

# ECONOMICS (ECON)

## ECON 100 – ECONOMIC APPROACH TO CURRENT ISSUES

3-4 credits.

Emphasizes current economic issues and illustrates how the economist's perspective helps understand them. Academic readings and popular books such as Freakonomics will be used to indicate the breadth and scope of questions that can be analyzed from an economic perspective.

**Requisites:** MATH 96 or placement into MATH 112 or satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for ECON 101, 102, or 111

**Course Designation:** Breadth - Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Discuss key economic concepts and their application to current policy questions.

Audience: Undergraduate

2. Evaluate and critique economic arguments as they apply to current events.

Audience: Undergraduate

## ECON 101 – PRINCIPLES OF MICROECONOMICS

4 credits.

Economic problems of individuals, firms and industries with emphasis on value, price, and distribution of income.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for ECON 111

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Explain basic economic concepts such as scarcity, opportunity cost, supply and demand, and market failure.

Audience: Undergraduate

2. Recognize how households and firms respond to incentives and make economic decisions.

Audience: Undergraduate

3. Identify and apply mathematical models to answer economic questions.

Audience: Undergraduate

4. Express relationships among economic variables verbally, graphically, and numerically.

Audience: Undergraduate

5. Read current news articles and recognize and critique economic arguments.

Audience: Undergraduate

6. Apply marginal analysis and cost-benefit analysis in a variety of settings.

Audience: Undergraduate

## ECON 102 – PRINCIPLES OF MACROECONOMICS

3-4 credits.

Macroeconomic measurement and models of aggregate demand and supply; fiscal and monetary policy for unemployment, inflation, and growth.

**Requisites:** ECON 101, A A E 101, or 215 prior to Fall 2024. Not open to students with credit for ECON 111

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**ECON 109 – STUDY ABROAD IN INTRODUCTORY ECONOMICS**

1-4 credits.

Provides an equivalency for introductory level economics courses taken on UW-Madison study abroad programs.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ECON 111 – PRINCIPLES OF ECONOMICS-ACCELERATED TREATMENT**

4 credits.

Integrated treatment of macroeconomics and microeconomics (see ECON 101 and ECON 102). Accelerated approach to economics training, especially for Economics: Math Emphasis majors.

**Requisites:** MATH 112 or 113 or placement into MATH 221. Not open to students with credit for ECON 101 or 102**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Fall 2024**Learning Outcomes:** 1. Explain basic economic concepts such as scarcity, opportunity cost, supply and demand, market failure, and national income accounting relationships.

Audience: Undergraduate

2. Describe U.S. fiscal/monetary institutions and functions.

Audience: Undergraduate

3. Recognize how households and firms respond to incentives and make economic decisions, and apply marginal analysis and cost-benefit analysis in a variety of settings.

Audience: Undergraduate

4. Identify sources of long-run economic growth and short-run economic fluctuations, and evaluate policy tools for addressing both.

Audience: Undergraduate

5. Identify and apply mathematical models to answer microeconomic and macroeconomic questions.

Audience: Undergraduate

6. Interpret economic data, and express relationships among economic variables verbally, graphically, and numerically.

Audience: Undergraduate

7. Read current news articles and recognize and critique economic arguments.

Audience: Undergraduate

**ECON 205 – QUANTITATIVE TOOLS FOR ECONOMICS**

3-4 credits.

Refine the quantitative skills used in intermediate- and advanced-level economics courses. Apply math skills to the questions, models, and optimization problems that are common in economics. Topics include specific economic applications of algebra, financial mathematics, and calculus.

**Requisites:** (ECON 101, 102, 111 or concurrent enrollment) and (MATH 211, 217, or 221). Not open to students with credit for MATH 222**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2026**Learning Outcomes:** 1. Apply techniques in algebra and financial mathematics to analyze common economic questions

Audience: Undergraduate

2. Understand select topics from calculus and apply them to standard economic optimization problems

Audience: Undergraduate

**ECON 228 – INTERNSHIP ECONOMICS**

1 credit.

Internship in economics related field. Students must be declared in the Economics major.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2026**ECON 299 – DIRECTED STUDY**

1-3 credits.

Study of topics at elementary undergraduate level as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2014

**ECON/FINANCE 300 – INTRODUCTION TO FINANCE**

3 credits.

Concepts and techniques in corporate finance and investments. Topics include the financial environment, securities markets, financial markets, financial statements and analysis, working capital management, capital budgeting, cost of capital, dividend policy, asset valuation, investments, decision-making under uncertainty, mergers, options, and futures.

**Requisites:** (ECON 101, 111 or A A E 101) and (ACCT I S 100 or 300 or concurrent enrollment) and (GEN BUS 206, 306, ECON 310, MATH 331, STAT/MATH 309, 431, STAT 224, 301, 302, 311, 324, 371 or PSYCH 210 or concur enrollment) or declared undergrad Bus Exchange Program

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Apply discounted cash flow analysis in various contexts and determine the appropriate discount rate for these calculations.

Audience: Undergraduate

2. Calculate and interpret the effect of leverage on firms' cost of debt, cost of equity, and a company's cost of capital under different assumptions.

Audience: Undergraduate

3. Characterize an efficient market and explain the implications of market efficiency for investors and corporations.

Audience: Undergraduate

4. Characterize different types of securities (including stocks, bonds, and derivatives) and identify the key features of each.

Audience: Undergraduate

5. Compute present and future values under different compounding assumptions.

Audience: Undergraduate

6. Demonstrate a command of the Capital Asset Pricing Model, including its strengths and weaknesses and its use in computing expected returns.

Audience: Undergraduate

7. Demonstrate the power of diversification and the risk-return tradeoff quantitatively.

Audience: Undergraduate

8. Solve capital budgeting problems using appropriate decision rules, taking into account the strengths and weaknesses of the available approaches.

Audience: Undergraduate

**ECON 301 – INTERMEDIATE MICROECONOMIC THEORY**

4 credits.

Contemporary theory of consumption, production, pricing and resource allocation.

**Requisites:** (ECON 101, 111, A A E 101, or 215 prior to Fall 2024) and (MATH 213, 217, 221, ECON 205, or MATH 211 prior to Fall 2024). Not open to students with credit for ECON 311.

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. apply economic models to understand household and firm behavior and market outcomes

Audience: Undergraduate

2. specify and adapt microeconomic models to analyze economic environments

Audience: Undergraduate

3. solve economic decision problems using tools of mathematical optimization

Audience: Undergraduate

4. understand the role of these models as the foundation for more advanced analysis

Audience: Undergraduate

**ECON 302 – INTERMEDIATE MACROECONOMIC THEORY**

4 credits.

Principles and theories of national income determination, analysis of savings, consumption, investment and other aggregates in the national and international economy and relation to employment, inflation and stabilization.

**Requisites:** (ECON 102 or 111) and (MATH 213, 217, 221, ECON 205, or MATH 211 prior to Fall 2024). Not open to students with credit for ECON 312.

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Use disaggregated data to inform the construction of economic models and policy

Audience: Undergraduate

2. Critically evaluate economic models using publicly available data

Audience: Undergraduate

3. Use mathematical methods to capture economic relationships

Audience: Undergraduate

4. Distinguish between short run and long run theories and policy objectives

Audience: Undergraduate

5. Identify how international markets affect the macroeconomy and macroeconomic policy

Audience: Undergraduate

**ECON/HIST SCI 305 – DEVELOPMENT OF ECONOMIC THOUGHT**

3-4 credits.

Development of economic thought from the middle ages to the present; emphasis on major schools of thought including Classical, Marxian, Neo-Classical, and Keynesian schools.

**Requisites:** (ECON 101 and 102) or (ECON 102 and A A E 101 or 215 prior to Fall 2024) or ECON 111

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**Learning Outcomes:** 1. Describe the evolution of the methodology of economics.

Audience: Undergraduate

2. Explain what Adam Smith wrote and what he did not write.

Audience: Undergraduate

3. Discuss the dual role of economics as a social science and as an art (moral philosophy).

Audience: Undergraduate

**ECON/A A E/REAL EST/URB R PL 306 – THE REAL ESTATE PROCESS**

3 credits.

Introductory overview focused on the key aspects of the real estate process: developing real estate, permitting real estate, buying and selling real estate, understanding the economics of real estate, financing real estate, valuing real estate, leasing real estate, and managing real estate.

**Requisites:** (ECON 101, 111, A A E 101, or 215 prior to Fall 2024) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Develop a working knowledge of the real estate process, including the roles of the various key real estate professionals and the unique challenges associated with the real estate asset class.

Audience: Undergraduate

2. Explain the characteristics, advantages, and disadvantages of the primary commercial real estate property types.

Audience: Undergraduate

3. Discuss the role of debt and equity in a real estate transaction as well as the fundamental terms, conditions, and requirements of commercial real estate financing.

Audience: Undergraduate

4. Navigate the basic regulatory framework governing the real estate process, including land use planning, zoning and the required project approvals.

Audience: Undergraduate

5. Describe the role of leasing in the commercial real estate transaction, including the critical terms and conditions of commercial leases.

Audience: Undergraduate

**ECON 309 – STUDY ABROAD IN INTERMEDIATE ECONOMICS**

1-4 credits.

Provides an equivalency for intermediate level economics courses taken on UW-Madison study abroad programs.

**Requisites:** None

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ECON 310 – STATISTICS: MEASUREMENT IN ECONOMICS**

4 credits.

Introduction to analysis of economic data. The techniques of descriptive statistics and statistical inference (hypothesis testing and estimation) as directed toward application in economic research.

**Requisites:** (ECON 101, 102, or 111) and (MATH 211, 217, or 221)

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Apply probability theory to model the likelihood of uncertain events.

Audience: Undergraduate

2. Use software to apply statistical techniques to the analysis of economic data.

Audience: Undergraduate

3. Interpret tables, graphs and statistics used to summarize data.

Audience: Undergraduate

4. Estimate the true value of unknown parameters using point and interval estimators.

Audience: Undergraduate

5. Critically evaluate interpretations of statistical estimates and resulting inferences.

Audience: Undergraduate

6. Test theories by determining an appropriate test statistic, implementing a formal hypothesis test, and interpreting the outcome.

Audience: Undergraduate

**ECON 311 – INTERMEDIATE MICROECONOMIC THEORY -  
ADVANCED TREATMENT**

3 credits.

A mathematical approach to the theory of consumption, production, pricing and resource allocation.

**Requisites:** MATH 222 and (ECON 101 and 102) or ECON 111. Not open to students who have credit for ECON 301

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Apply economic models to understand household and firm behavior and market outcomes.

Audience: Undergraduate

2. Specify and adapt microeconomic models to analyze economic environments.

Audience: Undergraduate

3. Solve economic decision problems using tools of mathematical optimization.

Audience: Undergraduate

4. Understand the role of these models as the foundation for more advanced analysis.

Audience: Undergraduate

**ECON 312 – INTERMEDIATE MACROECONOMIC THEORY -  
ADVANCED TREATMENT**

3 credits.

A mathematical approach to the principles and theories of national income determination, analysis of savings, consumption, investment and other aggregates in the national and international economy and relation to employment, inflation, and stabilization.

**Requisites:** MATH 222 and (ECON 101 and 102) or ECON 111. Not open to students who have credit for ECON 302

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Use disaggregated data to inform the construction of economic models and policy.

Audience: Undergraduate

2. Critically evaluate economic models using publicly available data.

Audience: Undergraduate

3. Use mathematical methods to characterize economic relationships.

Audience: Undergraduate

4. Distinguish between short-run and long-run macroeconomic theories and their corresponding policy objectives.

Audience: Undergraduate

5. Use numerical methods to solve and evaluate dynamic macroeconomic models.

Audience: Undergraduate

6. Identify how international trade and capital flows affect the macroeconomy and macroeconomic policy.

Audience: Undergraduate

**ECON 315 – DATA VISUALIZATION FOR ECONOMISTS**

3-4 credits.

Introduction to the fundamental concepts of economic data visualization and analysis. Develop a toolkit of skills to visualize, interpret, and communicate data. After examining the fundamentals of data visualization, emphasis is on methods using Tableau to design and develop dashboards, graphs, and charts to ease quick and accurate interpretation of economic relationships. Move beyond tabular results to display and demonstrate the findings of economic research.

**Requisites:** (ECON 101 or 111) and ECON 310

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Visually represent, interpret, and communicate economic data

Audience: Undergraduate

2. Understand data visualization theory

Audience: Undergraduate

3. Incorporate data visualization into economic research

Audience: Undergraduate

4. Present economic research findings clearly and efficiently

Audience: Undergraduate

5. Use Tableau software to interact with economic data

Audience: Undergraduate

**ECON/FINANCE 320 – INVESTMENT THEORY**

3 credits.

Structure and functioning of securities markets; principles of portfolio construction; models of the tradeoff between risk and expected return.

**Requisites:** FINANCE/ECON 300, (MATH 213 or 222) and (GEN BUS 307, 317, 656, ACT SCI 654, 655, ECON 400, 410, STAT/MATH 310, STAT 312, or 333 or concurrent enrollment) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Solve real-world investment problems

Audience: Undergraduate

2. Formulate the trade-off between risk and return

Audience: Undergraduate

3. Describe the distribution of returns on broad asset classes

Audience: Undergraduate

4. Identify investors' risk preferences

Audience: Undergraduate

5. Use portfolio optimization techniques to develop an asset allocation for an investor

Audience: Undergraduate

6. Examine factor models of returns

Audience: Undergraduate

7. Compare different equilibrium security pricing models

Audience: Undergraduate

8. Debate market efficiency

Audience: Undergraduate

**ECON 321 – SPORTS ECONOMICS**

3-4 credits.

An examination of the economics behind major professional and intercollegiate sports teams and franchises. Topics covered include the organization of leagues, competitive balance, cooperative and collusive behavior, measurement of productivity, the market for franchises, sale and resale of tickets, and public financing of facilities.

**Requisites:** ECON 101, 111, A A E 101, or 215 prior to Fall 2024

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Describe the role of monopoly and monopsony power in the labor market for professional athletes, and their relation to strikes and work stoppages.

Audience: Undergraduate

2. Analyze attempts within professional sports leagues to maintain competitive balance, through practices like salary caps, luxury taxes, and draft order.

Audience: Undergraduate

3. Document the financing of sports stadiums via public finance, private finance, or a mixture.

Audience: Undergraduate

4. Contrast the economics of collegiate versus professional sports in the U.S.

Audience: Undergraduate

5. Describe the interplay of industrial organization, public finance, and labor economics as pertains to sports.

Audience: Undergraduate

**ECON 325 – ECONOMICS OF RACE IN THE UNITED STATES**

3 credits.

Historical and contemporary sources and causes of, and potential policy responses to, racial and ethnic economic inequality in the United States. Topics covered include healthcare, education, labor markets, housing and neighborhoods, wealth, and criminal justice, with a focus on aspects of the economy where there are differences in economic outcomes for racial or racial minority groups. Questions include how these differences can result from disparities in how people, markets, or policies treat or impact different groups using economic theory as a foundation, and how economists have studied and measured these differences. In light of the history and range of economic opportunity and change in some communities, particular attention is given to the African American experience.

**Requisites:** ECON 101, 111, A A E 101, or 215 prior to Fall 2024

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Summarize the areas of racial economic inequality in the United States

Audience: Undergraduate

2. Articulate how the economic and social history of the United States has affected present day circumstances regarding race and racial economic inequities in the U.S.

Audience: Undergraduate

3. Identify how current policies, social institutions, and cultural assumptions work to maintain inequality.

Audience: Undergraduate

4. Interpret economic models that attempt to explain the existence of inequality.

Audience: Undergraduate

5. Synthesize existing economic research focused on the causes and effects of racial inequality.

Audience: Undergraduate

6. Present the pros and cons of potential policy solutions to racial inequality.

Audience: Undergraduate

7. Demonstrate self-awareness and empathy toward the cultural perspectives and worldviews of others.

Audience: Undergraduate

8. Apply course concepts to their lives outside the classroom by respectfully participating in our multicultural society.

Audience: Undergraduate

**ECON 330 – MONEY AND BANKING**

4 credits.

Monetary economics; the role of money in the determination of output, prices and interest rates; commercial and central banking, monetary policy, the international monetary system.

**Requisites:** (ECON 101 and 102) or ECON 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Explain the functions and roles of money in the modern macroeconomy.

Audience: Undergraduate

2. Track the development of the Federal Reserve from its creation in the 1910s to its current position as the dominant central bank with control over the world's reserve currency.

Audience: Undergraduate

3. Evaluate the various tools of monetary policy and their impacts on inflation and unemployment in both the short run and long run.

Audience: Undergraduate

4. Describe the role of regulatory agencies in financial markets as they work towards an appropriately capitalized banking system.

Audience: Undergraduate

5. Define basic financial derivatives, leverage, and duration analysis and discuss their role in increasingly complex and interdependent securities markets.

Audience: Undergraduate

**ECON 340 – MICROECONOMICS IN POPULAR CULTURE**

3 credits.

A critical look at the portrayal of housing, homelessness, globalization, and economic mobility in popular media (primarily films, documentaries, and popular sociological studies), both using the discipline of economic theory and from the perspective of broader economic data.

**Requisites:** ECON 101, 111, A A E 101, or 215 prior to Fall 2024. Not open to students with credit for ECON 390 topic: Microeconomics in Popular Culture prior to Fall 2024.

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. describe the financial instruments and policies that impact US mortgage markets, with particular emphasis on the causes, consequences, and lessons from the 2008 Financial Crisis

Audience: Undergraduate

2. explain the theory and empirical evidence about the effectiveness of alternative policy approaches toward problems associated with both low-income housing and homelessness

Audience: Undergraduate

3. discuss alternative approaches to understanding variations in economic mobility and opportunity both over time and across regions, with an emphasis on current data, approaches, and policies

Audience: Undergraduate

**ECON/A A E/ENVIR ST 343 – ENVIRONMENTAL ECONOMICS**

3-4 credits.

Microeconomic principles underlying the use of natural resources such as air, water, forests, fisheries, minerals and energy. These principles are applied in the examination of pollution control, preservation vs. development, deforestation, and other environmental issues.

**Requisites:** A A E 101 (215 prior to Fall 2024), ECON 101, or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Understand why environmental problems occur in a market-based economy.

Audience: Undergraduate

2. Identify market-based environmental policies to address market failures.

Audience: Undergraduate

3. Explain the social, economic, and/or environmental dimensions of the sustainability challenge(s) of pollution control.

Audience: Undergraduate

4. Apply sustainability principles and/or frameworks to addressing the challenge of optimizing the use of scarce resources over time.

Audience: Undergraduate

**ECON 350 – THE CHINESE ECONOMY**

3 credits.

The history of China's economic reforms and development, the nature of its growth, and the fundamental institutions that underlie its transformation into an economic powerhouse. China's integration into and impact on the world economy through trade and financial flows. Major challenges modern China faces, such as regional inequalities, environmental concerns, and the prospects for sustainable growth in the future.

**Requisites:** ECON 101, 111, A A E 101, or 215 prior to Fall 2024

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Apply economic theories to explain China's record of economic growth

Audience: Undergraduate

2. Critically analyze the strengths and weaknesses of China's policy implementation

Audience: Undergraduate

3. Evaluate academic literature related to China's economic reforms and development

Audience: Undergraduate

**ECON 355 – THE ECONOMICS OF GROWING-UP AND GETTING OLD**

3-4 credits.

What does economics have to say about how or why people decide to go to school, get married (or divorced), or have children? Use economic models to investigate these "every day occurrences." Start with early childhood and trace out the life cycle from schooling to retirement, concentrating on six stages of life: early childhood; schooling; adolescence; marriage and divorce; fertility; and retirement decisions.

**Requisites:** ECON 310

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**Learning Outcomes:** 1. Understand important empirical problems in social science (such as correlation vs causation, endogeneity, omitted variable bias) and tools for overcoming them

Audience: Undergraduate

2. Understand important theoretical models of human behavior (such as game theory, signaling models, hyperbolic discounting) and how to apply them to particular environments

Audience: Undergraduate

3. Understand important models of particular "life cycle" decisions (health, schooling, marrying, divorce, fertility)

Audience: Undergraduate

### **ECON 370 – ECONOMICS OF POVERTY AND INEQUALITY**

3 credits.

Analysis of patterns and causes of poverty and inequality. Topics include theoretical approaches, measurement, historical perspectives and policy responses.

**Requisites:** (ECON 101, 102, and 310) or (ECON 111 and 310)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**Learning Outcomes:** 1. Describe the many ways poverty and inequality are measured.

Audience: Undergraduate

2. Articulate and evaluate various theories for poverty.

Audience: Undergraduate

3. Discuss historic responses to the problem of poverty.

Audience: Undergraduate

4. Identify the numerous ways government policy seeks to alleviate poverty and inequality.

Audience: Undergraduate

5. Critique academic and policy research in the areas of poverty and inequality.

Audience: Undergraduate

### **ECON/A A E 371 – ENERGY, RESOURCES AND ECONOMICS**

3 credits.

Use microeconomic theory to analyze energy markets. Discuss the economics of oil, gas, and electricity and learn about applications to contemporary issues and policy questions.

**Requisites:** A A E 101 (215 prior to Fall 2024), ECON 101, or 111

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2024

**Learning Outcomes:** 1. Use economic tools to describe energy demand

Audience: Undergraduate

2. Apply economic models of competition to energy markets

Audience: Undergraduate

3. Analyze how policies to mitigate climate change affect energy markets

Audience: Undergraduate

4. Analyze the causes of and solutions for the sustainability challenge of climate change

Audience: Undergraduate

5. Describe the social, economic, and environmental dimensions of energy policy and identify potential tradeoffs and interrelationships among these dimensions at a level appropriate to the course

Audience: Undergraduate

### **ECON 390 – CONTEMPORARY ECONOMIC ISSUES**

3-4 credits.

Topics vary, including current developments in all fields of economics.

**Requisites:** ECON 101 or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. apply economic reasoning to contemporary questions and settings

Audience: Undergraduate

**ECON 400 – INTRODUCTION TO APPLIED ECONOMETRICS**

4 credits.

An introduction to applied econometrics - the statistical methods economists use to evaluate empirical relationships and test economic theory. Emphasis on application of econometrics to real world data using modern statistical software and developing skills needed to understand empirical work in economics.

**Requisites:** ECON 310, (STAT 240 and 340), STAT 302, 303, 311, 324, STAT/MATH 309, or 431. Not open to students with credit for ECON 410.

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Discuss the properties of an ordinary least squares (OLS) estimator for a linear regression model

Audience: Undergraduate

2. Test theories about the true model using formal hypothesis tests

Audience: Undergraduate

3. State the assumptions underpinning OLS, recognize violations of these assumptions, discuss the consequences of such violations, and - where possible - suggest alternative statistical approaches that are more appropriate given the circumstances

Audience: Undergraduate

4. Evaluate the extent to which econometric methods can be used to determine whether a statistical association represents a causal relationship

Audience: Undergraduate

5. Use statistical software to apply these statistical techniques to analyze the relationship between real-world economic variables

Audience: Undergraduate

6. Read and interpret results from applied economics journal articles that employ these statistical techniques

Audience: Undergraduate

**ECON 409 – STUDY ABROAD IN ADVANCED ECONOMICS**

1-4 credits.

Provides an equivalency for advanced level economics courses taken on UW-Madison study abroad programs for which there is no exact UW-Madison equivalent. Course must be of equal rigor to those offered on campus. To receive this equivalent, departmental pre-approval is required.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ECON 410 – INTRODUCTORY ECONOMETRICS**

4 credits.

Statistical methods used in applied economic research. Topics include: survey methods and data sources; multiple regression and analysis of variance; econometric estimation; forecasting and policy applications.

**Requisites:** ECON 310 and (MATH 217 or 221). Not open to students with credit for ECON 400

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Derive an ordinary least squares (OLS) estimator for a linear regression model.

Audience: Undergraduate

2. Test theories about the true model using formal hypothesis tests.

Audience: Undergraduate

3. Evaluate the expected value and variance of an estimator.

Audience: Undergraduate

4. Prove that the OLS estimator is unbiased, BLUE, and consistent.

Audience: Undergraduate

5. State the assumptions underpinning OLS, check for violations of these assumptions, determine the consequences of such violations, and - where possible - suggest alternative statistical approaches that are more appropriate given the circumstances.

Audience: Undergraduate

6. Evaluate the extent to which econometric methods can be used to determine whether a statistical association represents a causal relationship.

Audience: Undergraduate

7. Use statistical software to apply all of these statistical techniques to analyze the relationship between real-world economic variables.

Audience: Undergraduate

**ECON/REAL EST/URB R PL 420 – URBAN AND REGIONAL ECONOMICS**

3 credits.

Focuses on the study of the allocation of scarce resources across space. Uses economic methods to analyze urban real estate. Topics covered include the determinants of real estate values, the location decisions of households and firms, land use, urban growth and agglomeration, real estate pricing, cycles, development, housing market and policies, and sustainable development.

**Requisites:** (ECON 101 or 111) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Explain the economic forces that drive urban growth and regional development.

Audience: Undergraduate

2. Analyze how business and residential location decisions are made and how these decisions impact housing prices, land use, labor market, and many other aspects of cities.

Audience: Undergraduate

3. Apply the spatial equilibrium concepts to urban development and real estate analysis.

Audience: Undergraduate

4. Develop statistical models to assess residential and commercial real estate and perform sensible business and policy analysis.

Audience: Undergraduate

5. Apply the economic decision-making framework to real estate development decisions.

Audience: Undergraduate

6. Demonstrate understanding of cycles, risks and bubbles in residential and commercial real estate markets.

Audience: Undergraduate

7. Evaluate the challenges in economic, social and environmental sustainability in urban development around the world.

Audience: Undergraduate

8. Apply urban and regional economics to real estate business decisions and policy analysis.

Audience: Undergraduate

**ECON/A A E 421 – ECONOMIC DECISION ANALYSIS**

4 credits.

Managerial oriented, applied presentation of microeconomic theory. Quantitative emphasis with extensive homework use of spreadsheets and written executive summaries of applied economic analyses. Applications on natural resources and agricultural markets.

**Requisites:** STAT 301, 371, ECON 310, SOC/C&E SOC 360, PSYCH 210, or (GEN BUS 306 and 307)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Manipulate, organize, and visualize quantitative economic data using computer software.

Audience: Undergraduate

2. Conduct statistical analyses and estimate basic linear regression models of economic data.

Audience: Undergraduate

3. Correctly report and interpret results from statistical analyses in the context of informing economic decisions.

Audience: Undergraduate

4. Set up and solve linear and non-linear programming problems that inform economic decision-making using computer software.

Audience: Undergraduate

5. Integrate uncertainty into the analysis of economic decisions and articulate how uncertainty influences economic behavior.

Audience: Undergraduate

6. Effectively communicate verbally, visually, and in writing the process and results of economic decision analyses.

Audience: Undergraduate

**ECON 435 – THE FINANCIAL SYSTEM**

3 credits.

Banking, credit markets and financial institutions, monetary and debt management policies; relation of national monetary and credit institutions to the international system.

**Requisites:** (ECON 301 or ECON 311) and (ECON 302 or ECON 312) and ECON 330

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Describe key purposes and features of financial markets and institutions.

Audience: Undergraduate

2. Examine and interpret financial and macroeconomic data.

Audience: Undergraduate

3. Interpret the theoretical linkages between the financial sector and the larger macroeconomy

Audience: Undergraduate

**ECON 441 – ANALYTICAL PUBLIC FINANCE**

3-4 credits.

Analyzes the problems of the public sector in dealing with domestic issues of education, urban areas, welfare, natural resources, and the environment; provides students with opportunity to apply the tools of economic analysis that are pertinent to domestic public sector problems.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Evaluate the circumstances under which government intervention in the economy is necessary.

Audience: Undergraduate

2. Analyze the various policy approaches the government employs to intervene in the economy.

Audience: Undergraduate

3. Assess the costs, benefits, and unintended consequences of different policy approaches.

Audience: Undergraduate

4. Compare and contrast the primary sources of public revenue and major expenditure programs at the federal, state, and local levels.

Audience: Undergraduate

5. Critically examine policy debates about social insurance, redistributive programs, and taxation using evidence-based reasoning.

Audience: Undergraduate

**ECON 442 – MACROECONOMIC POLICY**

3-4 credits.

Addresses current issues in modern macroeconomic policymaking. Topics include: fiscal and monetary policy, financial and sovereign debt crisis, and financial regulation.

**Requisites:** (ECON 301 or 311), (ECON 302 or 312), and ECON 310; or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2025

**Learning Outcomes:** 1. Analyze the impact of policy and other factors on macroeconomic outcomes.

Audience: Both Grad & Undergrad

2. Apply models to investigate origins of -- and solutions to -- current macroeconomic problems.

Audience: Both Grad & Undergrad

3. Evaluate empirical evidence in order to differentiate between competing theories of macroeconomic behavior.

Audience: Graduate

**ECON 448 – HUMAN RESOURCES AND ECONOMIC GROWTH**

3-4 credits.

Theoretical and empirical analysis of public and private investment in people, emphasizing the contribution to productivity of education, training, health, and mobility.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**Learning Outcomes:** 1. Describe models of economic growth.

Audience: Undergraduate

2. Discuss the effects of various policy interventions.

Audience: Undergraduate

3. Apply theoretical frameworks to analyze the performance of countries.

Audience: Undergraduate

4. Explain how economic growth interacts with population, education, health, inequality.

Audience: Undergraduate

5. Present data in a useful way.

Audience: Undergraduate

6. Analyze and evaluate countries' experiences.

Audience: Undergraduate

**ECON/ENVIR ST/POLI SCI/URB R PL 449 – GOVERNMENT AND NATURAL RESOURCES**

3-4 credits.

Problems of public policy and administration for development and use of natural resources.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2025

**ECON 450 – WAGES AND THE LABOR MARKET**

3-4 credits.

Economic and institutional forces which determine labor supply and demand; wage theories, wages in the economy, the labor force, unemployment, wages, labor mobility, functioning of labor markets.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Describe and model how workers make labor supply decisions and how firms make labor demand decisions.

Audience: Undergraduate

2. Classify how equilibrium outcomes and policy implications differ by types of labor markets.

Audience: Undergraduate

3. Analyze and critique the presentation of labor-market-related issues in social media, news media, and policy debates.

Audience: Undergraduate

**ECON 455 – BEHAVIORAL ECONOMICS**

3-4 credits.

Empirical evidence documenting departures in human decision making from rational norms, and alternative theoretical approaches to explaining this behavior grounded based upon psychological enrichments of standard rational actor model. Topics include paradox of choice, loss aversion, time inconsistent preferences, and social preferences.

**Requisites:** (ECON 301 or 311) and ECON 310; or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Describe several decision/search heuristics used by economic agents and explain their association with commonly observed cognitive biases

Audience: Both Grad & Undergrad

2. Use economic models to characterize and predict choices made by agents whose preferences diverge from the standard assumptions of rationality.

Audience: Both Grad & Undergrad

3. Apply behavioral economic theories to evaluate real-world decision-making scenarios using case studies and empirical data.

Audience: Both Grad & Undergrad

4. Critically assess the effectiveness of behavioral interventions in influencing decision-making.

Audience: Both Grad & Undergrad

5. Design, describe and/or implement a behavioral intervention aimed at addressing a real-world economic inefficiency, integrating insights from the academic literature.

Audience: Graduate

**ECON 458 – INDUSTRIAL STRUCTURE AND COMPETITIVE STRATEGY**

3 credits.

Analysis of competition among firms and its effect on industrial structure. Theoretical models and case studies are used. Topics include: entry barriers, price competition dynamics, entry and exit strategies, and competitive tactics such as product differentiation, advertising, and technological change.

**Requisites:** ECON 301 or 311**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2026**Learning Outcomes:** 1. Apply game theory to formulate and analyze models of imperfectly competitive markets.

Audience: Undergraduate

2. Analyze case studies to determine major factors influencing the intensity of competition in an industry.

Audience: Undergraduate

**ECON 460 – ECONOMIC FORECASTING**

3-4 credits.

Introduction to econometric time series analysis, forecasting methods, and forecast evaluation. Covers theoretical, methodological, and applied topics, and much of the work will be hands-on data analysis.

**Requisites:** ECON 400, 410, or graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2025**Learning Outcomes:** 1. explain and use linear time-series econometric models

Audience: Both Grad &amp; Undergrad

2. describe and use economic time-series data and data sources

Audience: Both Grad &amp; Undergrad

3. formulate, estimate, and evaluate models for economic forecasting

Audience: Both Grad &amp; Undergrad

4. make point forecasts, interval forecasts and fan charts

Audience: Both Grad &amp; Undergrad

5. select and use conditioning information

Audience: Both Grad &amp; Undergrad

6. use model selection and combination methods

Audience: Both Grad &amp; Undergrad

7. be a "fox" rather than a "hedgehog"

Audience: Both Grad &amp; Undergrad

8. explain, formulate, and use Vector Autoregressive time-series models

Audience: Graduate

9. explain, formulate, and use multivariate time-series forecasting models

Audience: Graduate

**ECON 461 – INTERNATIONAL MACROECONOMICS**

3-4 credits.

International macroeconomics, focusing on the international exchange of financial instruments – currencies, bonds, equities, derivatives, and more – and how decisions and policies made in one country spill over into other markets.

**Requisites:** ECON 302 or 312**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Describe how foreign exchange markets work and use interest and purchasing power parity theories to describe how changes in the economic environment affect exchange rates.

Audience: Undergraduate

2. Connect unbalanced trade in goods to trade in financial assets and understand the link between trade deficits/surpluses and a country's net international investment position.

Audience: Undergraduate

3. Access and analyze data on cross-country asset flows and exchange rates.

Audience: Undergraduate

4. Use economic theory to interpret policies such as the Bretton Woods agreement, the Euro, and Argentina's fixed exchange rate regime.

Audience: Undergraduate

**ECON/A A E/INTL BUS 462 – LATIN AMERICAN ECONOMIC DEVELOPMENT**

3 credits.

A historico-institutional analysis of development problems in the principal Latin American countries, with attention to differentiation of national growth patterns and alternative development strategies.

**Requisites:** A A E 101 (215 prior to Fall 2024), ECON 101, or 111**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**Learning Outcomes:** 1. Demonstrate mastery of the language of international development economics

Audience: Undergraduate

2. Develop proficiency in an array of concepts from primary product exports to conditional cash transfers to migration and remittances to corruption and civil conflict.

Audience: Undergraduate

3. Examine how markets and distinct development strategies and processes provide different opportunities and returns for the rich and the poor, urban and rural, latino and indigenous peoples, large and small countries, and so on.

Audience: Undergraduate

4. Explain the strengths and weaknesses of contending theories of economic development.

Audience: Undergraduate

5. Apply contending theories to markets, state policies, social initiatives, and historical experiences in Latin American countries.

Audience: Undergraduate

**ECON 464 – INTERNATIONAL TRADE**

3-4 credits.

Contemporary theory of International Trade, focusing on why nations trade and what do they trade, and in what sense international trade is beneficial to trading countries. Current policy issues will be examined to demonstrate the usefulness as well as the limitations of the theory.

**Requisites:** ECON 301 or 311. Not open to students with credit for ECON 364.

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Identify the reasons of why countries trade

Audience: Undergraduate

2. Apply economic analysis to evaluate effects of opening to trade on welfare of different groups

Audience: Undergraduate

3. Identify effects of tariffs and other trade policy tools on consumer, producers and the government

Audience: Undergraduate

4. Apply economic analysis to evaluate current and proposed international trade agreements

Audience: Undergraduate

**ECON 465 – THE AMERICAN ECONOMY TO 1865**

3-4 credits.

Survey of the forces underlying American economic development and the distribution of income; rise of regional economies; origins of manufacturing; effects of slavery; influence of government and politics on growth.

**Requisites:** ECON 101 or 111

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**Learning Outcomes:** 1. Discuss the application of fundamental concepts of economics to real-world issues facing the pre-Civil-War United States.

Audience: Undergraduate

2. Evaluate quantitative claims with a focus on “orders of magnitude” and other practical skills.

Audience: Undergraduate

3. Apply a diverse set of strategies in quantitative reasoning.

Audience: Undergraduate

4. Use formal models to analyze and interpret significant historical events.

Audience: Undergraduate

**ECON/HISTORY 466 – THE AMERICAN ECONOMY SINCE 1865**

3-4 credits.

Emergence of the large corporation; growth and instability since the mid-nineteenth century; increasing government participation in the economy; the impact of war, depression, discrimination, and international responsibilities.

**Requisites:** ECON 101 or 111

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**Learning Outcomes:** 1. Describe critical economic events in American history.

Audience: Undergraduate

2. Discuss the application of fundamental concepts of economics to real-world issues facing the post-Civil-War United States.

Audience: Undergraduate

3. Identify the determinants and consequences of historical economic events, and use them to critique current economic issues.

Audience: Undergraduate

4. Evaluate quantitative claims with a focus on “orders of magnitude” and other practical skills.

Audience: Undergraduate

**ECON 467 – INTERNATIONAL INDUSTRIAL ORGANIZATIONS**

3-4 credits.

Focuses on the behavior of international firms and the public policies that affect them. Study theoretical models of strategic competition, evaluate the effects of government policies, review aggregate empirical evidence and learn from case studies.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**Learning Outcomes:** 1. Explain and compare models of competition among firms in international environments

Audience: Undergraduate

2. Extrapolate the effects of various government policies on firms, consumers and government finances

Audience: Undergraduate

3. Apply various theoretical frameworks to understand the behavior of specific firms and governments

Audience: Undergraduate

4. Characterize how economists use data and theory to arrive to specific conclusions

Audience: Undergraduate

**ECON 468 – INDUSTRIAL ORGANIZATION AND IMPERFECT COMPETITION**

3-4 credits.

An overview of the theory of industrial organization, including the study of oligopolistic behavior, monopolistic competition, product differentiation and the dynamic behavior of competitive industries under uncertainty.

**Requisites:** (ECON 301 or 311) and (MATH 217 or 221)

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Describe and model how firms acquire and maintain market power.

Audience: Undergraduate

2. Describe and model how firms exercise market power.

Audience: Undergraduate

3. Describe and model the implications of market power for economic efficiency and social welfare.

Audience: Undergraduate

4. Describe and model when and how a government can intervene to improve outcomes.

Audience: Undergraduate

**ECON/A A E 473 – ECONOMIC GROWTH AND DEVELOPMENT IN SOUTHEAST ASIA**

3 credits.

Evaluates economic development strategies in Southeast Asia and their implications for growth, distribution and environment. Students learn trade and development theory as well as specific knowledge of Southeast Asian economic development.

**Requisites:** A A E 101 (215 prior to Fall 2024), ECON 101, 111, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**Learning Outcomes:** 1. Demonstrate basic economic and statistical literacy relevant to the study of economic development.

Audience: Both Grad & Undergrad

2. Understand basic models of international trade and economic growth.

Audience: Both Grad & Undergrad

3. Demonstrate a working knowledge of available data on the economies of Southeast Asia.

Audience: Both Grad & Undergrad

4. Identify and analyze problems of economic development in Southeast Asia.

Audience: Undergraduate

5. Identify and analyze problems of economic development in Southeast Asia using formal methods of economic theory and evidence.

Audience: Graduate

**ECON/A A E 474 – ECONOMIC PROBLEMS OF DEVELOPING AREAS**

3 credits.

Analyzes aggregate growth, income distribution and poverty in lower income economies. Uses microeconomics of imperfect labor, capital and insurance markets to explore why some individuals advance economically as their economies grow and others fall behind. Considers implications of aggregate and micro analysis for national and international economic policy.

**Requisites:** A A E 101 (215 prior to Fall 2024), ECON 101, or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Demonstrate knowledge of current research in development economics to explain cases and identify areas that policy can influence.

Audience: Undergraduate

2. Calculate basic measures of poverty, inequality and economic development.

Audience: Undergraduate

3. Differentiate empirical methods used to analyze poverty and poverty alleviation.

Audience: Undergraduate

4. Use economic models and empirical methods to evaluate development policy.

Audience: Undergraduate

**ECON 475 – ECONOMICS OF GROWTH**

3-4 credits.

Theoretical analysis of issues in growth and development. Models will be motivated by country experiences. Topics include: factors affecting saving, investment and cross-country differentials on per capita income; the role of government institutions, market regulation, technology and trade.

**Requisites:** (ECON 301 or ECON 311), (ECON 302 or ECON 312) and (MATH 217 or 221); or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Summarize the salient stylized facts about growth and development in the post-World War II global economy.

Audience: Both Grad & Undergrad

2. Use econometric methods to identify the proximate and fundamental sources of economic growth and international income differences.

Audience: Both Grad & Undergrad

3. Use established economic models to analyze the major economic and demographic transitions from pre-industrial stagnation to today's modern growth economy.

Audience: Both Grad & Undergrad

4. Apply the principles of endogenous growth theory to identify and analyze the conditions for sustained long-term growth.

Audience: Both Grad & Undergrad

5. Apply the basic principles of dynamic programming to solve versions of the canonical neoclassical growth model and other dynamic macroeconomic models numerically.

Audience: Graduate

**ECON/A A E 477 – AGRICULTURAL AND ECONOMIC DEVELOPMENT IN AFRICA**

3 credits.

Composition, organization, and techniques of agricultural production; economic change and development of agriculture, economic policies, special problems of developing African agriculture.

**Requisites:** A A E 101 (215 prior to Fall 2024), ECON 101, 111, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Explain the economic problems of African nations including economic history, different sectors of the economy, economic development, and economic growth.

Audience: Both Grad & Undergrad

2. Use empirical evidence to evaluate an economic argument, including interpreting and explaining economic data.

Audience: Both Grad & Undergrad

3. Apply the tools of economic analysis (both theoretical and empirical tools) to evaluate specific policy proposals, especially as they relate to contemporary issues in African development.

Audience: Graduate

4. Communicate effectively in written and graphical form about issues in African development.

Audience: Both Grad & Undergrad

5. Explain the social, economic, and/or environmental dimensions of the sustainability challenges of development of African nations.

Audience: Both Grad & Undergrad

6. Analyze the causes of and solutions for the sustainability challenge of generating agricultural and economic development of African countries.

Audience: Both Grad & Undergrad

**ECON/FINANCE 503 – MARKETS WITH FRICTIONS**

3 credits.

Search theory provides framework for understanding markets and is used to study questions in monetary, public, financial economics. Develop theoretical tools used to introduce frictions in formal models and address the role of frictions in several applied scenarios.

**Requisites:** (FINANCE 305, 325, 330, and ECON/FINANCE 320), (ECON 301, 302, 311, or 312), or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Examine new issues related to frictional markets by looking at old issues in new ways.

Audience: Both Grad & Undergrad

2. Demonstrate economic reasoning about the economy at a micro and macro level by applying the foundations of mainstream economics.

Audience: Both Grad & Undergrad

3. Explain credit market rationing and its impact on markets for housing, small business loans and other investments.

Audience: Both Grad & Undergrad

4. Articulate the contributing factors of bubbles and crashes in asset prices.

Audience: Both Grad & Undergrad

5. Articulate the role of money and banking in the inter-temporal allocation of resources.

Audience: Both Grad & Undergrad

6. Articulate your perspectives on fundamental questions like: Why we use money? What is a bank? How do organizations (like firms or families) form?

Audience: Both Grad & Undergrad

7. Construct and analyze the three generations of money search models and apply this framework appropriately to real-world economic and financial issues.

Audience: Graduate

**ECON 521 – GAME THEORY AND ECONOMIC ANALYSIS**

3-4 credits.

The study of multi-agent, interactive decision problems, with emphasis on questions of coordination, cooperation and conflict. Applications include relations between countries, competition between firms, bargaining between unions and firms, and contests between political candidates.

**Requisites:** (ECON 301 or 311) and MATH 222; or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Discuss the fundamental concepts of game theory and how those concepts apply to real world issues.

Audience: Both Grad & Undergrad

2. Construct and evaluate game theoretic models, including their assumptions and conclusions.

Audience: Both Grad & Undergrad

3. Employ a diverse set of skills and strategies in mathematical reasoning and problem solving.

Audience: Both Grad & Undergrad

4. Use game theoretic techniques to analyze real world situations and policies.

Audience: Both Grad & Undergrad

5. Apply and write about game theory in novel strategic situations.

Audience: Both Grad & Undergrad

6. Read and critique published papers that use game theory.

Audience: Graduate

**ECON 522 – LAW AND ECONOMICS**

3-4 credits.

Economic analysis of legal rules and institutions with emphases on how different areas of law influence individual incentives. Specific topics include: (1) property, (2) contracts, (3) torts, (4) legal procedure and (5) criminal law.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Explain basic features of the Common Law and Civil Law traditions, their origins, their key differences, and some particular legal doctrines.

Audience: Undergraduate

2. Apply basic microeconomic ideas and models to particular legal settings.

Audience: Undergraduate

3. Analyze the effect of a law or aspect of the legal system on behavior, and judge which law will lead to better outcomes in a particular setting.

Audience: Undergraduate

**ECON/PHILOS 524 – PHILOSOPHY AND ECONOMICS**

3 credits.

Economics examined from the viewpoint of the philosophy of science. Normative and positive aspects of economic theory. Deterministic and statistical explanation. Arrow impossibility theorem. Radical economics.

**Requisites:** Sophomore standing and 3 credits of PHILOS or ECON

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2025

**Learning Outcomes:** 1. Describe some of the key philosophical questions within philosophy of economics and the positions that philosophers have defended.

Audience: Undergraduate

2. Critically evaluate the key positions within philosophy of economics.

Audience: Undergraduate

3. Engage in philosophical discussion with an eye for clarity, precision, understanding, and depth.

Audience: Undergraduate

**ECON/A A E 526 – QUANTITATIVE METHODS IN AGRICULTURAL AND APPLIED ECONOMICS**

4 credits.

Use of quantitative methods (mathematics, statistics, and optimization) to analyze problems faced by decision makers in natural resources and agriculture. Extensive homework requiring use of quantitative methods via spreadsheet tools to solve problems from an applied decision context.

**Requisites:** (MATH 211 or 221), ECON 301, and STAT 301, or graduate/professional standing

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2023

**Learning Outcomes:** 1. Develop an understanding of the use of calibrated economic models to study economic policy and the underlying applied price theory.

Audience: Both Grad & Undergrad

2. Gain expertise in the formulation of numerical economic equilibrium models with application to trade, public finance, climate and energy policy applications.

Audience: Both Grad & Undergrad

3. Describe data sources for sectoral and economy-wide policy applications of calibrated economic equilibrium models.

Audience: Both Grad & Undergrad

4. Use GAMS, Excel and other visualization tools to analyze and interpret large, multi-dimensional datasets and models.

Audience: Both Grad & Undergrad

5. Demonstrate competence in writing about economic issues on the basis of evidence-based analysis of economic policy proposals.

Audience: Both Grad & Undergrad

6. Learn equivalent formulations of partial and general economic equilibrium models in primal, dual and complementarity formats.

Audience: Graduate

**ECON/R M I 530 – INSURING LIFE'S RISKS: HEALTH, AGING, AND POLICY**

3 credits.

Covers risks related to health and aging, rationales for social insurance programs to protect against these risks, and costs and benefits of these programs. Broad topics include health insurance, disability insurance, and Social Security and pension policy.

**Requisites:** (ECON 301 or 311) and ECON 310; or graduate/professional standing

**Course Designation:** Breadth - Social Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2025

**Learning Outcomes:** 1. Describe and interpret models of risk and insurance

Audience: Undergraduate

2. Identify and interpret the basic features (and rationales) of major US social insurance programs related to health and aging

Audience: Undergraduate

3. Apply knowledge from Learning Outcomes 1 and 2 to be able to critique and evaluate the merits of recent research articles

Audience: Undergraduate

**ECON/A A E/F&W ECOL 531 – NATURAL RESOURCE ECONOMICS**

3 credits.

Economic concepts and tools relating to management and use of natural resources, including pricing principles, cost-benefit analysis, equity, externalities, economic rent, renewable and nonrenewable resources, and resource policy issues.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Employ appropriate concepts in order to correctly define the economic benefits accrued from different natural resources.

Audience: Both Grad & Undergrad

2. Apply appropriate methodologies and tools to demonstrate the conditions under which the benefits are likely to be captured or dissipated by real world actors.

Audience: Both Grad & Undergrad

3. Explain the social, economic, and/or environmental dimensions of the sustainability challenges of maintaining healthy supplies of forests, biodiversity, fish and wildlife, and freshwater.

Audience: Both Grad & Undergrad

4. Analyze the causes of and solutions for the sustainability challenges of maintaining healthy supplies of forests, biodiversity, fish and wildlife, and freshwater.

Audience: Both Grad & Undergrad

5. Apply academic principles of natural resource economics to a real-world policy problem.

Audience: Graduate

**ECON 535 – EXPERIMENTAL ECONOMICS**

3 credits.

An examination of the use of laboratory or field experiments to examine questions of interest to economists. How to design economic experiments and understand their results. Understanding answers to key questions about economic policy, development economics, learning in uncertain situations, behavior in markets, market design, auctions, finance, altruism and selfishness, bargaining, and many other topics, as well as the processes that produced these answers, using principles from statistical models, survey design, game theory, understanding of incentives, and behavioral economics.

**Requisites:** (ECON 301 or 311) and ECON 310

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Describe what experimental economics is and is not.

Audience: Undergraduate

2. Discuss the fundamental statistical tools and issues relating to experimental methods in economics.

Audience: Undergraduate

3. Design, carry out, and evaluate the results of basic economic experiments using concepts from survey design, applied statistics, game theory, and behavioral economics.

Audience: Undergraduate

4. Explain important economic models, experiments, games, and experimental results in the development and application of experimental economics.

Audience: Undergraduate

**ECON/POP HLTH/PUB AFFR 548 – THE ECONOMICS OF HEALTH CARE**

3-4 credits.

Analysis of the health care industry. Markets for hospitals and physicians' care, markets for health manpower, and the role of health insurance.

**Requisites:** ECON 301, ECON 311, or PUB AFFR 880

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Specify the types of economic decisions health care players make in different markets.

Audience: Both Grad & Undergrad

2. Apply micro economic models and tools to study economic decisions in the healthcare system and understand their implications.

Audience: Both Grad & Undergrad

3. Evaluate empirical evidence from health care literature that involves cost, access, and quality of care considerations for the different health care players.

Audience: Both Grad & Undergrad

4. Describe the basic institutional structure of the US healthcare market and how it compares to markets in other countries.

Audience: Both Grad & Undergrad

5. Identify types of data necessary for testing specific hypotheses involving health care player behavior.

Audience: Graduate

**ECON 570 – FUNDAMENTALS OF DATA ANALYTICS FOR ECONOMISTS**

3-4 credits.

Introduction to the data that underlies quantitative economic analysis. Learn how to formulate a research question, access economic data sources, conduct preliminary and formal analysis, and report findings in a professional manner.

**Requisites:** [ECON 310, (STAT 240 and 340), or (STAT 303 and 333)], and (ECON 301 or 311)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Understand the economist's research process: formulating a question; preliminary and formal analysis; and communicating results.

Audience: Undergraduate

2. Effectively communicate quantitative economic ideas through figures.

Audience: Undergraduate

3. Access and analyze panel datasets, such as the Panel Study of Income Dynamics, and time series datasets, such as the National Income and Product Accounts.

Audience: Undergraduate

4. Use modern tools to effectively manage data and perform analysis.

Audience: Undergraduate

**ECON 580 – HONORS TUTORIAL IN RESEARCH PROJECT DESIGN**

3 credits.

Students will be required to criticize research by others, to draft a research proposal and to complete a project that requires original research.

**Requisites:** (ECON 301 or 311), (ECON 302 or 312), and ECON 410

**Course Designation:** Gen Ed – Communication Part B

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Read, understand, and critically evaluate existing research in economics.

Audience: Undergraduate

2. Conduct original research in economics, including developing economic models and analyzing primary data sources.

Audience: Undergraduate

3. Present their original research and defend their methods and conclusions.

Audience: Undergraduate

4. Write a complete and well-structured economics research paper.

Audience: Undergraduate

**ECON 581 – HONORS THESIS**

3 credits.

Students will work on their honor thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 621 – MARKETS AND MODELS**

3-4 credits.

An investigation into the various ways that markets determine the allocation of scarce resources: via a single market-clearing price, waiting in line or other forms of rationing, search, a centralized matching algorithm, an auction, or a contest. We will examine real-world examples of each type of market, and introduce and solve a formal theoretical model of each to see what insights it leads to.

**Requisites:** (ECON 301 or 311) and (MATH 217 or 221), or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2026**Learning Outcomes:** 1. Explain general principles of why some markets work well (and others do not), and demonstrate why the precise details matter

Audience: Both Grad &amp; Undergrad

2. Discuss details of how particular real-world markets operate

Audience: Both Grad &amp; Undergrad

3. Construct theoretical economic models to match key features of real-world markets, and apply mathematical tools to analyze these models

Audience: Both Grad &amp; Undergrad

4. Understand and explain advanced theoretical results and their proofs; modify and apply these techniques to prove closely-related results

Audience: Graduate

**ECON 623 – POPULATION ECONOMICS**

3-4 credits.

Examination of economic determinants of population change and demographic behavior including household formation, marriage, child bearing and rearing, mortality (especially infant) and key forms of human capital investments including schooling and migration.

**Requisites:** (ECON 301 or 311) and ECON 310; or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2024**Learning Outcomes:** 1. Critically evaluate research published in economics journals and popular or policy publications.

Audience: Both Grad &amp; Undergrad

2. Develop economic arguments and assess evidence in a clear and effective manner.

Audience: Both Grad &amp; Undergrad

3. Think critically about institutions and behavior, and discuss the underlying mechanisms that influence population outcomes.

Audience: Both Grad &amp; Undergrad

4. Identify evidence that may adjudicate between alternate explanations for phenomena.

Audience: Both Grad &amp; Undergrad

5. Discuss differences in cultures, groups, and societies across time and place, and how this affects population outcomes.

Audience: Both Grad &amp; Undergrad

6. Describe how events and processes in one country can affect those in other countries.

Audience: Both Grad &amp; Undergrad

7. Apply economic theory and data to develop policy proposals.

Audience: Graduate

**ECON 661 – ISSUES IN INTERNATIONAL MACROECONOMICS**

3-4 credits.

Examines the macroeconomics of open economies (countries that can trade goods and assets with other countries). Takes a systematic approach to building and examining macroeconomic models of the open economy, to try to understand the determination of output and employment, trade balance, capital flows, the foreign currency exchange rate, international prices, and the role of uncertainty and asset choice.

**Requisites:** (ECON 302 or 312), ECON 310, and (MATH 217 or 221), or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Identify how international economic models help us to understand real world data such as exchange rates, output in open economies and the trade balance (inquiry and analysis)

Audience: Both Grad & Undergrad

2. Build and apply general equilibrium models of the international economy (critical and creative thinking)

Audience: Both Grad & Undergrad

3. Practice mathematical skills through homework and exams (quantitative literacy)

Audience: Both Grad & Undergrad

4. Examine how macroeconomic institutions vary across countries and how those influence macroeconomic outcomes

Audience: Both Grad & Undergrad

5. Program and numerically solve a dynamic economic model

Audience: Graduate

6. Identify a research topic and develop a detailed paper proposal

Audience: Graduate

**ECON 664 – ISSUES IN INTERNATIONAL TRADE**

3-4 credits.

Covers advanced topics in international trade and investment, including foreign direct investment, dynamic models of trade, and models of firm-level heterogeneity.

**Requisites:** ECON 464, 310, and (MATH 217 or 221); or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2024

**Learning Outcomes:** 1. Understand the motives for multinational production: theories of horizontal, vertical, and export platform foreign direct investment.

Audience: Both Grad & Undergrad

2. Evaluate the potential benefits and costs of hosting a multinational corporation.

Audience: Both Grad & Undergrad

3. Access and analyze data on international trade and production.

Audience: Both Grad & Undergrad

4. Apply boundary-of-the-firm theories to determine what factors influence outsourcing decisions.

Audience: Both Grad & Undergrad

5. Demonstrate an understanding of models of investment under uncertainty

Audience: Graduate

6. Write computer programs to solve multinational decision problems and use the models to analyze the ways that optimal behavior depends on parameter values

Audience: Graduate

**ECON 666 – ISSUES IN INTERNATIONAL FINANCE**

3-4 credits.

Modern institutions, history, and controversies of international financial relations. Foreign exchange market, the Euro-currency banking system, and central bank intervention in both.

**Requisites:** (ECON 301 or 311), (ECON 302 or 312), (ECON 310, STAT 302, or 311), and MATH 221; or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ECON/A A E/ENVIR ST/URB R PL 671 – ENERGY ECONOMICS**

3 credits.

The method, application, and limitations of traditional economic approaches to the study of energy problems. Topics include microeconomic foundations of energy demand and supply; optimal pricing and allocation of energy resources; energy market structure, conduct, and performance; macro linkages of energy and the economy; and the economics of regulatory and other public policy approaches to the social control of energy.

**Requisites:** Graduate/professional standing or (senior standing and ECON 101, 111, A A E 101, or 215 prior to Fall 2024)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**Learning Outcomes:** 1. Understand fundamentals of energy sources and technologies.

Audience: Both Grad & Undergrad

2. Be familiar with microeconomic theory with applications to energy industries and markets.

Audience: Both Grad & Undergrad

3. Build analytical skills in economic analysis and be able to apply the economic thinking to historical and contemporary energy-related issues.

Audience: Graduate

4. Analyze the causes of and solutions for the sustainability challenge of affordable and clean energy.

Audience: Both Grad & Undergrad

5. Apply sustainability principles and/or frameworks to addressing the challenge of affordable and clean energy.

Audience: Both Grad & Undergrad

**ECON 681 – SENIOR HONORS THESIS**

3 credits.

Faculty guided honors level original research.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 682 – SENIOR HONORS THESIS**

3 credits.

Faculty guided honors level original research.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 690 – TOPICS IN ECONOMICS**

2-4 credits.

Topics in economic theory and policy.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 691 – SENIOR THESIS**

1-3 credits.

Faculty guided original research.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2024

**ECON 692 – SENIOR THESIS**

1-3 credits.

Faculty guided original research.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2025

**ECON 695 – TOPICS IN ECONOMIC DATA ANALYSIS**

3-4 credits.

Various advanced topics on the use of data to answer important economic questions.

**Requisites:** ECON 310, (STAT 240 and 340), or (STAT 303 and 333)

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. interpret, evaluate and critique empirical economic papers

Audience: Undergraduate

2. use specific economic or econometric methodologies to analyze real data

Audience: Undergraduate

**ECON 698 – DIRECTED STUDY**

1-4 credits.

Study of topics or research at an advanced undergraduate as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ECON 699 – DIRECTED STUDY**

1-4 credits.

Study of topics or research at an advanced undergraduate as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2025**ECON 700 – MATHEMATICS FOR ECONOMISTS**

3 credits.

Mathematical techniques used in economics analysis at a Master level.

Topics include: proof techniques, optimization, introductory topology, functional analysis, linear algebra for microeconomists and differential equations. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 701 – MICROECONOMICS I**

3 credits.

First course in a two-semester sequence covering: consumer theory, producer theory, and markets under partial and general equilibrium, and with externalities or market power. The sequence will include an introduction to decision theory and game theory, and applications to auction theory and partially informed trade. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 702 – MACROECONOMICS I**

3 credits.

A mathematical approach to the study of aggregate output determination, including analysis of consumption, labor markets, economic growth, and business cycles. Analysis of fiscal and monetary policies and their interactions. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 703 – MATHEMATICAL ECONOMICS I**

3-4 credits.

A survey of mathematical techniques used in economic analysis. Linear algebra and optimization techniques are emphasized.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 704 – ECONOMETRICS I**

3 credits.

Econometric methods, theory, and applications. Matrix algebra will be used. Topics include linear regression, least-squares estimation, inference, and hypothesis testing. Primarily for Master's level students. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 705 – ECONOMETRICS II**

3 credits.

Econometric methods, theory, and applications. Topics include instrumental variables, GMM, panel data, limited dependent variables, time series, and vector autoregressions.

**Requisites:** ECON 704**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 706 – ECONOMETRICS III**

3 credits.

Focus on using econometric methods to address empirical questions, conduct empirical research, and write empirical papers in economics.

**Requisites:** ECON 705**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025

**ECON 707 – CAUSAL ESTIMATION IN ECONOMICS**

3 credits.

Most empirical work in economics focuses on estimation of causal effects, including causal effects of an economic policy, a program, or a person's decision. Discussion of the basic causality issue and contemporary methods in econometrics for identifying and estimating causal effects.

**Requisites:** ECON 704**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**Learning Outcomes:** 1. Explain the concept of causality

Audience: Graduate

2. Identify and evaluate empirical methods used in papers in microeconomics that estimate causal effects

Audience: Graduate

3. Evaluate and critique empirical papers estimating causal effects - understand the crucial assumptions behind the results, and judge the consequences of these assumptions on the estimates

Audience: Graduate

**ECON 708 – MICROECONOMICS II**

3 credits.

Second course in a two-semester sequence covering: consumer theory, producer theory, and markets under partial and general equilibrium, and with externalities or market power. The sequence will include an introduction to decision theory and game theory, and applications to auction theory and partially informed trade.

**Requisites:** ECON 701**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 709 – ECONOMIC STATISTICS AND ECONOMETRICS I**

3-4 credits.

Probability distributions, statistical inference; multiple linear regression; introduction to econometric methods. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 710 – ECONOMIC STATISTICS AND ECONOMETRICS II**

3-4 credits.

Extensions of the linear regression model; introduction to multiple equation models.

**Requisites:** ECON 709**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 711 – ECONOMIC THEORY-MICROECONOMICS SEQUENCE**

3 credits.

First course in a two-semester sequence: theories of firms, consumers, and markets; or partial and general equilibria in market and centralized economies; topics in welfare economics. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 712 – ECONOMIC THEORY-MACROECONOMICS SEQUENCE**

3 credits.

First course in a two semester sequence: commodity, money and labor markets, their components and general equilibrium; intertemporal optimization and growth theory. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 713 – ECONOMIC THEORY: MICROECONOMICS SEQUENCE**

3 credits.

Second course in a two-semester sequence: the theory of market, their efficiency properties, externalities, and the role of prices, and an introduction to the economics of information, including moral hazard and adverse selection.

**Requisites:** ECON 711**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 714 – ECONOMIC THEORY; MACROECONOMICS SEQUENCE**

3 credits.

Second course in a two-semester sequence. Topics include: asset pricing; fiscal and monetary policy; mechanism design, estimation and calibration of business cycle models.

**Requisites:** ECON 712**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 715 – ECONOMETRIC METHODS**

3 credits.

Nonlinear econometric theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025

**ECON 716 – ECONOMETRIC METHODS**

3 credits.

Advanced econometric theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**ECON 717 – APPLIED ECONOMETRICS**

3 credits.

Applied cross section and panel methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**ECON 718 – TOPICS IN APPLIED ECONOMETRICS**

3 credits.

Applied time series methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**ECON 721 – FINANCIAL MICROECONOMICS**

3 credits.

The contemporary theory of financial markets, portfolio choice, and asset pricing.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Formulate the classic consumption-based framework and financial equilibrium

Audience: Graduate

2. Derive the predictions for portfolio choice, asset pricing, and social efficiency

Audience: Graduate

3. Recover Fisher prices for YTM of treasury bonds and use these prices to value fixed income assets (bonds, mortgages)

Audience: Graduate

4. Recover Stochastic Discount Factor (SDF) from option prices and value risky assets (stocks, options)

Audience: Graduate

5. Understand the implication of SDF for a risk premium

Audience: Graduate

6. Model financial markets with default and collateral and systemic risk

Audience: Graduate

7. Model thin markets with institutional investors and insider's trading

Audience: Graduate

**ECON 724 – FINANCIAL ECONOMETRICS**

3 credits.

Introduction to econometric analysis of financial time series. Covers linear econometric time series models, multivariate time series, volatility estimation, and estimating and testing financial econometric models.

**Requisites:** ECON 704

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Demonstrate an understanding of the major theories of financial pricing

Audience: Graduate

2. Use the theory of efficient markets to understand asset pricing

Audience: Graduate

3. Use linear time-series econometric models for financial forecasting

Audience: Graduate

4. Use volatility models to identify financial uncertainty

Audience: Graduate

5. Formulate and estimate asset pricing models

Audience: Graduate

6. Work with real financial data sets

Audience: Graduate

7. Build models for portfolio optimization

Audience: Graduate

**ECON 725 – MACHINE LEARNING FOR ECONOMISTS**

3 credits.

Introduction to the use of Machine Learning (ML) in economic analysis. Covers basic techniques of ML, much attention will be devoted to evaluating the use of these tools in economics. Learn how economists are integrating the tools of ML with econometric techniques in current empirical research. Gain hands on experience in using these techniques to answer traditional questions of interest to economists. Topics include (i) an in-depth discussion of the differences and similarities in goals, empirical settings and tools between ML and econometrics, (ii) supervised learning methods for regression and classification, unsupervised learning methods, large data analysis and data mining, (iii) recent methods at the intersection of ML and econometrics, designed for causal inference, optimal policy estimation, estimation of counterfactual effects. The methods are taught with an emphasis on practical application.

**Requisites:** Declared in an Economics graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**Learning Outcomes:** 1. Summarize the basic concepts of machine learning from an economist's perspective, and how these tools complement the econometrics toolkit

Audience: Graduate

2. Classify differences and similarities between econometrics and machine learning

Audience: Graduate

3. Implement new methods at the intersection of machine learning and econometrics that can be used to answer economic questions

Audience: Graduate

4. Apply machine learning to datasets in economics

Audience: Graduate

5. Develop and enhance analytic skills

Audience: Graduate

6. Write functional code in R

Audience: Graduate

**ECON 726 – APPLICATIONS OF MACHINE LEARNING IN ECONOMICS**

3 credits.

Techniques of Machine Learning (ML) and the use of these tools in economics. Exploration of how economists are integrating ML tools with econometric techniques in current empirical research. Hands on experience in using these techniques to answer traditional questions of interest to economists. Topics include (i) an in-depth discussion of the differences and similarities in goals, empirical settings and tools between ML and econometrics, (ii) supervised learning methods for regression and classification, unsupervised learning methods, large data analysis and data mining, (iii) recent methods at the intersection of ML and econometrics, designed for causal inference, optimal policy estimation, estimation of counterfactual effects. The methods are taught with an emphasis on practical application.

**Requisites:** ECON 725**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**Learning Outcomes:** 1. Summarize the basic concepts of machine learning from an economist's perspective, and how these tools complement the econometrics toolkit

Audience: Graduate

2. Apply machine learning methods to real economic data

Audience: Graduate

3. Evaluate the advantages and disadvantages of alternative machine learning algorithms in economic applications

Audience: Graduate

**ECON 730 – INTERNATIONAL FINANCIAL ECONOMICS**

3 credits.

Examines the economics of international financial markets, and how international considerations affect financial economic models. It provides an introduction to foreign exchange markets and risk; it investigates international parity conditions and foreign exchange rate determination; it studies international capital markets; it looks at the basics of international corporate finance; and, it discusses foreign currency derivatives.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**Learning Outcomes:** 1. Identify how international financial models help us to understand real world data such as exchange rates, interest rates, forward rates, and other international financial variables

Audience: Graduate

2. Build and apply general equilibrium models of risk and return in the global economy

Audience: Graduate

3. Practice mathematical skills through homework and exams

Audience: Graduate

4. Examine how financial institutions vary across countries and how those influence outcomes such as systemic risk to the financial system

Audience: Graduate

**ECON/PUB AFFR/URB R PL 734 – REGIONAL ECONOMIC PROBLEM ANALYSIS**

3 credits.

Examination of major theories of regional economic development, with special emphasis upon the evolution and amelioration of regional economic problems. Selected techniques of regional analysis, including economic base multipliers, input/output models, and shift-share analysis are used in the context of setting regional development goals.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**Learning Outcomes:** 1. Explain regional economic theory, empirical justification/application, and relevant impacts of planning in the context of addressing local economic, social, and environmental problems.  
Audience: Graduate

2. Understand the theoretical basis of regional science.

Audience: Graduate

3. Describe and apply basic empirical tools.

Audience: Graduate

4. Explain relevant consequences of regional policies that target economic, social, and environmental change.

Audience: Graduate

**ECON 735 – MONETARY AND FINANCIAL THEORY**

3 credits.

Advanced appraisal of theory and institutions of the financial system, monetary theory, the credit system and financial intermediaries.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON 736 – MACROECONOMIC POLICY**

3 credits.

Theoretical, empirical, and institutional aspects of the use of monetary, fiscal, and income policies to affect inflation, unemployment, and other policy goals.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 741 – THEORY OF PUBLIC FINANCE AND FISCAL POLICY**

3 credits.

Theoretical development of the functions of government in a mixed economy; welfare criteria for efficient government expenditures and taxation; nature of public goods and of redistribution activities of governments. Program budgeting and theoretical issues in cost-benefit analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025**ECON 742 – THEORY OF PUBLIC FINANCE AND FISCAL POLICY**

3 credits.

Incidence of tax burdens and expenditure benefits on relative incomes; effect of taxation on microeconomic decisions relating to work effort, investment, and consumption; analysis of the stabilization, growth, and debt management policies in the context of the economy as a whole; problems in international taxation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**ECON/A A E 747 – FRONTIERS IN AGRICULTURAL ECONOMICS 2**

3 credits.

Organization, design, and performance of food and agricultural markets. Industrial organization; firm boundaries, contracting, and collective action; spatial, temporal, and quality dimensions of market design.

**Requisites:** ECON 709 and 711**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021

**Learning Outcomes:** 1. Describe the general state and history of the American agricultural sector, agricultural policy, and the major subfields of agricultural economics.  
Audience: Graduate

Audience: Graduate

2. Apply and extend economic models in agricultural contexts to evaluate or predict economic behavior or outcomes.

Audience: Graduate

3. Conduct and interpret econometric analyses motivated by economic theory.

Audience: Graduate

4. Synthesize and summarize research in the field of agricultural economics through clear writing.

Audience: Graduate

5. Generate interesting and relevant research questions informed by the economic literature.

Audience: Graduate

**ECON 750 – LABOR ECONOMICS**

3 credits.

Theoretical and empirical analysis of labor markets, labor mobility, the determination of earnings and employment, and labor supply of the household unit; emphasizes recent research on current issues in public policy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**ECON 751 – SURVEY OF INSTITUTIONAL ASPECTS OF LABOR ECONOMICS**

3 credits.

Taught on a modular basis: Labor Theories and Labor History; Union Political Activities; Collective Bargaining and Public Policy. For use in analysis of problems in areas of labor markets, wages and human resources.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**ECON 761 – INDUSTRIAL ORGANIZATION THEORY**

3 credits.

A review of theories of the firm, oligopoly, and imperfect competition. Includes applications of economic theory and game theory to agency theory, product diversity, technological change, and strategic behavior by firms--among other problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**ECON 762 – EMPIRICAL ANALYSIS OF INDUSTRIAL ORGANIZATION AND PUBLIC POLICY**

3 credits.

A study of measurement in industrial organization and a survey of empirical tests of hypotheses in the field. The theory and practice of antitrust is also covered. Each student will produce an original piece of research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**ECON 770 – DATA ANALYTICS FOR ECONOMISTS**

3 credits.

Use core economic datasets such as the Panel Study on Income Dynamics, Consumer Expenditure Survey, National Income and Product Accounts, and the American Community Survey for quantitative economic research.

Learn to clean and manipulate data to create datasets usable for economic research and to implement theory-based and atheoretic econometric models.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Be familiar with core data sets often used in microeconomics, macroeconomics, industrial organization, and finance  
Audience: Graduate

2. Assemble manipulate economic data into datasets that can be used to conduct economic research

Audience: Graduate

3. Recognize the organization of economic data into cross-section, panel, and time series datasets

Audience: Graduate

4. Use python and pandas to efficiently manipulate and analyze economic data

Audience: Graduate

5. Identify the strengths and weaknesses of theory-based and atheoretic econometric models

Audience: Graduate

**ECON 771 – ADVANCES IN ARTIFICIAL INTELLIGENCE FOR ECONOMISTS**

3 credits.

Introduction to the basic concepts of artificial intelligence and its use in economics. Covers general principles and specific economic applications. Discusses implementing these approaches using economic data.

**Requisites:** ECON 725**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Learning Outcomes:** 1. Explain basic Artificial Intelligence methods and how they are commonly applied to economic data

Audience: Graduate

2. Classify differences and similarities between econometrics and AI methods

Audience: Graduate

3. Evaluate advantages and disadvantages of different econometrics and AI methods

Audience: Graduate

4. Apply AI tools and methods to economic data

Audience: Graduate

**ECON/GEN BUS/STAT 775 – BAYESIAN STATISTICS**

3 credits.

Introduces the theory, methods, and computational procedures needed to perform advanced Bayesian data analyses. Predictive and decision-theoretic motivations including subjective probability, risk, admissibility, and exchangeability; highlights key components of Bayesian analysis (i.e., prior, likelihood, posterior, and predictive distributions) within standard parametric models and advanced hierarchical and multilevel models; demonstrates the iterative process of model specification, implementation, criticism, and revision with applied case studies; implements computational techniques (e.g., Markov chain Monte Carlo, variational inference) in modern probabilistic programming languages.

**Requisites:** STAT 609, 610, 611, STAT/MATH 709, ECON 709, POLI SCI 818, or COMP SCI/E C E 761**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2026**Learning Outcomes:** 1. Justify the use of probability for coherent uncertainty quantification

Audience: Graduate

2. Explain how Bayesian updating occurs in conjugate models and hierarchical models

Audience: Graduate

3. Compare and contrast the conceptual and practical benefits and challenges of different posterior approximation strategies like MCMC and variational inference

Audience: Graduate

4. Implement posterior approximation algorithms in modern statistical and probabilistic programming languages such as R or Stan

Audience: Graduate

5. Specify, fit, criticize, and revise Bayesian models in practice

Audience: Graduate

**ECON 805 – ADVANCED MICROECONOMIC THEORY I**

3 credits.

Economic behavior under uncertainty; measure of risk, information structure, stock market and asset pricing, insurance theory, asymmetric information and incentive mechanisms.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2025

**ECON 806 – ADVANCED MICROECONOMIC THEORY II**

3 credits.

General equilibrium analysis existence and computation of fixed points and competitive equilibrium, regular economics, core, non-competitive approach to perfect competition and monopolistic competition.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**ECON 809 – TOPICS IN MICROECONOMIC THEORY**

1-3 credits.

Topics in microeconomic theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2025

**ECON 810 – ADVANCED MACROECONOMIC THEORY**

3 credits.

Topics in macroeconomic research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON/URB R PL 845 – ADVANCED TOPICS IN PUBLIC FINANCE**

1-4 credits.

Advanced public finance problems and literature, research; subject changes each semester; may be repeated. Modules.

**Requisites:** ECON 713 and 714

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**ECON/POP HLTH 848 – HEALTH ECONOMICS**

1-3 credits.

Health economics issues including demand, supply and pricing, market structure, medical malpractice, technological change, value of life, role of insurance, and other aspects of uncertainty.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2024

**Learning Outcomes:** 1. Describe the breadth of themes in health economics, organized under three main topic areas (the production of health; the value of health and health care; and the use of evidence to make decisions in health and healthcare contexts), and to develop appropriate analytical and methodological skills

Audience: Graduate

2. Enhance analytical and writing skills by producing several short papers

Audience: Graduate

3. Enhance scholarly oral presentation skills

Audience: Graduate

**ECON 871 – ADVANCED INTERNATIONAL ECONOMICS**

3 credits.

General equilibrium algebraic and geometric modeling of open economies with balanced trade, and the welfare economics of international exchange and barriers thereto.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**ECON 872 – ADVANCED INTERNATIONAL ECONOMICS**

3 credits.

Algebraic and geometric modeling of open macroeconomics with unbalanced trade and payments, focussing analytically on the foreign exchange market and the determinants of the exchange rate.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2026

**ECON 880 – TOPICS IN COMPUTATIONAL ECONOMICS**

3 credits.

Covers techniques to compute and estimate structural models. Transition from formal Econometrics, Macroeconomics and Theory training to applications.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2025

**Learning Outcomes:** 1. Apply numerical methods to solve dynamic programming problems (including parallel computing)

Audience: Graduate

2. Solve and simulate dynamic equilibrium models with heterogeneous agents to understand such issues as wealth inequality and the firm size distribution

Audience: Graduate

3. Use simulated method of moments to calibrate dynamic models with heterogeneous agents

Audience: Graduate

4. Solve and estimate static and dynamic discrete choice models to understand such issues as demand for differentiated products, residential sorting, investment decisions

Audience: Graduate

5. Solve dynamic Markov games with strategic interactions to understand such issues as strategic investments and the evolution of the firm size distribution

Audience: Graduate

**ECON 899 – RECENT ADVANCES IN ECONOMICS**

1-3 credits.

Selections from all fields of economic research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 901 – WORKSHOP IN MATHEMATICAL ECONOMIC THEORY**

1-7 credits.

First in a two seminar sequence on critical discussion of topics in the field of economic theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 902 – WORKSHOP IN ECONOMIC THEORY**

1-7 credits.

Critical discussion of topics in the field of economic theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 903 – WORKSHOP ON INDUSTRIAL ORGANIZATION**

1-7 credits.

Current research on the operation of markets in which individuals and firms act with imperfect information, are limited in their responses, may purchase heterogeneous commodities or factor services, and are concerned with conflicting goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 904 – WORKSHOP ON INDUSTRIAL ORGANIZATION**

1-7 credits.

Second in a two seminar sequence on current research on the operation of markets in which individuals and firms act with imperfect information, are limited in their responses, may purchase heterogeneous commodities or factor services, and are concerned with conflicting goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 913 – WORKSHOP IN ECONOMETRICS**

1-7 credits.

Current research in econometric model building, estimation and inference in econometrics

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 914 – WORKSHOP IN ECONOMETRICS**

1-7 credits.

Second in a two seminar sequence on current research in econometric model building, estimation and inference in econometrics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON/ANTHRO/C&E SOC/SOC 925 – SEMINAR: SOCIO-ECONOMIC CHANGE IN UNDERDEVELOPED AREAS**

2-3 credits.

Social and economic factors relating to stability, growth, and change in the non-Western areas of the contemporary world.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2025

**ECON 955 – WORKSHOP IN LABOR ECONOMICS**

1-7 credits.

Analysis of current research in wage determination and the functioning of labor markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 956 – WORKSHOP IN LABOR ECONOMICS**

1-7 credits.

Second in a two seminar sequence on the analysis of current research in wage determination and the functioning of labor markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 965 – WORKSHOP ON QUANTITATIVE MACRO-ECONOMIC ANALYSIS**

1-7 credits.

Current research on macroeconomic models, monetary theory and policy, the theory of portfolio selection, and the allocative and distributive performance of capital markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 966 – WORKSHOP ON QUANTITATIVE MACRO-ECONOMIC ANALYSIS**

1-7 credits.

Second in a two seminar sequence on current research on macroeconomic models, monetary theory and policy, the theory of portfolio selection, and the allocative and distributive performance of capital markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 968 – WORKSHOP ON PUBLIC ECONOMICS**

1-7 credits.

Individual research and group discussion of public expenditure programs with attention to investment in human capital, education, training, health information, and welfare programs. Reports on research in progress by students, staff, visiting scholars.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 969 – WORKSHOP ON PUBLIC ECONOMICS**

1-7 credits.

Second in a two seminar sequence on individual research and group discussion of public expenditure programs with attention to investment in human capital, education, training, health information, and welfare programs. Reports on research in progress by students, staff, visiting scholars.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 977 – WORKSHOP IN INTERNATIONAL ECONOMICS**

1-7 credits.

Current research in international trade; a wide range of topics in theory, quantitative analysis, statistics, and policy. For graduate students in their second or later years when working on theses.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025

**ECON 978 – WORKSHOP IN INTERNATIONAL ECONOMICS**

1-7 credits.

Second in a two seminar sequence on the current research in international trade; a wide range of topics in theory, quantitative analysis, statistics, and policy. For graduate students in their second or later years when working on theses.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON/AFRICAN/ANTHRO/GEOG/HISTORY/POLI SCI 983 –  
INTERDEPARTMENTAL SEMINAR IN AFRICAN STUDIES TOPICS**

3 credits.

Interdisciplinary inquiry in African societies and cultures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2025

**Learning Outcomes:** 1. Develop in-depth knowledge in a sub-field of specialization within African studies

Audience: Graduate

2. Acquire and demonstrate understanding of major theories, approaches, concepts, currently informing African studies

Audience: Graduate

3. Understand your process of learning and possess the capacity to intentionally seek, evaluate, and learn from information, and to recognize and reduce bias in thinking.

Audience: Graduate

4. Gain firm knowledge of existing research in African studies

Audience: Graduate

5. Develop and improve speaking, readings, listening, and writing skills

Audience: Graduate

6. Write and speak across disciplinary boundaries

Audience: Graduate

7. Analyze texts from various theoretical and critical perspectives

Audience: Graduate

**ECON 990 – THESIS**

2-9 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2026

**ECON 999 – INDEPENDENT WORK**

2-9 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2025