ECONOMICS

Departmental Guidelines

The purpose of the economics curriculum is to educate students in the nature and uses of economic reasoning. We are an economics department that values diverse theoretical and methodological perspectives on economic analysis and its application. We are cognizant of the importance of the other social and natural sciences, the arts, and the humanities to a more complete understanding of human society. Our curriculum introduces students to a core body of economic knowledge and to research skills, integrating disciplinary education with the liberal arts mission of the university. Economics majors develop the ability to think analytically and creatively about complex economic issues and policy choices facing our global society.

The content of our curriculum is tiered. In introductory courses students learn the basic principles of economics. In intermediate courses students develop their understanding of microeconomic, macroeconomic, and econometric theory. The 200-level electives give students an opportunity early in their careers to use introductory theory to better understand their world. The 400-level electives give students an opportunity to study in depth, a particular field of economics through application of the requisite basic skills, and appropriate theoretical models and empirical methods. These courses primarily focus on national and international concerns, public policies, and controversies in economic theory and policy.

Good economic writing represents good economic thinking. The Economics Department encourages students to cultivate the habits of good economic writing by requiring students to take one elective course that satisfies the department’s writing requirement. Students are expected to use the vocabulary and theories of economics to correctly make cogent evidence-based arguments.

The Department of Economics supports students who globalize their education by completing some portion of their undergraduate education abroad. We encourage students to visit the Off-Campus Study Office to explore their options. If a student studies abroad then: (1) Only one economics course can transfer in to satisfy major requirements. (2) That course must have economics prerequisites. If Economics 101 and Economics 102 are prerequisites, then the course transfers in as a 200-level elective. If the prerequisite is Economics 301 or Economics 302, then it transfers in as a 400-level elective. (3) The course must be an economics course, not a business or similar course. (4) Economics 301, 302, and 307 may not be taken abroad.

Graduates of the Department of Economics seeking immediate employment have been successful in securing interesting and challenging positions in business, government, and non-profit enterprises. The economics curriculum also provides students with the opportunity to prepare themselves for graduate or professional studies in economics, business, public administration, international affairs, law and others.

Faculty

Associate Professor Quentin M. Duroy, Chair

Professors Sohrab Behdad, Theodore Burczak, Timothy Miller; Associate Professors Jessica Bean, Laura Boyd, Quentin Duroy, Xiao Jiang, Fadhel Kaboub, Andrea Ziegert; Assistant Professors Pedro Cadenas, Zarrina Juraquilo, Hyun Woong Park, Luis Villanueva; Visiting Associate Professor David Boyd; Visiting Assistant Professor Katherine Snipes; Visiting Instructor Patrick McGonagle; Academic Administrative Assistant Judy Thompson

View faculty profiles and contact information (https://denison.edu/academics/economics/contacts)

Economics Major

The major must satisfy the following requirements:

Core Requirements

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<th>Code</th>
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<tbody>
<tr>
<td>ECON 101</td>
<td>Introductory Macroeconomics (4 credits)</td>
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<tr>
<td>ECON 102</td>
<td>Introductory Microeconomics (4 credits)</td>
</tr>
<tr>
<td>MATH 130</td>
<td>Essentials of Calculus</td>
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<tr>
<td>or MATH 135</td>
<td>Single Variable Calculus</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Macroeconomic Analysis (4 credits)</td>
</tr>
<tr>
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<td>Intermediate Microeconomic Analysis (4 credits)</td>
</tr>
<tr>
<td>ECON 307</td>
<td>Introductory Econometrics (4 credits)</td>
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Students who want to major in economics should complete the above courses by the end of their junior year.

Advanced Course Requirements

In addition to the above, all students must take at least four additional courses from the Economics 201-440 or 460-470 sequence, up to two of which can be a 200-level course. At least one of these elective courses must satisfy the department’s writing requirement.

Economics with a Financial Economics Concentration

Students interested in the financial sector of the economy and who wish to pursue advanced degrees in business or finance, or a career in the financial sector of the economy, which require knowledge of financial principles and a strong mathematics background, may pursue an Economics major with a Financial Economics concentration. Requirements are fourteen courses distributed as follows:

<table>
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<tr>
<td>ECON 149</td>
<td>Accounting Survey</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introductory Macroeconomics</td>
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<tr>
<td>ECON 429</td>
<td>Financial Economics I</td>
</tr>
<tr>
<td>ECON 430</td>
<td>Financial Economics II</td>
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and two additional Economics electives. At least one elective must be a designated writing course in Economics; Mathematics 135, 145, 225, and 220.

Economics Minor

The Economics minor is meant to provide a basic grounding in economics for students majoring in other fields. It is hoped that students will make a conscious effort to relate the minor to their major field.
Students interested in minoring in economics must take the following courses:

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One of the following three courses:

- ECON 307 Introductory Econometrics
- ECON 401 History of Economic Thought I
- ECON 402 History of Economic Thought II

and one additional course from the Economics 201-440, or 460-470 sequence.

**Additional Points of Interest**

**Philosophy, Politics and Economics**

The Economics Department participates in the PPE (https://catalog.denison.edu/catalog/courses-of-study/philosophy-politics-economics) interdepartmental major.

**Courses**

**ECON 101 - Introductory Macroeconomics (4 Credit Hours)**

An introduction to the study of the economic problem, the nature and method of economics, the operation of markets, and of the aggregate national economy. Develops the basic theories of macroeconomics and applies them to topics of current interest. Explores issues such as: the causes of inflation, unemployment, recessions and depressions; the role of government fiscal and monetary policy in stabilizing the economy; the determinants of long-run economic growth; the long- and short-run effects of taxes, budget deficits, and other government policies on the national economy; and the workings of exchange rates and international trade.

**ECON 102 - Introductory Microeconomics (4 Credit Hours)**

An introduction to the study of the forces of supply and demand that determine prices and the allocation of resources in markets for goods and services, markets for labor and markets for natural resources. The focus is on how and why markets work, why they may fail to work, and the policy implications of both their success and failures. The course focuses on developing the basic tools of microeconomic analysis and then applying those tools to topics of popular or policy interest such as minimum wage legislation, pollution control, competition policy, international trade policy, discrimination, tax policy and the role of government in a market economy.

**Prerequisite(s):** ECON 101.

**ECON 149 - Accounting Survey (4 Credit Hours)**

A survey designed specifically for liberal arts students interested in Business, Economics, Law and Government. The meanings, purpose and function of accounting in business are presented through studying the concepts and theories of accounting. Basic accounting procedures covered in this course include journalizing transactions, posting, trial balances, adjusting entries and preparation of financial statements. Other topics include internal control, inventory methods, depreciation and generally accepted accounting principles. The course focuses on the sole proprietorship, partnership and corporate forms of business organization. Course credit may not be counted toward a major in Economics unless with the finance concentration.

**ECON 199 - Introductory Topics in Economics (1-4 Credit Hours)**

A general category used only in the evaluation of transfer credit.

**ECON 201 - Economic Justice (4 Credit Hours)**

This course investigates the various normative yardsticks that economists use when assessing public policy and the appropriate role for government in the economy. We will be concerned with questions like: What is economic freedom? Are individual property rights absolute? What are the differences, in terms of questions of justice, among slave labor, wage labor, and the work of an independent or cooperative partner? What is a fair distribution of economic resources? Is economic justice fulfilled by any distribution of income and wealth produced by market processes; an equal distribution of income and wealth; or a partially adjusted market distribution? The definitions of economic justice and fairness are perhaps the most controversial questions in political economy, and this course is designed for you to gain some insight into the contending perspectives that economists have advocated. We will examine natural rights theories, the contested meaning of equality of opportunity, and the potential trade-off between economic efficiency and the redistribution of income and wealth. We will examine perspectives ranging from libertarian to socialist.

**Prerequisite(s):** ECON 101 and ECON 102.

**ECON 202 - Economic Growth and Environmental Sustainability (4 Credit Hours)**

Economic growth is traditionally perceived as the solution to the socio-economic ills of poverty, unemployment and more generally underdevelopment. However, economic growth is also accompanied by increased pressure on and, over time, deterioration of the natural environment. The objective of this course is to explore the relationship between economic growth and the natural environment. While the concept of economic growth occupies a central place in economic policymaking, we will discuss whether economic growth is compatible with the sustainable-development worldview adopted by the UN and many other global and local economic actors. Sustainable development emphasizes the need to embark upon a development path that not only takes into account the environmental, social and economic needs of the present generation, but also those of future ones.

**Prerequisite(s):** ECON 101 and ECON 102.
ECON 204 - Income Inequality (4 Credit Hours)
The substantive goal of this course is to facilitate an understanding of changes in the distribution of income in the United States, from 1945 to the present. The first part of the course studies the measurement and context of American income inequality. We will end the first section of the course with an analysis of economic mobility in the US. The second section of the course will look at a variety of explanations for increasing income inequality. We will examine how the key themes of technical change, de-industrialization, immigration and globalization shaped the American economy over the last several decades. The primary focus of the first two sections will be upon income inequalities arising from changes in the ideological, demographic, macroeconomic and institutional context. In addition, we will investigate the impact of these trends on the middle class and different segments of the labor force. Finally, we will discuss why inequality might matter and how the trends discussed in the course could shape America's future and discuss whether and what policy changes might be needed.
Prerequisite(s): ECON 101 and ECON 102.

ECON 240 - General Topics in Intermediate Economics (4 Credit Hours)
These courses will be offered in a variety of applied economic fields.
Prerequisite(s): ECON 101 and ECON 102.

ECON 299 - Intermediate Topics in Economics (1-4 Credit Hours)
A general category used only in the evaluation of transfer credit.

ECON 301 - Intermediate Macroeconomic Analysis (4 Credit Hours)
An examination of the determinants of Gross Domestic Product, the unemployment rate and the price level. The components of aggregate spending consumption, investment, foreign trade and government will be examined to determine their significance for explaining the business cycle. Similarly the financial side of the economy and the role of money will be examined to determine their impact on the business cycle. The purpose of each examination is to understand the factors that move the economy and how fiscal and monetary policy can be used to alter the course of economic trends.
Prerequisite(s): ECON 101 and ECON 102.

ECON 302 - Intermediate Microeconomic Analysis (4 Credit Hours)
An examination of the basic assumptions and methods of analysis employed in microeconomic theory, including demand analysis, production and cost relationships, market structures, distribution theory, general equilibrium and welfare economics. Calculus and mathematical modeling can be used to provide insights not available with the tools of introductory theory.
Prerequisite(s): ECON 101 and ECON 102, and MATH 121 or 130, MATH 123 or 135, or MATH 124 or 145.

ECON 307 - Introductory Econometrics (4 Credit Hours)
An essential activity in any science is the systematic testing of theory against fact. Economics is no exception. This course develops and uses the statistical techniques that are essential for the analysis of economic problems. These techniques allow for testing of hypothesis, estimating magnitudes and prediction.
Prerequisite(s): ECON 302 or concurrently.

ECON 361 - Directed Study (1-4 Credit Hours)
ECON 362 - Directed Study (1-4 Credit Hours)
ECON 363 - Independent Study (1-4 Credit Hours)
ECON 364 - Independent Study (1-4 Credit Hours)
ECON 399 - Advanced Topics in Economics (1-4 Credit Hours)
A general category used only in the evaluation of transfer credit.
ECON 413 - International Finance (4 Credit Hours)
This course is a study of monetary interdependence among nations. The following topics will be explored: foreign exchange markets, international currency systems, national income determination in an open economy, balance of payments accounts and policies for their adjustments, exchange rate adjustments, exchange control, monetary problems of developed and underdeveloped countries, international capital flows.
Prerequisite(s): ECON 301.

ECON 415 - Political Economy of the Middle East (4 Credit Hours)
A study of the general features of the economic development experience of the Middle East and North Africa. We will study the structural transformation of these economies and the dynamics of their colonial and post-colonial structures. This course examines the different stages of economic development starting with the early post-colonial period, followed by the period of import substitution industrialization of the 1960s, export-led growth of the 1970s, the debt crisis of the 1980s, the structural adjustment programs of the 1990s, and the Arab uprisings of 2011. We will examine the political economy of the region as it relates to unemployment, poverty, inequality, migration, food insecurity, water stress, climate change, class conflict, gender dynamics, cultural norms, as well as regional and global geopolitical power struggles over the control of key markets such as oil and natural gas.
Prerequisite(s): ECON 301.
Crosslisting: MENA 415.

ECON 416 - Women in the U.S. Economy (4 Credit Hours)
This course will focus on the market and nonmarket contributions of women to the U.S. economy. A historical framework provides the backdrop for examining the economic, political and social institutions that affect women's contributions to the nation's economic well-being. This course fulfills the Social Sciences distribution requirement for WGST majors/minors.
Prerequisite(s): ECON 301.
Crosslisting: WGST 416.

ECON 417 - The Eurozone: Optimal Currency Area or Incomplete Monetary Union? (4 Credit Hours)
Before 2010, the Eurozone was hailed as the first successful multinational, large-scale model of monetary and currency union. Several countries in many regions of the world (such as South America, the Middle East, West Africa) have been considering following in the steps of the European Union (EU) by creating similar currency areas in the near future. However, the financial crises of the late 2000s followed by the sovereign debt crisis of the 2010s have challenged the perception of the Eurozone has a fully functioning currency area. In this class we will seek to place the creation of the Eurozone in the context of the broader evolution of the EU as a cosmopolitan project. We will examine the socioeconomic theories and political ideologies behind the creation of the Eurozone. This will require an understanding of the macroeconomic models which underlie the concept of optimal currency area and an investigation of the degree to which the Eurozone is a fully completed project. In particular, the solutions provided by EU leaders and institutions to the economic crisis in Greece (and other countries in the Eurozone) will give us a chance to reflect upon the future of the Eurozone and to discuss the intellectual and practical implications of two alternatives that member-states may face as they look towards the future of the EU: 1. the pursuit of further EU integration through the creation of a supranational fiscal and political union or 2. the beginning of a process of political and economic devolution towards smaller scale European projects.
Prerequisite(s): ECON 301.

ECON 418 - Personal Finance (4 Credit Hours)
This course focuses upon the application of economic theory to major issues faced by consumers in our modern economy. The course will combine economic theory, practical skills drawn from finance and Internet search strategies to empower students to make informed and rational decisions. The first half of the course will focus on buying and borrowing. The second half of the course will deal with investing and the risk versus expected reward tradeoff. The goal is not to learn what decisions to make, but rather to understand how economic theory can allow one to make better choices.
Prerequisite(s): ECON 301.

ECON 419 - Advanced Topics in Macroeconomics (4 Credit Hours)
This course will consider advanced topics in macroeconomics, such as investment theory, consumption theory, the theory of economic growth, and dynamic stochastic general equilibrium models. It will apply calculus tools to topics that may have been previously covered in Intermediate Macroeconomics. The course is designed to be a stepping stone to graduate school.
Prerequisite(s): ECON 301 and MATH 121 or 130 or MATH 123 or 135 or MATH 124 or 145.

ECON 421 - Public Finance (4 Credit Hours)
This course examines the economic rationale for government to better understand the role of the public sector in a market economy. The theory and practice of Federal budgeting and taxation is examined to investigate the impact of taxation and government spending on the economy. Topics studied may include social insurance, healthcare finance, welfare and education policy.
Prerequisite(s): ECON 302.

ECON 422 - Industrial Organization and Antitrust Economics (4 Credit Hours)
This course examines corporate decision making as a function of the competitive environment in which the firm operates. In addition to standard market structure theory, we examine a number of business practices including pricing and advertising policy, corporate strategic behavior, and horizontal and vertical mergers and acquisitions. The analysis is often mathematical, with a heavy emphasis on game theory.
Prerequisite(s): ECON 302.

ECON 423 - International Trade (4 Credit Hours)
This course is anchored in the following key questions: 1) What determines the pattern of international trade? 2) What are the effects of foreign trade on the key parameters of a country's social and economic well-being such as growth, employment and income distribution? 3) What is the role of policies in a contemporary globalized economy? The learning objectives of this course are threefold. First, students will learn various analytical tools to study international trade and trade related issues. Second, in addition to factor endowments, students will understand the importance of history, socioeconomic structures, international social and power relations, and international politics in international trade. Third, students will develop the abilities to critically assess some important past and present trade policies.
Prerequisite(s): ECON 302.
ECON 425 - Race and Ethnicity and the U.S. Economy (4 Credit Hours)
Race and ethnicity play important roles in our economy. They serve as social signals, group identities, political factions and community delineations around which the forces of inequality, poverty and growth carve their path. How can we analyze and come to understand the roles that race and ethnicity play in our society? Economics and economic history, along with a diverse set of interdisciplinary tools, allow us to look into the past, at the inception and development of racial and ethnic identities, and further our understanding of the hierarchies of power embedded in the notions of race and ethnicity.
Prerequisite(s): ECON 302 or consent.

ECON 427 - Environmental Economics (4 Credit Hours)
This course provides an examination of various economic issues facing business and government regarding the use of natural resources and the management of environmental quality. Students will develop an understanding of both the economic nature of environmental problems and the economic tools necessary to explore and devise potential policy solutions for environmental problems. In addition, students will examine the institutional framework within which environmental problems exist in order to understand those factors which may mitigate against economic solutions. Crosslisted with ENVS 427.
Prerequisite(s): ECON 302.

ECON 428 - Financial Instability and Economic Crises (4 Credit Hours)
Throughout the history of market economies, financial markets have periodically experienced rapid changes in the prices of financial assets, i.e., booms and crashes. These periods of instability are often connected to rising unemployment, fall in production, and painful economic crises. In spite of this, an influential contingent of economists - sometimes referred to as "free market" economists - continue to argue that all markets are stable and that government regulations are at best unnecessary and at worst counterproductive. This course studies the historical development of the "free market" ideology and explores many of the serious challenges to this ideology that come from both economic theory and economic history.
Prerequisite(s): ECON 302.

ECON 429 - Financial Economics I (4 Credit Hours)
Financial markets play an important role in allocating resources, managing risks and promoting or threatening macroeconomic growth and stability. This course introduces students to the institutional structure and economic reasoning for understanding investment theory and practice, security analysis, and financial intermediation.
Prerequisite(s): ECON 302.

ECON 430 - Financial Economics II (4 Credit Hours)
The goal of this course is to learn the principles associated with the investment, financing and dividend decisions needed to manage organizations, particularly the corporation. The course covers valuations of assets, capital budgeting, cost of capital, capital asset pricing model, capital structure, payout policy, agency problems and corporate governance. Prerequisite ECON 149 and ECON 429.

ECON 431 - Advanced topics in Microeconomics (4 Credit Hours)
This course explores the mathematical foundations of microeconomics. Constrained and unconstrained optimization are employed to generate the results of consumer theory, producer theory and market structure. The course is particularly well suited for those students contemplating graduate study in economics or business.
Prerequisite(s): ECON 302.

ECON 440 - Topical Seminars in Economics (4 Credit Hours)
Open to advanced students, these courses will typically involve the preparation of a research paper and be offered in a variety of applied economic fields.
Prerequisite(s): ECON 301 and/or ECON 302.

ECON 445 - Advanced Theory Seminars (4 Credit Hours)

ECON 451 - Senior Research (4 Credit Hours)
Research in selected topics in Economics.

ECON 452 - Senior Research (4 Credit Hours)
Research in selected topics in Economics.

ECON 461 - Growth, Distribution, and Instability (4 Credit Hours)
This course explores what 18-19th century classical political economists – Adam Smith, Thomas Malthus, David Ricardo and Karl Marx had to say about economic growth, income distribution and macroeconomic instability in a market economy. The unique aspect of this course is that these ideas are presented and analyzed using modern economic tools such as mathematical modeling, computational simulations and statistical analysis. By doing so, we are able to develop new insights on a set of modern economic phenomena such as uneven development, income inequality, business cycles and financial crisis.
Prerequisite(s): ECON 301 and ECON 302.

ECON 462 - Health Economics (4 Credit Hours)
This course develops the basic theories of labor supply and labor demand. Using these theories, we examine the influence that human capital investments, institutional forces, and government policies have on wages and hours worked. A focus of this course will be on empirically testing theoretical models using real-world data.
Prerequisite(s): ECON 307 or ECON 302 and DA 101.

ECON 465 - Forensic Economics (4 Credit Hours)
After an untimely death or a wrenching divorce, forensic economists are often called upon to estimate the economic worth of a human life or a family business. To make such estimations requires that students have a firm understanding of the underlying micro- and macroeconomic aspects of economic theory, of the relevant demographic and economic data that is available, and of the process of calculating net discounted present value. There are generally accepted ways of calculating economic worth, but there are also grey areas where judgments are made. The latter requires a subtle understanding of the issues behind why one assumption may be better than another and its impact on the final value of economic worth. Students will role-play a movie forensic economist who is a member of a well-respected law firm specializing in wrongful death and divorce.
Prerequisite(s): ECON 301 and ECON 302.
ECON 466 - Evolution of the Western Economy (4 Credit Hours)
This course examines the path of economic growth and its consequences in the major Western economies from pre-industrial times through the late nineteenth century. We will spend the first part of the semester exploring the causes and consequences of the Industrial Revolution in Britain, and then conclude with an examination of the integration of the world economy in the late-19th-century wave of globalization. We will examine major historical developments in the structure of the economy and evaluate the related contributions to the economic history literature. The main objectives of the course are to introduce you to the methods and approaches of economic historians, and for you to develop your analytical and critical thinking skills by engaging with some of the major ongoing debates within the field of economic history.
Prerequisite(s): ECON 301 and ECON 302.

ECON 467 - Econometrics II (4 Credit Hours)
Econometrics II builds upon the foundation of Introductory Econometrics. Among its goals are: to expand each student's proficiency in estimating and interpreting economic models, to enhance each student's ability to do economic research, to increase each student's ability to read the research literature and to better prepare those students desiring to go to graduate school in economics.
Prerequisite(s): ECON 307 or ECON 302 and MATH 220.

ECON 468 - Topics in Twentieth Century Economic History (4 Credit Hours)
This course examines major developments in the economic history of the 20th century, with a primary focus on the U.S. and Western Europe. Topics will include the implementation of progressive-era social policy, the Great Depression, and the economic consequences of the two world wars, including the post-WWII economic boom, rise in female labor force participation, and development of European welfare states. The course will be seminar style, reading- and writing-intensive, and the focus will be on how economic historians have interpreted the causes and consequences of the major economic events of the 20th century.
Prerequisite(s): ECON 301 and ECON 302.