Environmental Economics and Policy (ENVECON)

Courses

Expand all course descriptions [+]Collapse all course descriptions [-]

ENVECON C1 Introduction to Environmental Economics and Policy 4 Units

Terms offered: Fall 2024, Summer 2024 8 Week Session, Fall 2023, Fall 2022
Introduction to microeconomics with emphasis on resource, agricultural, and environmental issues.
Introduction to Environmental Economics and Policy: Read More [+]
Rules & Requirements

Prerequisites: Mathematics 32

Credit Restrictions: Students will receive no credit for ECON C3 after completing ECON 1.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Also listed as: ECON C3

Introduction to Environmental Economics and Policy: Read Less [-]

ENVECON 7 Disaster Risk Resilience and Adaptation 3 Units

Terms offered: Spring 2024, Spring 2023
A multidisciplinary approach to the many
natural and human-made disasters facing California and the wider world in the 21
st century, with a focus
on understanding risk; risk reduction; risk governance (linking science and public policy); and
preparedness and resilient recovery. Emphasis on exposure of people, property and systems to natural
hazards, and adaptive capacity to risk vulnerability. Course is 10 weeks long for compatibility with the
quarter system of other UC campuses.
Disaster Risk Resilience and Adaptation: Read More [+]
Hours & Format

Fall and/or spring: 10 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 10 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Zilberman

Disaster Risk Resilience and Adaptation: Read Less [-]

ENVECON 39D Freshman/Sophomore Seminar 1.5 - 4 Units

Terms offered: Fall 2009, Fall 2008
Freshman and sophomore seminars offer lower division students the opportunity to explore an intellectual topic with a faculty member and a group of peers in a small-seminar setting. These seminars are offered in all campus departments; topics vary from department to department and from semester to semester.
Freshman/Sophomore Seminar: Read More [+]
Rules & Requirements

Prerequisites: Priority given to freshmen and sophomores

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1.5-4 hours of seminar per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: The grading option will be decided by the instructor when the class is offered. Final exam required.

Freshman/Sophomore Seminar: Read Less [-]

ENVECON 98 Directed Group Studies (for Lower Division Students) 1 - 3 Units

Terms offered: Spring 2001
Group study (or seminar) of a selected topic or topics in Environmental Economics and Policy.
Directed Group Studies (for Lower Division Students): Read More [+]
Rules & Requirements

Prerequisites: Consent of Instructor

Credit Restrictions: Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-3 hours of directed group study per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Directed Group Studies (for Lower Division Students): Read Less [-]

ENVECON 100 Intermediate Microeconomics with Applications to Sustainability 4 Units

Terms offered: Fall 2024, Summer 2024 8 Week Session, Spring 2024
Covers the basic microeconomic tools for further study of natural resource problems. Theory of consumption, production, theory of the firm, industrial organization, general equilibrium, public goods and externalities. Applications to agriculture and natural resources.
Intermediate Microeconomics with Applications to Sustainability: Read More [+]
Rules & Requirements

Prerequisites: C1 or Economics 1 or C3; and Mathematics 16A and 16B or Math 1A and 1B; or consent of instructor

Credit Restrictions: Students will receive no credit for Environmental Economics 100 after completing Economics 100A, Economics 101A, or Undergraduate Business Administration 110.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructors: Perloff, Wagner

Intermediate Microeconomics with Applications to Sustainability: Read Less [-]

ENVECON C101 Environmental Economics 4 Units

Terms offered: Fall 2024, Spring 2024, Spring 2023
Theories of externalities and public goods applied to pollution and environmental policy. Trade-off between production and environmental amenities. Assessing nonmarket value of environmental amenities. Remediation and clean-up policies. Environment and development. Biodiversity management.
Environmental Economics: Read More [+]
Rules & Requirements

Prerequisites: 100, Mathematics 16A-16B, or Economics 100A or 101A

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Zilberman

Also listed as: ECON C125

Environmental Economics: Read Less [-]

ENVECON C102 Natural Resource Economics 4 Units

Terms offered: Fall 2023, Spring 2023, Fall 2022
Introduction to the economics of natural resources. Land and the concept of economic rent. Models of optimal depletion of nonrenewable resources and optimal use of renewable resources. Application to energy, forests, fisheries, water, and climate change. Resources, growth, and sustainability.
Natural Resource Economics: Read More [+]
Rules & Requirements

Prerequisites: 100, or Economics 100A or 100B

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Sunding

Natural Resource Economics: Read Less [-]

ENVECON 103 Intermediate Microeconomic Theory with Application to Natural Resources 4 Units

Terms offered: Prior to 2007
Covers intermediate microeconomic theory for further study of economic behavior as it relates to agriculture and natural resource problems. Theory of consumption, production, theory of the firm, industrial organization, general equilibrium, public goods and externalities. Applications to agriculture and natural resources.
Intermediate Microeconomic Theory with Application to Natural Resources: Read More [+]
Rules & Requirements

Prerequisites: C1 or Economics 1 or C3 and Mathematics 16A or consent of instructor

Credit Restrictions: Students will receive no credit for Environmental Economics 103 after completing Environmental Economics 100, Economics 100A, Economics 101A, or Undergraduate Business Administration 110.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Ligon

Intermediate Microeconomic Theory with Application to Natural Resources: Read Less [-]

ENVECON 104 The Economics of Sustainable Business and Policy 3 Units

Terms offered: Summer 2024 Second 6 Week Session, Summer 2023 Second 6 Week Session, Summer 2022 Second 6 Week Session
This course examines how private businesses operate in the context created by environmental regulation. It provides an overview of grand environmental challenges, including climate, air pollution, and water quality and scarcity. For each problem, the potential for value creation by private businesses that can help society solve these problems is explained, so that environmental problems can be understood as market opportunities. It provides a series of case studies that examine how the strategic decisions of businesses are shaped by environmental policy, and how businesses act to shape policy to their benefit.
The Economics of Sustainable Business and Policy: Read More [+]
Rules & Requirements

Prerequisites: ENVECON 100, ECON 101 A & B, or the equivalent

Hours & Format

Summer: 6 weeks - 6 hours of lecture and 1.5 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

The Economics of Sustainable Business and Policy: Read Less [-]

ENVECON 105 Data Tools for Sustainability and the Environment 3 Units

Terms offered: Summer 2024 Second 6 Week Session, Summer 2023 Second 6 Week Session, Summer 2022 Second 6 Week Session
This course introduces students to data analysis for use in addressing sustainable business and policy questions. By the end of this course, students will be able to analyze real-world data within the Jupyter/Python programming environment. It will focus on real-world applications such as the White House's environmental justice proposals; emissions monitoring; and assessing plastic waste for the Government of Indonesia.
Data Tools for Sustainability and the Environment: Read More [+]
Hours & Format

Summer: 6 weeks - 6 hours of lecture and 1.5 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Data Tools for Sustainability and the Environment: Read Less [-]

ENVECON C115 Modeling and Management of Biological Resources 4 Units

Terms offered: Fall 2018, Fall 2017, Fall 2015, Fall 2014
Models of population growth, chaos, life tables, and Leslie matrix theory. Harvesting and exploitation theory. Methods for analyzing population interactions, predation, competition. Fisheries, forest stands, and insect pest management. Genetic aspects of population management. Mathematical theory based on simple difference and ordinary differential equations. Use of simulation packages on microcomputers (previous experience with computers not required).
Modeling and Management of Biological Resources: Read More [+]
Rules & Requirements

Prerequisites: A course that includes differential and integral calculus

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Summer: 6 weeks - 6.5 hours of lecture and 4 hours of laboratory per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Getz

Also listed as: ESPM C104

Modeling and Management of Biological Resources: Read Less [-]

ENVECON C118 Introductory Applied Econometrics 4 Units

Terms offered: Fall 2024, Summer 2024 8 Week Session, Spring 2024
Formulation of a research hypothesis and definition of an empirical strategy. Regression analysis with cross-sectional and time-series data; econometric methods for the analysis of qualitative information; hypothesis testing. The techniques of statistical and econometric analysis are developed through applications to a set of case studies and real data in the fields of environmental, resource, and international development economics. Students learn the use of a statistical software for economic data analysis.
Introductory Applied Econometrics: Read More [+]

Rules & Requirements

Prerequisites: Statistics 2, 20, 21, or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Also listed as: IAS C118

Introductory Applied Econometrics: Read Less [-]

ENVECON 131 Globalization and the Natural Environment 3 Units

Terms offered: Fall 2013, Fall 2012, Fall 2011
An examination of the environmental effects of globalization. How has increased international trade, the integration of factor markets, and the adoption of international agreements affected the environment? Case studies include the environmental impact of GATT/WTO and NAFTA. Multi-disciplinary approach examines the actual laws and institutions and the economic theories of globalization, in addition to the empirical evidence of globalization's environmental effects.
Globalization and the Natural Environment: Read More [+]

Rules & Requirements

Prerequisites: Intermediate micro-economic theory or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Karp

Globalization and the Natural Environment: Read Less [-]

ENVECON C132 International Environmental Economics 4 Units

Terms offered: Fall 2023, Fall 2022, Fall 2021
This course studies the following question:How should policymakers and scholars design and analyze environmental policy in a globalized world where much economic activity and pollution crosses political borders? The course addresses issues including climate change, air and water pollution, deforestation, species extinction, and others. The course also analyzes a variety of ways that countries and regions interact, including trade, foreign direct investment, outsourcing, international agreements and treaties, and others. The course also teaches a range of tools used to analyze these issues, including life-cycle(also called environmental footprint) analysis, simple econometrics, environmental market design, non-market valuation, and the data.
International Environmental Economics: Read More [+]

Objectives & Outcomes

Course Objectives: 1. Develop a strong grasp of the main debates and ideas involving international environmental economics

2. Learn to interpret, apply, and critically assess methods used to study international environmental economic issues
3. Build skills in reading basic economic writing involving these issues, including an understanding of their evidence and conclusions, and ability to critically evaluate the basis for these conclusion

Student Learning Outcomes: 1.
A strong grasp of the main scholarly debates and ideas involving international environmental economics

2.
The ability to interpret and critically assess methods used to study international environmental economic issues, including:
life-cycle analysis and input-output tables;
simple econometric estimates;
the design of environmental policy;
non-market valuation;
and the use of remote sensing (satellite) data
The ability to read basic empirical environmental economics papers, understand their evidence and conclusions, and critically evaluate the basis for these conclusions

Rules & Requirements

Prerequisites: ENVECON 100, ECON 101a, ECON 100a or or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Shapiro

Also listed as: ECON C184

International Environmental Economics: Read Less [-]

ENVECON 140AC Economics of Race, Agriculture, and the Environment 3 Units

Terms offered: Fall 2012, Fall 2011, Fall 2010
This course examines whether and how economic processes explain shifting formations of race and differential experiences among racial groups in U.S. agricultural and environmental systems. It approaches economic processes as organizing dynamics of racial differentiation and integration, and uses comparative experience among different racial and ethnic groups as sources of evidence against which economic theories of differentiation and integration can be tested.
Economics of Race, Agriculture, and the Environment: Read More [+]
Rules & Requirements

Prerequisites: 1, or one lower division course in a social science, or consent of instructor

Requirements this course satisfies: Satisfies the American Cultures requirement

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Romm

Economics of Race, Agriculture, and the Environment: Read Less [-]

ENVECON 141 Agricultural and Environmental Policy 4 Units

Terms offered: Spring 2024, Spring 2023, Summer 2022 8 Week Session
This course considers the formation, implementation, and impact of public policies affecting agriculture and the environment. Economic approaches to public lawmaking, including theories of legislation, interest group activity, and congressional control of bureaucracies. Case studies include water allocation, endangered species protection, water quality, food safety, drainage, wetlands, pesticides, and farmworker safety. Emphasis on examples from California.
Agricultural and Environmental Policy: Read More [+]
Rules & Requirements

Prerequisites: 100 or Economics 100A or 101A

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Agricultural and Environmental Policy: Read Less [-]

ENVECON 142 Industrial Organization with Applications to Agriculture and Natural Resources 4 Units

Terms offered: Spring 2015, Spring 2014, Spring 2013
Organization and performance of agricultural and resource markets. Conduct of firms within those markets, such as price competition, product differentiation, predatory pricing, vertical integration, dealer networks and advertising. The role of public policy in the markets. Case studies include oil cartel OPEC, agricultural cooperatives, vertical integration of food processors and franchising of fast-food chains. Discussion sections cover empirical applications of theory presented during lectures for current environmental and agricultural policies.
Industrial Organization with Applications to Agriculture and Natural Resources: Read More [+]
Rules & Requirements

Prerequisites: Environmental Economics and Policy 100 or Economics 100A or 101A

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Villas-Boas

Industrial Organization with Applications to Agriculture and Natural Resources: Read Less [-]

ENVECON 143 Economics of Innovation and Intellectual Property 4 Units

Terms offered: Spring 2023, Spring 2022, Fall 2021
This course addresses the economics of research and incentives for innovation including intellectual property rights. Topics include the standard modern economics of invention; modern intellectual property rights; innovation examples from agriculture, energy, pharmaceuticals, software, and electronics; the roles of the public and private sectors; innovation and market structure; the needs of the poor; and global intellectual property negotiations.
Economics of Innovation and Intellectual Property: Read More [+]
Rules & Requirements

Prerequisites: ENVECON 100 or ECON 100A or ECON 101A with minimum grade of C+

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Wright

Economics of Innovation and Intellectual Property: Read Less [-]

ENVECON 145 Health and Environmental Economic Policy 4 Units

Terms offered: Fall 2021, Fall 2019, Fall 2016
This course introduces students to key issues and findings in the field of health and environmental economics. The first half of the course focuses on the theoreticl and statistical frameworks used to analyze instances of market failure in the provision of health and environmental goods. The second half focuses on policy-relevant empirical findings in the field.
Health and Environmental Economic Policy: Read More [+]
Rules & Requirements

Prerequisites: Intermediate microeconomics, 100, Economics 100 or 101A, and some statistics

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Anderson

Health and Environmental Economic Policy: Read Less [-]

ENVECON 147 The Economics of the Clean Energy Transition 4 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
The most promising path to deep decarbonization involves decarbonizing the electricity sector and then electrifying as much as we can – from transportation to buildings to industrial processes. Thus, the electricity sector has a pivotal role to play in our efforts to mitigate -- and adapt to-- climate change.
The clean energy transition will require not only technological innovation, but also energy market reforms, climate policy interventions, and regulatory innovation to ensure that the process is fair, equitable, and affordable. This course draws from the fields of environmental economics, energy economics, public economics, behavioral economics, and industrial organization to introduce the economic models and concepts that will help
The Economics of the Clean Energy Transition: Read More [+]
Rules & Requirements

Prerequisites: Intermediate microeconomic theory and calculus

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Fowlie

The Economics of the Clean Energy Transition: Read Less [-]

ENVECON C151 Development Economics 4 Units

Terms offered: Fall 2024, Summer 2024 8 Week Session, Fall 2023, Fall 2022
This course covers theory and empirical evidence on the determinants of economic development and the global fight against poverty. The course aims to introduce students to modern empirical research methods that are being used to inform policy making in developing countries. Students also learn how to implement these tools themselves using real-world data sets and widely used statistical software for impact evaluation.
Development Economics: Read More [+]
Rules & Requirements

Prerequisites: EnvEcon 100 or Econ 100A or 101A; Econ 140 or 141 or EnvEcon/IAS C118

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer:
6 weeks - 8 hours of lecture and 2 hours of discussion per week
8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Also listed as: ECON C171

Development Economics: Read Less [-]

ENVECON N151 Economic Development 4 Units

Terms offered: Prior to 2007
Problems of underdevelopment and poverty, policy issues, and development strategy.
Economic Development: Read More [+]
Rules & Requirements

Prerequisites: Envecon 100, Economics 100A or Economics 100B

Credit Restrictions: Students will receive no credit for ENVECON N151 after completing ECON N171, ENVECON C151, or ECON C171.
A deficient grade in ENVECON N151 may be removed by taking ECON N171, ENVECON C151, or ECON C171.

Hours & Format

Summer:
6 weeks - 8 hours of lecture and 2 hours of discussion per week
8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economic Development: Read Less [-]

ENVECON 152 Advanced Topics in Development and International Trade 3 Units

Terms offered: Spring 2020, Spring 2018, Fall 2016
This course discusses recent efforts to understand behavior and institutions in village economies, with particular attention paid to the importance of risk. Economic analysis of savings, consumption, insurance, production, trade, welfare distribution and institutions of villages in developing countries. Roughly equal parts of theory, evidence, and policy.
Advanced Topics in Development and International Trade: Read More [+]
Rules & Requirements

Prerequisites: 100 or Economics 100A

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Magruder

Advanced Topics in Development and International Trade: Read Less [-]

ENVECON 153 Population, Environment, and Development 3 Units

Terms offered: Spring 2024, Spring 2023, Spring 2022
This course takes a quantitative, hands-on approach to understanding the challenges of feeding the human population of the planet Earth. We'll discuss topics of nutrition, subsistence food consumption, and consumer demand for food to develop our understanding of the current situation. We'll then develop both theories and computer models of population dynamics taking into account people's decisions about childbearing, changes in mortality, and changes in food supply in order to learn something about the future of food. Focus throughout the course will be on developing practical tools to work with real-world data.
Population, Environment, and Development: Read More [+]
Rules & Requirements

Prerequisites: ENVECON 100 or ECON 100A or ECON 101A, and STAT C8 or INFO C8 or COMPSCI C8, and MATH 54 RECOMMENDED

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Population, Environment, and Development: Read Less [-]

ENVECON 154 Economics of Poverty and Technology 3 Units

Terms offered: Spring 2014, Spring 2013, Spring 2012
Introduction to the economic framework underlying the use of technology to address rural poverty in developing countries. Analyzes the path of technology development from innovation and design to the adoption and use of technology in rural economies. Focuses on technologies related to agricultural production, processing, market access, value chains, and climate change.
Economics of Poverty and Technology: Read More [+]
Rules & Requirements

Prerequisites: Intermediate microeconomics

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Boettiger

Economics of Poverty and Technology: Read Less [-]

ENVECON 161 Advanced Topics in Environmental and Resource Economics 4 Units

Terms offered: Fall 2013, Fall 2012, Fall 2011
The roots of environmental and resource economics. Theories of land and resource rent. Models of optimal use of renewable and nonrenewable resources with applications to energy and timber. Balancing environmental and extractive values. Resources, growth, and sustainability. Special topic: the problem of global climate change.
Advanced Topics in Environmental and Resource Economics: Read More [+]

Rules & Requirements

Prerequisites: 100 or Economics 100A or Economics 101A; 101 recommended

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Advanced Topics in Environmental and Resource Economics: Read Less [-]

ENVECON 162 Economics of Water Resources 3 Units

Terms offered: Spring 2023, Spring 2022, Spring 2021
Urban demand for water; water supply and economic growth; water utility economics; irrigation demand; large water projects; economic impacts of surface water law and institutions; economics of salinity and drainage; economics of groundwater management.
Economics of Water Resources: Read More [+]

Rules & Requirements

Prerequisites: 100 or Economics 100A or 101A; 101 recommended

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Economics of Water Resources: Read Less [-]

ENVECON 170 Energy and Climate Policy in China 1 Unit

Terms offered: Spring 2024, Spring 2023, Spring 2022
The course will present scholarly review of historical and on-going energy and climate policy topics in China, with a broad goal of gaining understanding the relationship between energy, economic development, and climate change in the largest emerging economy, China.
Energy and Climate Policy in China: Read More [+]

Objectives & Outcomes

Course Objectives: One goal of the course is to give students the tools to read, write about, speak about, and in general critically evaluate empirical research on energy and climate policy in China and in developing economics in general. The lectures and interactions with guest speakers would give student the perspective on the effectiveness of various energy and climate policies in the developing world context, an understanding of the key factors in successful climate policies, so they could apply these lessons learned to develop appropriate energy and climate policies in other developing economies.

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of seminar per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Instructor: Lin

Energy and Climate Policy in China: Read Less [-]

ENVECON C175 The Economics of Climate Change 4 Units

Terms offered: Spring 2016, Fall 2015, Fall 2014, Fall 2013
The course will start with a brief introduction and evaluation of the scientific aspects behind climate change. Economic models will be developed to analyze the impacts of climate change and provide and critique existing and proposed policy tools. Specific topics studied are impacts on water resources and agriculture, economic evaluation of impacts, optimal control of greenhouse gases, benefit cost analysis, international treaty formation, discounting, uncertainty, irreversibility, and extreme events.
The Economics of Climate Change: Read More [+]

Rules & Requirements

Prerequisites: 106, 107, Economics 1, or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 6 weeks - 7.5 hours of lecture and 2.5 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructors: Aufhammer, Fisher

Also listed as: IAS C175

The Economics of Climate Change: Read Less [-]

ENVECON C176 Climate Change Economics 4 Units

Terms offered: Fall 2024, Summer 2024 Second 6 Week Session, Fall 2023
This course is a self-contained introduction to the economics of climate change. Climate change is caused by a large variety of economic activities, and many of its impacts will have economic consequences. Economists have studied climate change for more than two decades, and economic arguments are often powerful in policy decisions. The course will familiarize students with these arguments and equip them with the tools to participate in discussions of climate change policy through an economic lens.
Climate Change Economics: Read More [+]

Objectives & Outcomes

Course Objectives: The course will start with a brief review of the science of climate change, discuss scenarios of economic growth and the greenhouse gas emissions caused by economic activities and investigate various emission reduction opportunities and their economic costs. A significant amount of time will be spent on studying the impacts of climate change, their economic evaluation and how adaptation can lower the costs of climate damages.

We will then study various theoretical frameworks economists have developed that answer the question how estimates about the costs and benefits of climate policy can be combined to find “good” climate policies. We then study three more specialized topics that turn out to be of great importance when analyzing climate change policy: first, how do we compare costs and benefits of generations that live many centuries apart? Second, how do we design climate policy when our projections of both the costs and the benefits of climate policy are highly uncertain? And third, how can equity considerations be accounted for in an economic assessment of climate change policy? The course will close with a look at international cooperation on climate policy and why it has been so difficult to agree on effective treatises that implement climate change policy.

Student Learning Outcomes: Students will also have gained insight into the practical aspects of modeling the economics of climate change by building a simple integrated assessment model in Excel. They will be able to use that model to do simple analysis of climate change policy themselves.
Students will be familiar with the tools economists use to analyze climate change policy. They will have studied empirical estimates of the costs and benefits of climate policy and have an understanding of the analytical issues that drive research on the economics of climate change.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Summer:
6 weeks - 9 hours of lecture and 6 hours of laboratory per week
8 weeks - 6 hours of lecture and 4 hours of laboratory per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Anthoff

Also listed as: ENE,RES C176/IAS C176

Climate Change Economics: Read Less [-]

ENVECON C181 International Trade 4 Units

Terms offered: Fall 2024, Spring 2024, Fall 2023
The theory of international trade and its applications to tariff protection. This course is equivalent to UGBA 118; students will not receive credit for both courses.
International Trade: Read More [+]
Rules & Requirements

Prerequisites: Economics100A-100B or Economics 101A-101B

Credit Restrictions: Students will receive no credit for ECON C181/ENVECON C181 after passing ECON 181, ECON N181 or UGBA 118. A deficient grade in ECON 181, or ECON N181 may be removed by taking ECON C181/ENVECON C181.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

International Trade: Read Less [-]

ENVECON C183 Forest Ecosystem Management 4 Units

Terms offered: Spring 2016, Spring 2015, Spring 2014
Introduces students to concepts and quantitative tools needed for the sustainable management of multi-use forest ecosystems. Topics covered include: estimation of ecological, economic, and social values: construction of dynamic forest models, methods for optimal decision-making, and development of forest management plans. Application to current issues in temperate and tropical forest management are discussed. Quantitative, analytical, and communication skills are emphasized. Oral presentation required.
Forest Ecosystem Management: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 3 hours of laboratory per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Potts

Also listed as: ESPM C183

Forest Ecosystem Management: Read Less [-]

ENVECON 185 The Production and Business of Beer, Wine, and Spirits 2 Units

Terms offered: Fall 2022, Fall 2021, Fall 2020
Raw materials, process flow, production methodology and quality control will be introduced in the first half of the class
for the first half of the semester. Students will also be introduced to basic chemistry and microbiology of fermentation
and distilling. The second half of the semester will be an introduction to finance, cost accounting, sales and marketing for the alcoholic beverage industry. The goal will be to enable the students to write a business plan by the end of the semester.
The Production and Business of Beer, Wine, and Spirits: Read More [+]
Objectives & Outcomes

Course Objectives: 1. Cite detail of raw materials and production processes for beer, wine and spirits.

2. Describe and differentiate the majority of beer styles, wine varietals and various distilled spirits.

3. Write a realistic business plan for a beverage production company.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Instructor: Perloff

The Production and Business of Beer, Wine, and Spirits: Read Less [-]

ENVECON C188 Advanced Topics in International Economics 3 Units

Terms offered: Fall 2024
Globalization and its consequences have interested economists and the public since Adam Smith and David Ricardo. However, the nature of the global economy has changed dramatically over time. Paraphrasing Ricardo's famous example, "it's not wine for cloth anymore." This course will introduce a modern view on international trade focusing on firms as vehicles of trade. We will study key theoretical models of New Trade Theory and apply them to understand the consequences of a range of trade policies from the recent past, such the NAFTA agreement and China's entry to the WTO. We will combine theoretical models, empirical econometric tools, and data to understand the impacts of trade and offshoring on trade flows,aggregate welfare,and inequality
Advanced Topics in International Economics: Read More [+]
Rules & Requirements

Prerequisites: • Microeconomics (Envecon100, Econ100 or Econ101A): required • Econometrics (EnveconC118, Econ140 or Econ141): required but can be taken concurrently • International TradeEnvecon/ EconC181): optional. This course is complementary to C181; a few extra readings will be provided to students who have not taken that class; • Students should have a basic knowledge of calculus (roughly at the level of Mathematics 16A and 16B) and be comfortable understanding mathematical arguments

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Borusyak

Advanced Topics in International Economics: Read Less [-]

ENVECON 195 Senior Thesis 4 Units

Terms offered: Summer 2019, Fall 2017, Fall 2016
Writing of a thesis under the direction of member(s) of the faculty. Subject must be approved by faculty sponsor.
Senior Thesis: Read More [+]
Rules & Requirements

Prerequisites: Senior standing in Environmental Economics and Policy and consent of instructor

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer:
6 weeks - 0 hours of independent study per week
8 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Senior Thesis: Read Less [-]

ENVECON 196 Senior Research Seminar 4 Units

Terms offered: Spring 2011
This course is intended as a capstone experience for undergraduates in the major coordinated by one faculty member with participation by others. Following presentations by faculty on researchable topics in their areas of expertise, students will develop ideas for a research paper and discuss in subsequent seminar sessions. Approximately the last five weeks of the semester will be devoted to student presentations of papers either already completed or in progress, and discussion by seminar participants and faculty.
Senior Research Seminar: Read More [+]
Rules & Requirements

Prerequisites: Student must be a senior with at least a 3.6 GPA in the Environmental Economics and Policy major

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Instructor: Fisher

Senior Research Seminar: Read Less [-]

ENVECON H196 Honors Research 4 Units

Terms offered: Fall 2016, Spring 2016, Fall 2015
Supervised independent honors research specific to aspects of environmental economics and policy, followed by a oral presentation and a written report.
Honors Research: Read More [+]
Rules & Requirements

Prerequisites: Upper division standing. Eligibility restrictions related to GPA and unit accumulation. Open only to Environmental Economics and Policy majors in the College of Natural Resources

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 4 hours of independent study per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Letter grade. Final exam not required.

Honors Research: Read Less [-]

ENVECON 197 Field Study in Environmental Economics and Policy 1 - 4 Units

Terms offered: Fall 2016, Summer 2016 10 Week Session, Spring 2016
Supervised experience in off-campus organizations relevant to specific aspects of environmental economics and policy. Regular individual meetings with faculty sponsor and written reports required.
Field Study in Environmental Economics and Policy: Read More [+]
Rules & Requirements

Prerequisites: Consent of instructor

Credit Restrictions: Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of independent study per week

Summer:
6 weeks - 1-9 hours of independent study per week
8 weeks - 1-7 hours of independent study per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Field Study in Environmental Economics and Policy: Read Less [-]

ENVECON 198 Directed Group Studies for Advanced Undergraduates 1 - 3 Units

Terms offered: Spring 2016, Fall 2015, Spring 2015
Group study of selected topic or topics in Environmental Economics and Policy.
Directed Group Studies for Advanced Undergraduates: Read More [+]
Rules & Requirements

Prerequisites: Consent of instructor

Credit Restrictions: Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-3 hours of directed group study per week

Summer: 8 weeks - 1.5-5.5 hours of directed group study per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Directed Group Studies for Advanced Undergraduates: Read Less [-]

ENVECON 199 Supervised Independent Study and Research 1 - 4 Units

Terms offered: Spring 2023, Fall 2021, Spring 2021
Enrollment restrictions apply. Open to qualified upper division students wishing to pursue special study and directed research under the direction of a member of the staff.
Supervised Independent Study and Research: Read More [+]
Rules & Requirements

Prerequisites: Upper division standing and consent of instructor

Credit Restrictions: Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer: 8 weeks - 1-4 hours of independent study per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Supervised Independent Study and Research: Read Less [-]

ENVECON 199S Sponsored Projects for Undergraduate Research (SPUR) 1 - 4 Units

Terms offered: Not yet offered
The Sponsored Projects for Undergraduate Research (SPUR) program helps students get involved in research projects with world renowned faculty and staff researchers in the Rausser College of Natural Resource
Sponsored Projects for Undergraduate Research (SPUR): Read More [+]
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 3-12 hours of independent study per week

Summer: 12 weeks - 5-18 hours of independent study per week

Additional Details

Subject/Course Level: Environmental Economics and Policy/ Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Alternative to final exam.

Sponsored Projects for Undergraduate Research (SPUR): Read Less [-]