ECO: ECONOMICS

Courses

ECO 111. Principles of Economics (Macro). 3 Credits.
National income and its measurement. The determination of price levels, output, and employment. Money and credit, expenditures, and economic stability. Government fiscal and monetary policy.
Gen Ed Attribute: Behavioral and Social Science Distributive.
Distance education offering may be available.
Typically offered in Fall, Winter.

ECO 251. Business Analytics I. 3 Credits.
This course develops an understanding of the basic tools of descriptive analytics that students can apply to a wide variety of situations and data encountered in the areas of business and economics. Students will develop a proficiency in employing Microsoft Excel for statistical analysis. Topics include descriptive statistics, probability theory, sampling and estimation, hypothesis testing, and linear regression.
Pre / Co requisites: ECO 251 requires prerequisites of MAT 113 or MAT 115 or MAT 131 or MAT 143 or MAT 161; and ECO 111 or ECO 112.
Distance education offering may be available.
Typically offered in Fall, Winter.

ECO 333. Households and the Economy. 3 Credits.
ECO 338. International Economics. 3 Credits.
A descriptive, analytical examination of international trade, finance, and other economic relationships. The effects of public policies on these relationships.
Pre / Co requisites: ECO 338 requires prerequisites of ECO 111 and ECO 112 and minimum 2.50 CUM GPA.
Distance education offering may be available.
Typically offered in Fall, Spring.

ECO 346. Intermediate Microeconomics. 3 Credits.
A continuation and extension of the price-system analysis in ECO 112. Emphasis on the need for efficiency in the economy's use of scarce productive resources.
Pre / Co requisites: ECO 346 requires prerequisites of ECO 111; ECO 112; ECO 251 or MAT 121 or MAT 125; MAT 143 or MAT 161; and a minimum 2.50 cumulative GPA.
Typically offered in Fall & Spring.

ECO 411. Public Finance. 3 Credits.
Government's influence on stability of national income. Nature of taxes and expenditures at the various levels of government and their effect on the allocation of resources and the distribution of income.
Pre / Co requisites: ECO 411 requires prerequisites of ECO 111 and ECO 112 and minimum 2.50 CUM GPA.

ECO 424. Economics of the Law. 3 Credits.
Applies economic reasoning to the analysis of legal rules, examining both efficiency and distributional consequences. Examines the incentive effects created by property law, tort law, contract law and criminal law, along with their institutional frameworks.
Pre / Co requisites: ECO 424 requires prerequisites of ECO 111 and ECO 112 and a minimum CUM GPA of 2.50.

ECO 435. History of Economic Thought. 3 Credits.
Pre / Co requisites: ECO 435 requires prerequisites of ECO 111 and ECO 112 and minimum 2.50 CUM GPA.

ECO 436. Game Theory. 3 Credits.
This course introduces students to strategic decision-making. It considers simultaneous and sequential interactions, repeated interactions among the same players, and interactions where information is incomplete or asymmetric. It provides an applied overview of game theoretical concepts and emphasizes their use in real-world situations. The course also introduces students to the field of behavioral game theory, which integrates insights from psychology into standard economic theory.
Pre / Co requisites: ECO 436 requires prerequisites of ECO 111, ECO 112, and ECO 351; ECO 251 or MAT 121; MAT 143 or MAT 161; and a minimum 2.50 cumulative average.
Typically offered in Fall & Spring.

ECO 347. Intermediate Macroeconomics. 3 Credits.
Introduction to the theory of income, employment, and growth. Provides the analytic tools necessary for dealing with aggregate economic problems.
Pre / Co requisites: ECO 347 requires prerequisites of ECO 111; ECO 112; ECO 251 or MAT 121 or MAT 125; MAT 143 or MAT 161; and a minimum 2.50 cumulative GPA.
Distance education offering may be available.
Typically offered in Fall, Winter.

ECO 349. Industrial Organization. 3 Credits.
This course studies the theory and empirical evidence concerning the organization of firms and industries. It examines the structure-conduct-performance paradigm in detail, along with applications such as advertising, patents, durable goods and strategic behavior.
Pre / Co requisites: ECO 349 requires prerequisites of ECO 111; ECO 112; and MAT 143 or MAT 161.
Typically offered in Fall & Spring.

ECO 350. Urban Economics. 3 Credits.
Economic aspects of such urban problems as poverty, housing, taxation, income distribution, and discrimination. Analysis of economic aspects of various proposed remedies, including urban renewal, family allowances, cooperatives, and others.
Pre / Co requisites: ECO 350 requires prerequisites of ECO 111 and ECO 112 and minimum 2.50 CUM GPA.
Gen Ed Attribute: Writing Emphasis.
ECO 351. Business Analytics II. 3 Credits.
This course extends student understanding of descriptive analytics through data visualization and basic statistical inference such as hypothesis testing and analysis of variance. Students will develop predictive analytics tools such as multiple regression analysis, forecasting, data mining, and spreadsheet modeling. The course will stress using statistical software beyond Microsoft Excel to address practical business applications.
Pre / Co requisites: ECO 351 requires prerequisites of ECO 111 and ECO 112 and ECO 251 or MAT 121 or MAT 125.
Distance education offering may be available.
Typically offered in Fall, Spring, Summer, Winter.

ECO 360. Business Analytics Using R. 3 Credits.
This course will develop students' business analytical skills using statistical software (e.g., R). This course emphasizes data analytics to drive business decisions. No (or little) prior coding experience is assumed. Students will gain an intuitive understanding of the analytical and economic concepts and of their proper applications to real-world data problems. Computer skills will be developed through hands-on experiences.
Pre / Co requisites: ECO 360 requires prerequisites of ECO 351 or STA 200 and a minimum 2.5 cumulative GPA.
Distance education offering may be available.
Typically offered in Fall, Spring, Summer, Winter.

ECO 361. Business Analytics Using R. 3 Credits.
This course will develop students' business analytical skills using statistical software (e.g., R). This course emphasizes data analytics to drive business decisions. No (or little) prior coding experience is assumed. Students will gain an intuitive understanding of the analytical and economic concepts and of their proper applications to real-world data problems. Computer skills will be developed through hands-on experiences.
Pre / Co requisites: ECO 361 requires prerequisites of ECO 351 or STA 200 and a minimum 2.5 cumulative GPA.
Distance education offering may be available.
Typically offered in Fall, Spring, Summer, Winter.

ECO 362. Data Mining with R. 3 Credits.
Institutions today face both the challenge and the opportunity of big data. This course will be designed for business students to build knowledge of data mining using R. Upon the completion of this course, students will be able to apply multiple data mining techniques, such as linear models, Discriminant Analysis, Support Vector Machines, k-Nearest Neighbors, Regression Trees, and Neural Nets, to make predictions and classification.
Pre / Co requisites: ECO 362 requires prerequisites of ECO 361 and a minimum 2.50 cumulative GPA.
Distance education offering may be available.
Typically offered in Fall, Spring, Summer, Winter.

ECO 370. The Economics of Health Care. 3 Credits.
This course will apply the basic tools of economic analysis to the various components of the health care system. Relying on microeconomic principles, we will study the behavior of participants (consumers, providers, insurers) in the health care industry. We will address some key policy issues that surround the provision of health care, as well as considering different health systems. To be successful in this course students must be able to manipulate data and formulas using a spreadsheet package such as Excel.
Pre / Co requisites: ECO 370 requires prerequisites of ECO 111 and ECO 112 and a minimum 2.50 cumulative GPA.
Distance education offering may be available.
Typically offered in Fall, Spring, Summer, Winter.

ECO 371. Business Forecasting. 3 Credits.
This course is designed to prepare business professionals to utilize advanced forecasting tools that are commonly used in industry and in the process to deepen their understanding of the role that such forecasting can play in business decision making. Firms continually need to make predictions about future events, including costs, sales, price movements, cash flows, asset values, and even general macroeconomic outcomes that can affect the business environment. Such predictions are regularly used to plan production, allocate resources, set budgets, determine staffing needs, and address many other things of concern to the firm. Making use of a variety of statistical modeling techniques, the course will enable the proper examination of relationships among various pieces of information that a firm has access to and make use of those relationships to project future outcomes for variables of interest. This will include developing the ability to evaluate forecast accuracy through the use of confidence ranges and a variety of statistical tests, as well as learning additional procedures to help increase that accuracy.
Pre / Co requisites: ECO 371 requires prerequisites of ECO 351 and a minimum 2.50 cumulative GPA.
Distance education offering may be available.
Typically offered in Fall, Spring, Summer, Winter.

ECO 385. Environmental & Resource Economics. 3 Credits.
The role of the environment in an economic system. Topics include energy economics, the economics of renewable and nonrenewable resources, and the economics of pollution.
Pre / Co requisites: ECO 385 requires prerequisites of ECO 111 and ECO 112 and minimum 2.50 cumulative GPA.

ECO 399. Transfer Elective Upper Level. 1-10 Credits.
Transfer Elective Upper Level. Repeatable for Credit.

ECO 400. Research Methods: Business & Economics. 3 Credits.
Provides the skills and tools required in business and economic research. Covers research ethics, hypothesis development, data collection, multivariate analysis, and regression. Senior Economics majors only.
Pre / Co requisites: ECO 400 requires prerequisites of ECO 340, ECO 348, ECO 351, and a minimum 2.50 cumulative GPA.
Gen Ed Attribute: Writing Emphasis.
Typically offered in Fall & Spring.

ECO 401. Introduction to Econometrics. 3 Credits.
Statistical and mathematical techniques applied to economic situations. Use of empirical data in economic analysis.
Pre / Co requisites: ECO 401 requires prerequisites of ECO 111 and ECO 112 and ECO 351 and MAT 143. Minimum 2.50 CUM GPA.
Typically offered in Fall & Spring.

ECO 411. Internship. 3-6 Credits.
The internship is open to majors in economics only. It is intended to enhance the student's educational experience by providing substantive, professional work experience.
Pre / Co requisites: Minimum 2.50 CUM GPA.
Repeatable for Credit.

ECO 412. Internship. 3-6 Credits.
The internship is open to majors in economics only. It is intended to enhance the student's educational experience by providing substantive, professional work experience.
Pre / Co requisites: Minimum 2.50 CUM GPA.
Consent: Permission of the Department required to add.
Repeatable for Credit.

ECO 414. Special Topics in Economics. 3 Credits.
Provides in-depth coverage of a major current topic in Economics. The topics could range from current monetary policy to economic issues in China.
Pre / Co requisites: ECO 414 requires prerequisite of ECO 111 and ECO 112. Minimum 2.50 CUM GPA.