

SUSTAINABILITY STUDIES

Program Overview

Environmental sustainability is clearly a defining issue of the 21st century. Alarming patterns of environmental degradation have emerged since the beginning of the industrial revolution. Creating social, systematic, and commercial structures that reverse this trend by explicitly acknowledging and nurturing the interconnectedness of the natural and human environment is an important challenge facing Rider's graduates. Educators, entrepreneurs, chemists, journalists, psychologists and analysts will all need to understand the ways that our economic, natural and social systems work together to sustain the collective human enterprise.

Concentrating on the interdependence of natural, economic and human systems, the sustainability studies minor helps students explore the complex task of protecting the earth while generating economic welfare and ensuring social justice. Because the minor draws on a network of approaches (social, scientific, economic), students will be equipped to take on increasingly pressing challenges in areas ranging from education and energy, communications and design to ecosystems management, business and government.

The program also provides students with opportunities to get under the hood, exploring what "going green" really means. Coursework is application-intensive. The introductory course will expose students to a wide range of issues, from food to packaging, from natural lands preservation to building sustainable communities. Other coursework complements students exploration of these issues. A broad range of internship and independent study opportunities are available for interested students. The capstone course brings together a team of students to address a real problem on the Rider campus, hopefully making significant changes along the way.

Students in the sustainability studies minor will take six courses (20-21 credits) in environmental and social sciences, ethics and business. Sustainability-related courses that contribute to the minor are offered within many majors. The introductory course is deeply interdisciplinary, drawing on expertise from across the University in the social sciences, business, history, philosophy, ecology, physics and marketing. After this introduction, students are expected to complete an independent study or internship project on or off campus that provides hands-on experience with the complex tasks required to make systems more sustainable. The capstone course draws on the interests and expertise of the enrolled students who together will identify a specific sustainability challenge on the Rider campus and devise, implement, and measure the effects of a plan to address it.

Minor Offered

- Minor in Sustainability Studies

Contact

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Program Website: Sustainability Studies (<http://www.rider.edu/sustainability-studies/>)

Associated Department: Earth & Chemical Science (<https://www.rider.edu/academics/colleges-schools/college-arts-sciences/science-technology-math/faculty-departments/earth-chemical-sciences/>)

Related Programs

- Accounting (<http://catalog.rider.edu/undergraduate/colleges-schools/business-administration/majors-minors-certificates/accounting/>)
- Earth and Environmental Sciences (<http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/earth-environmental-sciences/>)
- Environmental Sciences (<http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/environmental-sciences/>)
- Environmental Studies (<http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/environmental-studies/>)
- Geology (<http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/geology/>)
- Global Supply Chain Management (<http://catalog.rider.edu/undergraduate/colleges-schools/business-administration/majors-minors-certificates/global-supply-chain-management/>)
- Marine Sciences (<http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/marine-sciences/>)
- Political Science (<http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/political-science/>)
- Sociology (<http://catalog.rider.edu/undergraduate/colleges-schools/arts-sciences/majors-minors-certificates/sociology/>)

Sustainability Studies Minor Requirements

(20-21 credits)

Code	Title	Credits
Foundation Courses ¹		14
SUS 100	Introduction to Sustainability Studies	
ENV 100	Introduction to Environmental Sciences	
PHL 215	Environmental Ethics	
GSC 115	Introduction to Global Supply Chain Mgt.	
Disciplinary Explorations ²		3-4
Select one of the following:		
AMS 304	Technology and Science in America	
BHP 259	Honors Seminar: The Environment: a Conflict of Interest	
BIO 350	General Ecology	
ENG 218	Literature and the Environment	
ENG 318	Food Writing	
ENG 322	Grant Proposals, Fundraising and Development	
ENV 200	Statistical and Computer Applications in the Natural Sciences	
ENV 205	Introduction to Geographic Information Systems	
ENV 220	Weather and Climate Change	
HIS 224	American Environmental History	
POL 215	Global Politics	
POL 328	Environmental Politics	

POL 329	Comparative Environmental Policy	
POL 330	Geopolitics of Energy	
SOC 225	Population Study	
SOC 340	Power and Politics	
SOC 350	Social Policy	
Experiential Learning³		3
SUS 490	Independent Study: Research and Creative Expression	
SUS 491	Internship in Sustainability	
Total Credits		20-21

1

PHL 202 or PHL 360 may be substituted with permission of the chair.

2

Or other special topics courses as reviewed by a quorum of the GEMS faculty.

3

Students must earn 3 credits total from SUS 490, SUS 491, or a combination of these two courses. SUS 491 may only be taken twice.

Courses and Descriptions

SUS 100 Introduction to Sustainability Studies 4 Credits

Sustainability is an idea that will shape the lives of all in the 21st century. Students will explore how we arrived at our current precarious environmental situation and investigate cutting-edge methods that support human development and protect the natural ecosystems on which we will depend. By exploring principles of sustainability (whole-systems approaches, resource limitations, stewardship) through many different lenses, students will appreciate the interdisciplinarity of the sustainability enterprise. This course counts towards the fulfillment of the Disciplinary Perspectives element of the CLAS general education curriculum.

Corequisite(s): SUS 100L.

SUS 100L Intro to Sustainability Lab 0 Credits

For students concurrently taking SUS 100. Field trips, visiting speakers, and films to complement topics covered in the introductory course. One three-hour laboratory per week.

Corequisite(s): SUS 100.

ENV 100 Introduction to Environmental Sciences 4 Credits

Examines how ecosystems function, with emphasis on the interactions between biological organisms and their physical environment, and the chemical processes that govern these interactions. The impact of human populations on natural ecosystems is investigated in detail using case studies from history and current events. The laboratory provides for hands-on experiences and/or short field trips to local sites for a better understanding of many of the concepts discussed. Weekday and weekend field trips may be required. Three hours of lecture and one three-hour lab per week. CLAS general education areas addressed: DP, SP, GP.

Corequisite(s): ENV 100L.

ENV 100L Introduction to Environmental Sciences Lab 0 Credits

This lab is a co-requisite and must be taken with the corresponding course.

Corequisite(s): ENV 100.

GSC 115 Introduction to Global Supply Chain Mgt. 3 Credits

This course introduces students to components of global supply chains and issues of managing the global supply chain. It is designed as a survey course to give first or second year business students a general view of supply chain management at both domestic and international levels, as well as familiarize them with basic concepts and major challenges of supply chain management. Delivery of course material will include lectures and guest speakers from industry, and in-class logistics mini cases.

PHL 215 Environmental Ethics 3 Credits

A comprehensive introduction to environmental ethics that examines the major theoretical approaches, including anthropocentric (human-centered), zoocentric or sentientist (animal-centered), and biocentric or ecocentric (nature-centered) value systems, as well as the most important critiques of these ethical approaches. We will examine and analyze several classical ethical theories that are particularly relevant to a study of contemporary environmental controversies. We will also address specific issues such as biodiversity and wilderness preservation; human use of animals as food, entertainment, and research subjects; environmental racism and toxic dumping; sustainable development, population and consumption. Students will analyze and discuss the ethical dimensions of several contemporary environmental controversies. This course counts towards the fulfillment of the Disciplinary Perspectives element of the CLAS general education curriculum.

SUS 490 Independent Study: Research and Creative Expression 1-4 Credits

Immerses the student in applying sustainability principles in a field setting. Students are expected to assess the outcomes of their projects and communicate their results verbally and in writing to interested audiences.

SUS 491 Internship in Sustainability 1-4 Credits

A supervised work/service experience in an approved organization where students gain understanding and experience with applying sustainability principles. Placements may be in private, public, educational, non-profit or governmental organizations. Students are expected to include measurement and documentation of the environmental, social, and economic impact of their work. A minimum of 50 hours of work is required for one credit. At least 150 hours are required to earn 3 credits.