## **ECONOMICS**

**Department Chair:** Parker Wheatley

**Faculty:** Mehrnoosh Asadi, Shuoshuo Hou, Louis Johnston, Sucharita Mukherjee, Ana K. Negrete, and Parker Wheatley

Economics is the study of individual and social choices that lead to the production, distribution, and consumption of goods and services through private markets and non-market activities. The goal of economic analysis is to understand and evaluate how societies, businesses, organizations, and individuals' access, produce, and distribute resources. Key applications of economic analysis include the following: critical evaluation of public policy to promote individual and social well-being, examination of individual-decision making to shape private sector actions and public policy, analysis of key sectors of the economy such as labor markets and financial markets, and investigation of the overall economy to promote understanding of growth and business cycles.

The Department of Economics prepares students to understand economic activity, to engage in critical analysis of economic, business, financial, social, and policy matters as articulate and engaged citizens committed to the common good, and to become leaders in the private sector, non-profit sector, government, and academia.

# In Support of This Mission, the Department Commits Itself to the Following

- We will strengthen student our students' abilities in the following areas: critical thinking; quantitative and qualitative analysis; writing, speaking, and other communication skills; and analyzing the interaction of human values and economic life.
- We will support student learning and intellectual growth through both collaborative research opportunities and through class-based and senior research experiences.
- We will support and advise students as they seek internships, leadership experiences, and experiential opportunities as they prepare for their futures.
- We will challenge students to consider the intersection of economic thought and our community values of service, sustainability, and justice.

# The Economics Curriculum is Structured in Three Tiers

- Tier I consists of one 4-credit course, ECON 111 Introduction to Economics, which introduces the subject of economics by examining fundamental economic principles as well as issues and problems examined by economists.
- Tier II courses (numbered between 300 and 349) build on the Tier I foundation to address in greater depth particular areas of economic theory and application. Some Tier II courses (numbered 300-329) are electives while ECON 332 Microeconomic Theory, ECON 333 Macroeconomic Theory and ECON 334 Introductory Econometric Analysis form the set of core courses which all majors are required to complete.
- Tier III courses (numbered 350-399) are advanced courses in analysis and applications and are primarily intended for economics majors and minors. All Tier III courses have a prerequisite of at least two of

the core theory courses, ECON 332 Microeconomic Theory, ECON 333 Macroeconomic Theory, and either completion or concurrent enrollment with ECON 334 Introductory Econometric Analysis.

Some courses in the economics curriculum are designed to meet requirements in programs outside economics. In particular, the department contributes to the curricula in Accounting and Finance, Asian Studies, Global Business Leadership, Theology as well as the general education curriculum of the Colleges.

The economics major prepares students for employment in a variety of areas and for graduate study. Recent graduates are pursuing careers in banking, insurance, finance and brokerage, journalism, sales and marketing, and management. Others are employed as policy analysts for various agencies and branches of local, state, and federal governments. Economics majors also go on to graduate study in economics, business, finance, law, public policy analysis, agricultural economics, environmental economics, labor relations and human resource management, health administration, sports administration, and public administration.

The Department also offers a minor that can be matched with many different majors as preparation and support for a variety of career opportunities.

#### **Assessment**

The Department of Economics conducts assessment of student learning to determine how well the department and its students are meeting the program's specified learning goals and objectives.

Assessment provides the department with systematic feedback to make curricular and pedagogical improvements. While protecting confidentiality, students of economics should expect that their coursework may serve as assessment data, that they may be asked to provide other data for assessment, and that they will be invited to participate in assessment reviews.

### Major

The Department of Economics offers a general major along with concentrations in data analytics, finance, and policy.

- Economics Major (https://catalog.csbsju.edu/catalog/academicdepartments/economics/economics-major/)
- Economics Major with a Data Analytics Concentration (https://catalog.csbsju.edu/catalog/academic-departments/economics/economics-major-data-analytics-concentration/)
- Economics Major with a Finance Concentration (https:// catalog.csbsju.edu/catalog/academic-departments/economics/ economics-major-finance-concentration/)
- Economics Major with a Policy Concentration (https://catalog.csbsju.edu/catalog/academic-departments/economics/economics-major-policy-concentration/)
- Economics Minor (https://catalog.csbsju.edu/catalog/academicdepartments/economics/economics-minor/)

#### **Economics Courses**

#### **ECON 111 Introduction to Economics (4 Credits)**

Why does a bumper crop year for farmers often lead to a fall in their incomes? Should we worry about importing too many things from China? What's the difference between inflation and the consumer price index? How do supply and demand affect average salaries in the career you hope to have after graduation? Are there better measures of economic well-being than GDP (gross domestic product)? What is "the Fed" and how does it affect the economy? These and other questions about daily economic life are explored in this introduction to economics as a discipline.

Prerequisites: None

Equivalent courses: ECON 111A, ECON 111Z, HONR 220A

Attributes: Quantitative Reasoning (QR), Social World (SW), Thematic

Encounter1/2-Justice

#### ECON 202 Readings in Economics (0-1 Credits)

Readings and discussions in specific areas of economics. Topics may be tied to on-campus lectures/presentations given by invited speakers. Approval of department chair and/or faculty moderator required. This course can be repeated for credit with the permission of the department chair.

Prerequisites: ECON 111 or ECON 111Z

# ECON 217 Applied Statistics for Economics, Business, and Society (4 Credits)

This course will introduce students to the tools and methods of descriptive statistical analysis, methods of basic statistical inference and applications of these concepts to understand and analyze socioeconomic phenomena in the areas of economics, business, finance, and public policy. Students will learn basic measures of central tendency (mean, median, mode), positional measures of dispersion (range, variance, standard deviation) and explore their computation in Excel as a way of summarizing data. They will also represent data through appropriate graphs such as box plots and histograms. Students will learn the differences between cross sectional and time series data and tools to visualize both. Students will understand trends and seasonal fluctuations in time series data and learn methods to smoothen seasonality and other fluctuations by using methods such as moving averages. In addition to descriptive statistics, students will gain grounding in probability theory and sampling theory as part of the development of knowledge necessary for statistical inference. Students will explore and draw inferences about relationships among different types of data in the context of topics in economics, business, finance, and society more broadly (e.g., correlation, covariance, Pearson's r, Chi-square measures of association, F statistics, t-statistics).

Prerequisites: None

Attributes: Thematic Encounter1/2 - Truth

#### ECON 271 Individual Learning Project (1-4 Credits)

Supervised reading or research at the lower-division level. Prerequisite: 111 or permission of the department chair. Consult department for applicability towards major requirements. Not available to first-year students.

Prerequisites: None

#### ECON 302 Readings in Economics (0-1 Credits)

Readings and discussions in specific areas of economics. Topics may be tied to on-campus lectures/presentations given by invited speakers. Approval of department chair and/or faculty moderator required. This course can be repeated for credit with the permission of the department

Prerequisites: ECON 111 or ECON 111Z

#### ECON 314 Economics of Financial Institutions and Markets (4 Credits)

How do interest rates affect the value of stocks and bonds, the cost of a mortgage, and how much you save by buying a used car rather than a new one? How do pension funds and mutual funds work? How does the interaction of supply and demand affect personal and national finances? Who makes the rules for the banking system and why? You will learn how success in these areas leads to financial stability and supports a well-functioning economy and broader well-being, while failure can cause widespread harm to individuals and society.

Prerequisites: ECON 111 or HONR 220A or ECON 111Z or ECON 111A

#### ECON 315 American Economic History (4 Credits)

Examination of the growth and development of the American economy from the 17th –century colonization to the present. Application of basic tools of economic analysis to explore the effects of the natural environment, public policies, changes in technology, and social and cultural forces on historical economic events, institutions and processes of economic growth and development.

Prerequisites: ECON 111 or ECON 111Z or ECON 111A or HONR 220 or HONR 220A

Attributes: Social World (SW), Thematic Encounter3 - Movement

#### ECON 316 Asian Economies (4 Credits)

Life in the United States has deep connections to the global community. This course looks at some of the largest economies of Asia, such as China, Japan, India and South Korea, and traces their journey to becoming economic giants in today's world. It looks at the role played by the United States in each of those stories as an economic and political partner. It addresses income growth in these economies and the quality of lives of citizens within them. Are they healthier? Are they happier? Do they have more equal access to the fruits of economic prosperity? It especially looks at gender equality between women and men. And this study asks whether those experiences parallel our own experiences in the US. The course focuses on understanding the interplay of economic justice with economic growth and learning how the complex process of economic development requires appropriate public policy to ensure a high quality of life for citizens.

Prerequisites: ECON 111 or ECON 111Z or HONR 220A or ECON 111A Attributes: Social World (SW), Thematic Encounter3 - Justice

#### **ECON 317 International Economics (4 Credits)**

Is it easy to win a trade war? Does the labor of immigrants help or hurt the US economy? Should we be more concerned about China or automation as a threat to US jobs? Why do trade deficits matter? Does international trade make poor countries even poorer? Can Chinese "currency manipulation" hurt the US economy? International economics explores the theory of international trade and finance with attention to today's problems of trade policy, the balance of payments, the international monetary system, and globalization issues. The course will help students understand such things in the news as comparative advantage, trade policy, international economic institutions (the WTO, the IMF, and the World Bank), regional trade agreements, foreign exchange markets, and the influence of multinational corporations.

Prerequisites: ECON 111 or HONR 220A or ECON 111Z or ECON 111A

#### ECON 318 Natural Resource and Environmental Economics (4 Credits)

Examination of the economics of natural resources and the environment with special focus on environmental policy formulation. Topics include inter-temporal efficiency criteria, cost/benefit analysis, and sustainability issues

Prerequisites: ECON 111 or ECON 111Z or HONR 220 or HONR 220A or

**ECON 111A** 

Attributes: Thematic Encounter3 - Justice

#### ECON 320 Market Structures and Firm Strategy (4 Credits)

At your local supermarket there are likely over 200 different kinds of ready-to-eat breakfast cereals, but a few dozen brands of carbonated beverages. However, both are dominated by few firms producing a majority of the brands. Why does this occur? Many markets such as automobile, airline, videogame and online video streaming share similar characteristics. How can we better understand such market structures as well the firms who sell us the products that we consume? In this course, we examine the pricing, output, and welfare implications of different market structures such as perfect competition, monopoly, oligopoly, and monopolistic competition. Topics frequently include the structure of production and costs, industrial regulation, pricing and advertising strategy, and the sources of firm dominance in an industry.

Prerequisites: ECON 111 or HONR 220A or ECON 111Z or ECON 111A

#### ECON 323 Economics of the Public Sector (4 Credits)

Examination of the economic rationale for the government sector; issues of economic efficiency and equity. Evaluation of government expenditures. The nature and incidence of taxation. Federal government debt.

Prerequisites: ECON 111 or ECON 111Z or HONR 220 or HONR 220A or ECON 111A

#### ECON 325 Political Economy of Gender and Race (4 Credits)

Over the past five decades, the top 1% of American earners have doubled their share of national income, from about 10% of all income to 20%. What are the forces creating this inequality? How equal is the American labor market? Is access to education an indicator of inequality? Access to health insurance? How will "Generation Z" (that's you) deal with growing income inequality, declining prime-age employment, and less economic mobility? To answer these questions, we need to have a good understanding of the economy and a big part of that is understanding an upsurge in differences across various social groups in the most important factors that trigger inequality – wages, education, and health. The course not only explores competing explanations for gender, racial, and ethnic inequality in the US but pays attention to the way these imbalances shape the ideas of citizenship and employment, and how some public policies can contribute to disparity.

Prerequisites: ECON 111 or ECON 111Z or HONR 220A or FYS 101 or HONR 101 or FYS 201 or ECON 111A

Attributes: Social World (SW), Thematic Encounter3 - Justice

#### ECON 326 History of Economic Thought (4 Credits)

Are ticket prices high because the salaries of sports superstars are high or are salaries high because ticket prices are high? Economists agree that David Ricardo answered this question 200 years ago, though he was talking about land and not superstars. Will the citizens of a poor country with inefficient production processes simply lose jobs if their nation begins to trade with a rich country that produces nearly everything more efficiently? Ricardo and others in the history of the discipline had a lot to say about this too. A number of other important contemporary questions have been addressed – and in some cases "solved" – by economists long ago. This course investigates the development of the discipline of economics, starting with the ancient Greeks, but focusing on the last three centuries.

**Prerequisites:** You must take ECON 111 prior to taking ECON 326. You must take INTG 100 or 205 prior to ECON 326. You also must take a Cultural and Social Difference: Identity (CI) course prior to or at the same time as Thematic Focus Courses.

Attributes: Human Experience (HE), Thematic Focus - Truth

#### ECON 327 Economic Thought and Religious Values (4 Credits)

Does competition in today's global markets contradict the religious concern for the common good? Should a Christian – called to love one's neighbor – refuse to act out of self-interest in economic life? These questions are actually very old ones. This course will investigate these and other issues of economic life, starting with the Hebrew Scriptures 3000 years ago, through history from the early church, the Middle Ages, the Protestant Reformation, and contemporary debates about free markets, liberation theology, feminism, and the social teaching of the Roman Catholic Church today.

**Prerequisites:** (ECON 111 or ECON 111Z or HONR 220A or ECON 111A or FYS 101 or HONR 101 or INTG 100 or FYS 201 or INTG 200) and (THEO 111 or THEO 100 or INTG XXXG or HONR 240A)

Equivalent courses: CORE 369, CORE 369A, THEO 349E

Attributes: Cmnty Engaged Learning Opt, Theological Integration (TI), Writing Requirement (WR)

#### ECON 329A Behavioral Economic Ideas (2 Credits)

Examines social influences and psychological constraints affect household choices. Questions asked include the following: Why is having more choice sometimes detrimental to good decision-making? How do common decision rules and behaviors lead consumers and managers astray? How can better systems and incentives help people improve choices? How can the introduction of market norms undermine social norms? Why do most people lie, cheat, and steal just a "little bit"? Course will explore how behavioral economic findings can be applied in policy, business, and finance.

Prerequisites: ECON 111 or ECON 111Z or ECON 111A or HONR 220A or PSYC 111 or PSYC 111Z or FYS 101 or FYS 201

#### ECON 329B Behavioral Economic Analysis (2 Credits)

Focuses on how cognitive limits, social forces, and psychology interact to affect human decision making under conditions of uncertainty and over time. Traditional economic theories will be compared with behavioral economic models. The course will also explore behavioral games with applications to bargaining and questions of fairness. Applications will include considerations of risky behavior, insurance pricing and choice, savings and investment behaviors, eating/exercise behaviors, and the extent of cooperation in groups.

**Prerequisites:** ECON 111 or ECON 111Z or ECON 111A or ECON 329A (may be taken concurrently)

#### ECON 329C Economics of Climate Change (2 Credits)

Examines the economic effects of climate change. Some important questions explored include the following: Which communities and countries are most affected by climate change? How does climate change affect agricultural production, our food supply, livelihoods, air quality, human health, and ecosystems? What are the different methods of measuring the economic cost of climate change? How do international climate negotiations like the Kyoto Protocol, the Paris Agreement or the UNFCCC meetings try to mitigate and prevent the effects of climate change? It also considers policy options that will help different communities and groups to adapt to climate change, and explores economic models and impacts of policies intended to affect the rate or nature of climate change. Pre-requisite(s): ECON 111 or permission of the instructor.

Prerequisites: ECON 111 or ECON 111Z or ECON 111A or HONR 220A

#### ECON 329D International Economic History (4 Credits)

A survey of trends in the international economy since the industrial revolution. Primary emphasis on the role of trade in industrialization and growth. Other topics include the spread of the industrial revolution from Britain; the role of domestic and international financial markets in growth; the nature and causes of international business cycles; the international nature of the Great Depression; and economic growth since World War II. Prerequisites: ECON 111 or Sophomore Cohort Standing.

Prerequisites: ECON 111 or ECON 111Z or ECON 111A or HONR 220A or FYS 101 or HONR 101 or FYS 201

#### ECON 329E The Economics of Innovation (4 Credits)

Electricity, telephones, jet engines, computers, copy machines, cellphones, social media, sustainable energy, 3-D printing, AI. The list goes on. The rate of innovation has steadily increased since the Industrial Revolution. We can increase economic output without using more inputs because of innovation (discovery) and technology (where entrepreneurs translate new ideas into commercial uses). This can help us solve problems – like education, health care, poverty, etc – by having more wealth available as a society. Yet, innovation has also been accompanied by a rise in inequality both within countries and between them, inequality in the quality of life that innovation has made possible. This course will help students better understand the origins and effects of innovation in a world where upcoming breakthroughs may significantly change humanity's life perspectives.

Prerequisites: ECON 111 or ECON 111Z or ECON 111A

#### ECON 332 Microeconomic Theory (4 Credits)

Why have seat belt laws led to an increase in the rate of auto accidents? Why are some people workaholics and others take more time off to enjoy life? Why doesn't the US allow buying and selling kidneys, even though this would extend the lives of those with kidney disease? These are the kind of questions we will be looking at in Micro Theory. This course examines how producers, consumers, and resource owners, acting through the market, determine the prices and output of goods, the allocation of productive resources, and the distribution of incomes. The market system is seen as a network of interrelated decisions, with prices communicating information among decision makers.

Prerequisites: (ECON 111 or ECON 111Z or ECON 111A or HONR 220A) and (MATH 119 or MATH 119Z or MATH 118)

Attributes: Abstract Structures (AS)

#### ECON 333 Macroeconomic Theory (4 Credits)

Why do some countries grow faster than others? What causes unemployment and what can the government do about it? What causes inflation? US households are saving more than ten years ago: is this good or bad for the economy? Is a recession coming soon? Macroeconomics studies aggregate economic activity, which affects the decisions of households, businesses, and policymakers. It focuses on saving, consumption, investment, and international economic influences that affect national output, inflation, and unemployment rates. The course will help students become informed decision-makers who can use analytical tools to understand today's economy.

Prerequisites: (ECON 111 or ECON 111A or ECON 111Z or HONR 220A) and (MATH 118 or MATH 119 or MATH 119Z)

#### **ECON 334 Introductory Econometric Analysis (4 Credits)**

Engaging in analysis and drawing inferences from economic data are an important tool for students interested economics, business, policy, and financial analysis. Students in this course will formulate hypotheses based on economic theory that can be tested with data. Students will become proficient in regression analysis and related statistical inference using appropriate software. They will understand issues related to proper variable and functional form selection, and they will be able identify and correct for violations of the Classical Model of regression analysis (e.g., multicollinearity, heteroskedasticity, and autocorrelation). They may be exposed to more advanced topics in econometrics.

Prerequisites: (ECON 332 or ECON 333) and (MATH 124 or MATH 124Z or HONR 260A or MATH 345) and (MATH 119 or MATH 119Z) and (ECON 111 or ECON 111A or HONR 220A

Attributes: Social World (SW), Thematic Encounter3 - Truth

#### ECON 350 Topics in Econometrics and Data Analysis (4 Credits)

Students will examine more advanced techniques in econometrics and data analysis. Topics may include time-series analysis, panel data analysis, limited dependent variable analysis, simultaneous equations and instrumental variable approaches. Other advanced econometric and data analytic methods may be introduced depending on instructor. Students will be introduced to more advanced uses of software in data analysis and management.

Prerequisites: ECON 334

#### ECON 353 Labor Economics and Policy Analysis (4 Credits)

Labor force participation, wage determination, and income distribution. Collective bargaining, bargaining power, and labor legislation. Economics of the family, poverty, and discrimination. Evaluation of labor market policy. Prerequisite: 334.

Prerequisites: ECON 334

#### ECON 359C Environmental Economics and Policy (4 Credits)

This course will study the economics of public policy toward natural resources and the environment. It will start by developing the concepts of externalities, public goods, property rights, market failure, and costbenefit analysis and will then consider additional problems such as information, uncertainty, and risk analysis. These concepts be used to evaluate environmental policy towards actual policy problems such as air pollution, water pollution, solid waste management, and hazardous materials. The course will also cover public policy towards nonrenewable resources, such as fossil fuels, and renewable resources, such as forests and fisheries. Prerequisite: 332 & 334 or written perm of instructor.

Prerequisites: ECON 334 and ECON 332

#### ECON 359E Economics of Disasters (4 Credits)

Examines the economic concepts and relevant policy issues concerning the impact of natural disasters including hurricanes, earthquakes, droughts, and climate change. Topics include the history of natural disasters and their economic impact, economic vulnerability to disasters, the role of insurance, disaster impact on poverty and inequality, and post-disaster growth and reconstruction. Emphasizes the analysis of existing research, and the evaluation of both pre- and post-disaster policy.

Prerequisite: 332, 333 & 334

Prerequisites: ECON 332 and ECON 333 and ECON 334

#### ECON 359G International Finance Theory and Policy (4 Credits)

International finance as a field of economics arises because of special problems associated with the economic interaction between sovereign states. This course will introduce the main concepts and theories of international finance and illustrate them with real world applications. Students will be equipped with tools and methods to study and analyze international economic issues and problems. The course addresses a wide range of issues, including the balance of payments, exchange rate determination, international policy coordination, economic integration and monetary unification and international investment and banking (international capital markets). Prerequisites: 333 and 334.

Prerequisites: ECON 333 and ECON 334

#### ECON 359H Education Economics & Policy (4 Credits)

This course will explore a range of theoretical, empirical, and policy dimensions of education. The course will examine the theory of human capital development as a foundation for understanding benefits and costs of education. The theory and estimation of education production and cost functions will be studied. The course will further consider the returns from education both at the individual level and in terms its economic growth effects. The course will also review the labor markets for teachers, the role of taxation in education finance, and the methods of financing elementary, secondary, and tertiary education in the United States. Special topics will include the achievement gap and the role of technology in education. Prerequisite: ECON 333 and 334 or written permission of the instructor.

Prerequisites: ECON 334

# ECON 3591 Introduction to Game Theory Applications in Economics (4 Credits)

This is an introductory course to game theory and its applications in economics. The course will cover the main topics of non-cooperative game theory in a mathematically rigorous way. Game theory is the mathematical study of behavior in strategic settings: situations in which an individual must think about other individuals' perspectives and choices to determine one's own optimal choice(s). The course covers a set of analytical tools essential to understanding and consequently predicting behavior in multi-person decision settings. The course trains students to analyze strategic interactions between individual economic agents and to solve various types of games. In addition to learning the substance of game theory and improving students' mathematical skills and logical thinking, Prerequisite ECON 332 (or 333) & 334

Prerequisites: (ECON 332 or ECON 333) and ECON 334

#### ECON 359J Economic Impact Evaluation (4 Credits)

Students will learn the principles and methods underlying economic policy evaluation with a focus on if and whether policy interventions in developing countries can be shown to improve outcomes such as health, wealth, and productivity in a wide variety of settings. The course emphasizes empirical applications and relies on both theory and case studies as learning tools. Students will learn a wide range of methods in policy impact evaluation, including experimental and quasi-experimental methods, and students will develop a critical understanding of the design and implementation of these types of studies.

Prerequisites: ECON 334

#### ECON 359K Economics, Philosophy, and Method (4 Credits)

We regularly hear competing explanations of why things happen, even among economists. What makes for a good scientific explanation? Is it the same in economics and psychology as it is in chemistry and physics? This course will investigate the philosophical debates concerning what makes for a good explanation in natural and social science, including disagreements about whether explanations in social science are fundamentally different because they apply to human beings. It will trace how disagreements among different schools within economics often reflect underlying philosophical disagreements.

**Prerequisites:** ECON 359K is a Thematic Focus - Truth Course. You must take INTG 100 or 205 prior to taking a Thematic Focus Course. You must take a Cultural and Social Difference: Identity (CI) course prior to or at the same time as Thematic Focus Courses.

Equivalent courses: ECON 328, PHIL 368B

Attributes: Human Experience (HE), Thematic Focus - Truth

#### **ECON 359L Financial Economics (4 Credits)**

How should we compare money invested today to payments expected in the future? What is the difference between risk and uncertainty? What happens when risk increases along with returns? How do interest rates influence the profitability of a financial investment? How does inflation influence both interest rates and future profits? What are the derivative securities and how do they both help and threaten financial markets? Financial economics studies financial instruments and asset classes, the time value of money, term structures of interest rates, portfolios and investment management, financial risk management, and other topics. The course will help students understand important microeconomic concepts in financial economics such as the risk-return trade-offs and the tools to evaluate alternative investment strategies.

Prerequisites: ECON 332 and ECON 333 and ECON 334

#### ECON 362 Economic Development (4 Credits)

Examines and analysis of issues of economic development in developing and developed countries. The course focuses on understanding key concepts in evaluating economic development of economies and understanding the process of development as a broad notion of wellbeing of individuals within economies. The course uses the gender lens to understand heterogeneities in the experience of economic development within and across societies. Prerequisite: 334.

Prerequisites: ECON 334

#### **ECON 363 Economic Growth (4 Credits)**

Investigation and analysis of the theoretical and empirical causes, processes, and consequences of economic growth. Particular attention is given to the roles of history, capital accumulation, education, and research and development in economic growth to explain why some countries experience growth and others do not. Prerequisite: 333 and

Prerequisites: ECON 333 and ECON 334

#### **ECON 364 Dynamic Macroeconomics (4 Credits)**

Development and application of dynamic models to macroeconomic phenomena. Models will include the Solow growth model, overlapping generations models, and real business cycle models. Emphasis will be on the general equilibrium nature of macroeconomics and the need to consider macroeconomic theory and policy in a dynamic, rather than a static, context. Prerequisite: 333 and 334.

Prerequisites: ECON 334 or ECON 333 Equivalent courses: ECON 359B

#### ECON 371 Individual Learning Project (1-4 Credits)

Supervised reading or research at the upper-division level. Prerequisite: completion of 12 credits within the department, including 334, and permission of the department chair. Consult department for applicability towards major requirements. Not available to first-year students.

Prerequisites: None

#### ECON 373 International Theory and Policy Analysis (4 Credits)

General equilibrium analysis of reasons for trade and the gains from trade. Impact of international trade on income distribution. Trade and commercial policy. Politics of trade. International trade agreements and trade wars. Exchange rates and balance of payments. Prerequisite: 333 and 334.

Prerequisites: ECON 333 and ECON 334

#### ECON 374 Monetary Theory and Policy Analysis (4 Credits)

Theoretical analysis and empirical investigation of the effect of money on macroeconomic activity from classical and contemporary approaches. Theories of money demand and the money supply process. Issues in the formulation, execution and impact of monetary policy. Prerequisite: 333 and 334.

Prerequisites: ECON 333 and ECON 334

#### ECON 376 Industrial Organization and Public Policy (4 Credits)

Theoretical and empirical analysis of the behavior of and policies for business and industry. Theories of production, costs, and market power are studied along with related estimation methods. Applied game theory is used to study strategy and policy in imperfectly competitive markets. Models and strategies of businesses that complete on product quality and location are considered. Special topics may include pricing strategy, information economics, intellectual property and innovation, and network industries. Prerequisite: 332 and 334.

Prerequisites: ECON 332 and ECON 334 Equivalent courses: ECON 359D

#### ECON 380 Welfare Economics and Public Policy Analysis (4 Credits)

Application of the new welfare economics to analysis of government policy. Efficiency and equity criteria are developed and applied to analysis of expenditures and tax policy with special focus on the federal government. Evaluation of specific government programs. Examination of taxation theory and burden of the public debt. Prerequisite: 332 and 334.

Prerequisites: ECON 332 and ECON 334

Equivalent courses: ECON 379

#### ECON 384 Advanced Research in Economics (4 Credits)

A directed research experience in economics. Application of economics research methodology and analysis in various sub-disciplines of economics. Each student intensively explores a topic and makes a formal presentation to the department. Fall and spring.

Prerequisites: (ECON 334 and ECON 333 and ECON 332) and (ECON 350 or ECON 353 or ECON 359C or ECON 359E or ECON 359G or ECON 359H or ECON 359I or ECON 359J or ECON 359J or ECON 359L or ECON 362 or ECON 363 or ECON 364 or ECON 373 or ECON 374 or ECON 376 or ECON 370 or ECON 380)

379 or ECON 380)

Attributes: Experiential Engagement (EX)

#### ECON 397 Internship (1-4 Credits)

Practical off-campus experience. Must have a substantial academic component. Directed by officers of employing firms or institutions. Prerequisites: 20 credits in economics, senior standing and permission of the department chair. These credits will not apply to the requirements for a major or minor.

Prerequisites: None

Attributes: Experiential Engagement (EX)

# ECON 398 Honors Senior Essay, Research or Creative Project (1-4 Credits)

Required for graduation with "Distinction in Economics."

Prerequisites: COLG 396