semester hours)

Access to quality health care remains an important public health problem for a significant part of the population. This course examines the theoretical and empirical analyses of major topics in health care economics, such as the production of health, demand for medical care and health insurance, the physician-firm, the hospital market, and government provided health care. Prerequisites: ECON 3100 and ECON 3300, both with a grade of at least C-.

## ECON 4740 Economic Development (4 semester hours)

This course is about global poverty, with a focus on the market failures that often characterize countries in the developing world and the solutions that countries have adopted to deal with these failures. We will explore how missing or incomplete markets for land, insurance, and credit give rise to the institutions that we see in developing countries, particularly in rural areas. Evidence about important policy debates, such as the role of industrialized countries in the development process, will be discussed in detail. Prerequisites: ECON 3100 and ECON 3300, both with a grade of at least C-. University Core fulfilled: Flag: Oral Skills.

## ECON 4900 Senior Assessment (0 semester hours)

Assessment of student learning outcomes in the field of economics. Includes a written comprehensive examination, a senior exit interview, and possible additional Department evaluation. ECON 4900 is required of all economics majors who will have completed 100 hours or more by the end of the Spring semester. Prerequisite: Registered to complete 100 hours or more by the end of the semester in which it is taken and to have taken or be contemporaneously enrolled in at least two upper-level economics electives (that is, courses beyond ECON 3100, 3200, and 3300). Economics majors only. Credit/No Credit only.

## ECON 4998 Special Studies (1-4 semester hours)

ECON 4999 Independent Studies (1-4 semester hours)

## ECON 5300 Mathematics for Economics (4 semester hours)

Absolutely necessary for those continuing to graduate school and required for those pursuing the B.S. degree in economics. Review of fundamental mathematical concepts and logic. Treatment of linear algebra, univariate and multivariate calculus, real analysis, and unconstrained and constrained optimization. Applications of mathematical techniques to typical problems in microeconomics and macroeconomics. Prerequisites: ECON 3100 with a grade of at least C-and MATH 131 (or equivalent) with a grade of at least C. Recommended: MATH 132 (or equivalent). Offered only in the Fall semester.

## 4 Economics (ECON)

## ECON 5320 Advanced Econometrics (4 semester hours)

This branch of economics uses mathematical and statistical tools to analyze economic phenomena. Mathematical formulation, establishment of hypotheses, model construction, data collection, and statistical estimation and inference. Prerequisite: ECON 3300 with a grade of at least C- and either MATH 131 or MATH 112. Required for the B.S. degree in Economics. Offered only in the Spring semester.

## ECON 5900 Senior Seminar (4 semester hours)

Course introduces fundamentals of research, discusses original literature, and assists in research and writing of a substantive independent research project. Strongly recommended for those considering graduate school. Prerequisites: ECON 3100, ECON 3200, and ECON 3300, all with a grade of at least B-. ECON 5300 and ECON 5320 strongly recommended. Senior Economics majors only. Written approval of research proposal by Department faculty member (with prior permission, by faculty member outside Department)—formal research proposal requirements can be obtained from the Department. Permission of instructor required. University Core fulfilled: Flag: Writing.

ECON 5998 Special Studies (1-4 semester hours)

ECON 5999 Independent Studies (1-4 semester hours)