ECONOMICS (ECON)

ECON 101 | PRINCIPLES OF MICROECONOMICS
Units: 3-4 Repeatability: No
Core Attributes: First Yr Integration (LC Only), Social/Behavioral Inquiry area
An introduction to consumer behavior and the theory of the firm. Topics include the demand behavior of households, the supply behavior of business firms, an introduction to market structure, market equilibrium, market failures, the workings of input markets, international trade and the role of the government in the economy.

ECON 102 | PRINCIPLES OF MACROECONOMICS
Units: 3
Core Attributes: Social/Behavioral Inquiry area
Prerequisites: ECON 101 with a minimum grade of C-
The study of the operation of the American economy in an international setting, examining the interaction of households, business firms, government, and the rest of the world in resource, product, and financial markets. Topics include national income accounting and analysis, business fluctuations, inflation, unemployment, and monetary and fiscal policy.

ECON 201 | INTERMEDIATE MICROECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C- and (MATH 130 with a minimum grade of C- (Can be taken Concurrently) or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- (Can be taken Concurrently) or MATH 151 with a minimum grade of C- (Can be taken Concurrently))
The economic theory of demand, production, product and input markets, welfare, and general equilibrium. Applications of price theory, including its use in evaluating and forming public policy.

ECON 202 | INTERMEDIATE MACROECONOMICS
Units: 2-3
Prerequisites: ECON 102 with a minimum grade of C-
Examines the causes of fluctuations in important national economic variables, such as aggregate output, interest rates, the rate of inflation, the rate of unemployment, and exchange rates. Investigates the feasibility of stabilizing the economy through the use of fiscal and monetary policy.

ECON 216 | STATS FOR BUSINESS & ECON
Units: 4 Repeatability: No
Core Attributes: Quantitative reasoning comp
Prerequisites: MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C-
A systematic exposure to the issues and problems of applying and interpreting statistical analyses of business situations. Topics include descriptive statistics, probability, random variables and their distributions, statistical inference, multiple regression and residual analysis, correlation, classical time-series models, and forecasting. Extensive computer analysis of data.

ECON 217 | APPLIED REGRESSION ANALYSIS
Units: 1 Repeatability: No
Core Attributes: Quantitative reasoning comp
Prerequisites: MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or Passing the appropriate departmental placement test within the previous year or Passing the appropriate departmental placement test within the previous year
A course in applied regression analysis with applications to Business and Economics. Emphasis on simple and multiple regression modeling and interpretation of results. Topics include a review of hypothesis testing for means and proportions; correlation; simple and multiple regression analysis including linear and non-linear models, residual analysis, the use of categorical variables, time series analysis, and forecasting. Extensive computer analysis of data, especially using Microsoft Excel.

ECON 294 | SPECIAL TOPICS IN ECONOMICS
Units: 1-4 Repeatability: Yes (Repeatable if topic differs)
An overview and analysis of selected topics in economics. The course may be repeated if the topic changes. Prerequisites may change depending on the topic.

ECON 302 | PUBLIC FINANCE
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
An introduction to public sector economics, concentrating on the revenues and expenditures of federal, state, and local governments. Topics include public goods, externalities, voting theory, cost benefit analysis, and the study of taxation and government transfer programs. Note: Students are eligible for this course after successfully completing 45 units and the course prerequisites.

ECON 304 | URBAN ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
The application of economic analysis to urban and regional areas. Topics include the theory underlying urbanization and the location of economic activity, the methodology utilized to analyze urban and regional economies, and problems and policies related to urban areas, such as housing, poverty, transportation, and local public finance. Special attention will be given to the San Diego metropolitan area. Note: Students are eligible for this course after successfully completing 45 units and the course prerequisites.

ECON 308 | ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C-
The application of economic analysis to environmental issues and the management of natural resources. Topics include the theory underlying the economic impact of pollution and the policies used to deal with it, the methodologies utilized to conduct environmental economic analysis, renewable and non-renewable resource management, sustainability issues, and economic perspectives on climate change. (Students are eligible for this course after successfully completing 45 units and the course prerequisites.).

ECON 309 | LGBTQ IN BUSINESS AND ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 101 and ECON 102 and (MATH 130 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 133 with a minimum grade of C-)
This course is an examination of the effects of heteronormativity on the economic outcomes of the LGBTQ population. Topics examined will include the demographics of the LGBTQ population, LGBTQ in the workplace, marketing to the LGBTQ population, the formation of "Gay" neighborhoods, and public finance issues related to the LGBTQ population (tax treatment, impact of gay marriage).

ECON 310 | MONEY AND BANKING
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
A study of the structure, regulation, and performance of the banking industry in the United States, focusing on the strategy and procedures of the Federal Reserve System. Examines the problems encountered by the Federal Reserve System in trying to achieve its goals. Note: Students are eligible for this course after successfully completing 45 units and the course prerequisites.

ECON 322 | LABOR ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
An analysis of the operation of labor markets focusing on the market system for wage determination. Topics include the supply and demand for labor, wage determination under various market structures, human capital formation, discrimination in labor markets, collective bargaining and the structure of pay, unemployment, and wage inflation.

ECON 327 | LAW AND ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
The application of economic methodology to the principal areas of law: property, contracts, torts, and crime. The microeconomic concepts of maximization, equilibrium, and efficiency are used to examine the consequences of existing and proposed laws and legal institutions. Topics include the economic analysis of property rights, ownership solutions to environmental problems, the economics of various contract designs, and the efficiency of tort liability rules.

ECON 333 | INTERNATIONAL ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
The theory, practice, and institutions of the international economy. Topics include international trade and investment, balance of payments, foreign exchange rate determination, multinational enterprises, trade with developing countries, and international economic policy. Note: Students are eligible for this course after successfully completing 45 units and the course prerequisites.

ECON 335 | ECONOMIC DEVELOPMENT OF LATIN AMERICA
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C- and ECON 102 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
An analysis of the determinants of economic development and growth in developing countries in general and Latin America in particular, along with associated problems and policies. Topics include theories and policies concerning population, income distribution, education, capital formation, finance, agriculture, industry, trade, and economic planning.

ECON 337 | ECONOMIC DEVELOPMENT OF ASIA
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C- and ECON 102 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
An analysis of the determinants of economic development and growth in Asia and the Pacific Rim, along with associated problems and policies. Topics include theories and policies concerning population, income distribution, industry, agriculture, domestic savings and investment, human resources, international trade, foreign capital, and external debt.

ECON 339 | LATIN AMERICA BUSINESS ENVIRONMENT
Units: 3 Repeatability: No
Prerequisites: ECON 101 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
This course is designed to prepare participants to work effectively in or with Latin American organizations by providing an understanding of the issues, opportunities, and complexities associated with doing business in the region. The focus is on the cultural, historical, economic, social, political and business environments in Latin America and on the activities of companies operating in Latin America, both foreign and domestic. Successful Latin American companies competing internationally will also be an aspect of the course. Upon successful completion of the course, students will possess an awareness of the business and economic environments in Latin America, and be able to demonstrate analytical and strategic thinking skills that reflect an understanding of the competitive environment in which local and foreign companies operate in Latin America.

ECON 340 | BEHAVIORAL ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and (ECON 216 with a minimum grade of C- or ECON 217 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
Behavioral Economics is the study of the decision-making process of individuals and institutions to provide insight into the actions of individuals and business firms. This course combines quantitative methodology and analytic tools with insights from decision theory. There will be a special focus on how businesses can gain insights about individuals' decisions, motivation, and judgements from experiments, surveys, and data analytics. Analytics tools explored will include, but are not limited to, experiment design, survey design, A/B testing. The course will aim to inform future managers, analysts, consultants, and advisors of the psychological processes and biases underlying economic decision-making, with an emphasis on how to incorporate such insights into business strategies.

ECON 353 | SPORTS ECONOMICS
Units: 3 Repeatability: No

Prerequisites: ECON 101 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
The application of economic principles to analyze a wide range of issues in professional sports and collegiate athletics. Principles from the economics of labor markets, industrial organization, and public finance are applied to the analysis of sports issues. Issues discussed include league formats, rival leagues, franchise relocation and venue location, player salaries, free agency, salary caps, arbitration, player development, discrimination, NCAA rules on scholarships and eligibility, financial aspects of collegiate athletic programs, revenues from merchandising and broadcast rights, and economic impact analysis of sports teams on a local community.

ECON 370 | APPLIED ECONOMETRICS
Units: 3 Repeatability: No

Prerequisites: (ECON 102 with a minimum grade of C- or ISYE 330 with a minimum grade of C-) and (ECON 216 with a minimum grade of C- or ECON 217 with a minimum grade of C- or ISYE 330 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
A hands-on experience in econometric analysis designed to help students to acquire the skills necessary to carry out their own empirical research in economics. Various aspects of empirical research in economics will be covered, including development of testable economic models, appropriate use of data, and specification and estimation of econometric models. Topics covered include: Ordinary Least Squares (OLS) applied to simple and multiple regression models, hypothesis testing, proper specification of models, multicollinearity, heteroskedasticity, serial correlation, cross sectional and time series models, binary-choice models, simultaneous equation models, panel data analysis, and forecasting. This course focuses on the development of practical skills associated with constructing regression equations that describe data sets appropriately, and providing economic interpretations to the results. The course includes hands-on laboratory assignments using Stata software.

ECON 375 | GAME THEORY
Units: 3 Repeatability: No

Prerequisites: ECON 101 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
Develops a conceptual framework to understand strategic behavior in economics and business environments and examines models of strategic thinking in interactive situations. Analyzes how to represent strategic situations as games and develops basic solution concepts to predict their outcomes. Topics include the use of credible threats and promises, repeated games, backward induction, strategic use of information through signaling, and bidding in auctions.

ECON 376 | GIS APPLICATIONS IN BUSINESS
Units: 3 Repeatability: No

Prerequisites: (ITMG 100 with a minimum grade of C- or BUSN 101 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
An introduction to geospatial, or geographic, information systems (GIS) applied to organizational and environmental decision-making applications. The course provides background knowledge to identify spatial characteristics of many decision-making situations and to integrate spatial thinking and GIS analysis into the student's academic studies and career. The course includes hands-on laboratory tutorials and projects using ArcGIS 10 desktop GIS software. Prerequisites: (BUSN 101 or ITMG 100) and (MATH 130 or MATH 133 or MATH 150 or MATH 151). Prerequisites require a C- or better.

ECON 381 | PREDICTIVE ANALYTICS & BIG DATA
Units: 3 Repeatability: No

Prerequisites: (ITMG 100 with a minimum grade of C- or BUSN 101 with a minimum grade of C- or ISYE 330 with a minimum grade of C-) and (ECON 216 with a minimum grade of C- or ECON 217 with a minimum grade of C- or ISYE 330 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C-) and (ISYE 330 with a minimum grade of C- or (BUAN 314 with a minimum grade of C- or BUAN 370 with a minimum grade of C-) or (ECON 201 with a minimum grade of C- and ECON 202 with a minimum grade of C-))
Analytics is the process of transforming data into insight in order to make better-informed decisions. Predictive analytics is the branch of analytics problem type that focuses on the central question of "what will (or could) happen?" This involves making predictions by describing static and dynamic relationships using a collection of techniques including, but not limited to response surface modeling, simulation, and forecasting. This course will focus on developing a toolkit for solving two important and common types of prediction problems: 1) formulating a continuous prediction; 2) formulating a categorical (discrete) prediction. With these goals in mind, methodologies will be introduced by leveraging modern-day software implementation and machine learning when appropriate. By the end of the course, you will know how to estimate and assess the performance of (validate) a variety of predictive models for applications in business.

ECON 390 | BUSINESS ANALYTICS STRATEGY
Units: 3 Repeatability: No

Prerequisites: (ITMG 100 with a minimum grade of C- or BUSN 101 with a minimum grade of C- or ISYE 330 with a minimum grade of C-) and (ECON 216 with a minimum grade of C- or ECON 217 with a minimum grade of C- or ISYE 330 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C-) and (ISYE 330 with a minimum grade of C- or (BUAN 314 with a minimum grade of C- or BUAN 370 with a minimum grade of C-) or (ECON 201 with a minimum grade of C- and ECON 202 with a minimum grade of C-))
Business analytics refers to the ways in which enterprises such as businesses, nonprofits, and governments can use data to gain insights and make better decisions. The ability to use data effectively to drive rapid, precise, and profitable decisions has been a critical strategic advantage for many companies. In this course, we will examine how managers and other stakeholders can apply advanced statistical techniques and tools that are central to the analysis of structured data that is used in business decision making. Data visualization and exploratory analysis will be emphasized as a key first step in the analytics process. Students will go through the process of identifying the data needs of a company, identifying key questions, identifying and exploring data sources to address these needs & questions, study design, strategy for implementation of study design, and communication of results. Special emphasis will be on communicating and translating analytic information into actionable business intelligence. Students will explore a variety of industry sectors (business, financial, technology, healthcare, sports, social innovation/ "big data for social good", social media).

ECON 414 | INVESTMENT ECONOMICS
Units: 3 Repeatability: No

Prerequisites: ECON 102 with a minimum grade of C- and (ECON 216 with a minimum grade of C- or ECON 217 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
An overview of the economic foundations of modern finance, including individual preferences and decision-making in the face of uncertainty, how investors apply this decision-making framework to choose a portfolio of assets (Markowitz Portfolio Theory), the equilibrium pricing implications of these decisions (CAPM, Arbitrage Pricing Theory, Derivatives), and the role of asset prices and financial markets in the wider macroeconomy.

ECON 424 | INDUSTRIAL ORGANIZATION
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
Combing microeconomic theory, game theory, and empirical results to explore the relationships among firms within and across industries and to examine the nature of strategic interaction among firms. The focus is on the structure and performance of markets that are imperfectly competitive, including entry deterrence strategies and barriers to entry, vertical control, market segmentation and price discrimination, mergers and acquisition, price and non-competition, and market equilibria with incomplete information.

ECON 471 | BUSINESS CYCLES AND FORECASTING
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and (ECON 216 with a minimum grade of C- or ECON 217 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
Examines the business cycle and techniques for forecasting fluctuations. The emphasis of the course is to gain hands-on exposure to specific business forecasting techniques and learn to apply them to limit the range of uncertainty in management decision making. Specific techniques covered include lead-lag, exponential smoothing, and econometric and ARIMA (Box-Jenkins) time series analysis.

ECON 473 | MANAGERIAL ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and (ECON 216 with a minimum grade of C- or ECON 217 with a minimum grade of C-) and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
The application of analytical techniques and economic principles to analyze typical problems encountered by managers. Topics include risk analysis, demand analysis and estimation using multiple regression analysis, sales forecasting, production analysis, cost estimation, pricing decisions, game theory, market structure and capital budgeting. (Note: offered only during the spring semester).

ECON 480 | MATHEMATICAL ECONOMICS
Units: 3 Repeatability: No
Prerequisites: ECON 102 with a minimum grade of C- and MATH 150 with a minimum grade of C-
An introduction to mathematical techniques used to analyze economic problems to gain a deeper understanding of economic decision making through the use of mathematical models. Topics include comparative statistics, optimization problems, dynamics, and mathematical programming. Mathematical techniques covered include matrix algebra, differential and integral calculus, differential equations, and difference equations.

ECON 494 | SPECIAL TOPICS IN ECONOMICS
Units: 1-4 Repeatability: Yes (Repeatable if topic differs)
An in-depth analysis of selected topics in economics. The course may be repeated if the topic changes. Prerequisites may change depending on the topic.

ECON 496 | UNDERGRADUATE RESEARCH
Units: 1-3 Repeatability: Yes (Can be repeated for Credit)
Students develop and/or assist in research projects in various fields of economics under the supervision of a faculty member. Students will meet with a faculty member, with whom a research relationship is established, on an on-going basis to discuss the research project, assess the student's role and responsibilities, and to discuss the process of conducting scholarly research. Students may participate in a range of research activities, including but not limited to: survey construction and design, project management, participant solicitation, experimental research, qualitative interviewing, focus group moderation, fieldwork, literature searches, data entry, data analysis, critical analysis, political economy inquiries, and writing of instruments and manuscripts. Students must register with a specific faculty member with whom they complete a contract outlining the roles and responsibilities of the student and faculty member. A maximum of three units of undergraduate research may be used to satisfy requirements for the major. Requires professor's and department chair's approvals.

ECON 497 | SENIOR SEMINAR
Units: 3 Repeatability: No
Core Attributes: Advanced writing competency, Advanced Integration, Oral communication competency
Prerequisites: ECON 201 with a minimum grade of C- and ECON 202 with a minimum grade of C- and ECON 370 and (MATH 130 with a minimum grade of C- or MATH 133 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
This "capstone" course is designed to enhance research, critical thinking, and analytical skills for students majoring in economics and business economics. Students will use quantitative tools and the theoretical foundations learned in prior economic courses to analyze current economic problems and social issues. Requires integrating a variety of tools and techniques from economics, quantitative reasoning, critical thinking and information literacy, and social and behavioral inquiry to empirically test and provide implications about self-selected research questions. Students will sharpen their oral presentation, writing and technical analytical skills as they work on individual research and discussion topics, culminating in a final Economics research paper and presentation. (Prerequisite note: Last semester senior standing).

ECON 498 | INTERNSHIP
Units: 1-3
Prerequisites: (MATH 130 with a minimum grade of C- or MATH 150 with a minimum grade of C-)
Experiential learning working in a business, government, or nonprofit organization. Placements provide the opportunity for practical application of economics, business, and accounting principles. Placement must emphasize economics field. See schedule of classes for special meeting times. This course may not be repeated for credit.

ECON 499 | INDEPENDENT STUDY
Units: 1-3 Repeatability: Yes (Can be repeated for Credit)
Prerequisites: (MATH 130 with a minimum grade of C- or MATH 150 with a minimum grade of C- or MATH 151 with a minimum grade of C-)
Study of economic theory and public policy through selective readings and research. A maximum of 3 units of independent study may be used to satisfy requirements for the major.