

# SUSTAINABILITY MINOR

The Sustainability Minor provides an interdisciplinary perspective on finding sustainable solutions to social and environmental problems. Sustainability is a discipline that combines leadership, environmental and social sciences, economics, social justice, and ethics to promote global well-being, meeting the needs of today without compromising the ability of future generations to meet their needs.

This minor is recommended for students who are developing expertise in other areas who would like to apply those skills in a “green” career, and students with a strong personal interest in sustainability.

Many courses in the minor are also BACRs, and electives that are compatible with a wide variety of majors. SUST 371 serves as a culminating experience providing practice in developing unique sustainability solutions.

## Required Courses

SUST 100	CONCEPTS IN SUSTAINABILITY	4
SUST 371	EWU CAMPUS SUSTAINABILITY	3
or SUST 395	INTERNSHIP	
or SUST 399	DIRECTED STUDY	
or SUST 495	INTERNSHIP	
or SUST 499	DIRECTED STUDY	
<b>Choose one of the following</b>		<b>5</b>
CHEM/SUST 141	SUSTAINABLE CHEMISTRY	
GEOS 113	THE EARTH'S CLIMATE AND WEATHER	
GEOS 204	HOT EARTH: PEOPLE AND CLIMATE CHANGE	
PHYS 110	ENERGY, SOCIETY AND THE ENVIRONMENT	
<b>Choose one of the following</b>		<b>5</b>
ANTR/DSST/ GWSS 266	GENDER, HEALTH AND MARGINALIZATION	
PHED 202	INTRODUCTION TO HEALTH, WELLNESS AND SUSTAINABLE LIVING	
PLAN 100	THE CITY	
SUST/GEOS 235	ENERGY/WATER NEXUS	
<b>Required Elective—choose one upper-division elective—highly relevant to Sustainability—with the approval of a Sustainability faculty advisor.</b>		<b>3</b>
<b>Total Credits</b>		<b>20</b>

## Sustainability Courses

### SUST 100. CONCEPTS IN SUSTAINABILITY. 4 Credits.

**Satisfies:** a BACR for natural science.

This course introduces sustainability emphasizing ecosystems; environmental justice; and sustainable energy, food, water, and transportation systems. We will examine scientific processes in sustainability, introduce techniques for quantifying impacts, and learn to evaluate the scientific basis for sustainability claims.

### SUST 120. SUSTAINABILITY AS A COLLABORATIVE EXPERIENCE. 1 Credit.

This course focuses on immersing students in sustainability issues at the urban-wildland interface in the Spokane region and to build student community through a two-day outdoor experience.

### SUST 139. SPECIAL TOPICS IN SUSTAINABILITY. 2 Credits.

**Notes:** may be repeated with permission of advisor.

This course provides participants with an opportunity to evaluate their values surrounding topics in sustainability, and to learn ways to connect their values with their actions. Each term, a single topic will be explored through a mix of lectures, speakers, readings and film, or through a singular medium as determined by the instructor. Instructors for this course will rotate through discipline area expertise across the campus community and include relevant topics.

### SUST 141. SUSTAINABLE CHEMISTRY. 5 Credits.

**Cross-listed:** CHEM 141.

**Pre-requisites:** MTHD 104 with a grade  $\geq$ C, or concurrent enrollment in MATH 114.

**Satisfies:** a BACR for natural science.

This course is an introduction to environmental chemistry, which looks at sustainability on an atomic level, tackling issues such as ocean acidification, climate change, and energy issues. Emphasis will focus on how chemistry can help us understand, approach and solve contemporary environmental problems.

### SUST 235. ENERGY/WATER NEXUS. 4 Credits.

**Cross-listed:** GEOS 235.

**Satisfies:** a BACR for social sciences.

Energy and water are intrinsically linked. Each is needed to extract, harness, and transport the other and modern society demands that both are readily available. This class will review water availability, use, classifications and spatiotemporal considerations. Students will learn about the history and current state of technology of energy systems. The water energy nexus and how it prevails in different systems will be discussed throughout the course.

### SUST 300. WRITING FOR THE PROFESSIONS. 5 Credits.

**Cross-listed:** ENGL 300, TCOM 300.

**Pre-requisites:** ENGL 201.

This course focuses on analyzing and creating effective communication practices for professional writing. Communication projects such as proposing new research projects, creating and integrating data graphics into professional reports, and reporting data to recommend problem-based solutions through reports and presentations will be emphasized in this course.

### SUST 336. GLOBAL CLIMATE CHANGE. 4 Credits.

**Pre-requisites:** MTHD 104 and any college-level PHYS or CHEM course.

This course focuses on the underlying science of climate change, greenhouse gas monitoring policies and protocols, and the use of current best practice methods to monitor greenhouse gas emissions in proposed and existing systems.

### SUST 371. EWU CAMPUS SUSTAINABILITY. 3 Credits.

**Pre-requisites:** SUST 100 and junior or above status, or permission of the instructor.

Using EWU as a living laboratory, students will learn how to develop proposals that seek to improve the sustainability of an organization's operations. Students will work with EWU staff and faculty to identify issues and opportunities to improve campus sustainability. Using this information students will design and draft detailed proposals for sustainability focused improvement projects. At the end of the quarter students will present these proposals to campus stakeholders.

**SUST 395. INTERNSHIP. 1-5 Credits.**

Internship.

**SUST 399. DIRECTED STUDY. 1-5 Credits.**

**Pre-requisites:** permission of the instructor, department chair and college dean.

Directed study.

**SUST 435. LAND USE AND NATURAL RESOURCE MANAGEMENT. 4 Credits.**

**Pre-requisites:** junior standing.

This course describes and applies the tools and techniques of environmental land use planning and management, representing the integration of environmental research with the spatial analysis of complex data sets around land use management and decision-making.

**SUST 470. SUSTAINABILITY PROJECT DEVELOPMENT I: RESEARCH, PROSPECTUS AND LEADERSHIP. 5 Credits.**

**Pre-requisites:** SUST 371.

The first in a three course series, wherein the advanced student of sustainability synthesizes interdisciplinary scholarship with community-focused, practical application. Working collaboratively with the instructor and community partner organizations, student-groups will relate the theories and methods of sustainability in the built, natural and social environments toward the resolution of unsustainable practices in public infrastructure, policies or institutions.

**SUST 480. SUSTAINABILITY PROJECT DEVELOPMENT II: FIELD WORK, DATA COLLECTION AND ANALYSIS. 5 Credits.**

**Pre-requisites:** SUST 470.

The second in a three course series, wherein the advanced student of sustainability synthesizes interdisciplinary scholarship with community-focused, practical application. Working collaboratively with the instructor and community partner organizations, student-groups will relate the theories and methods of sustainability in the built, natural, and social environments toward the resolution of unsustainable practices in public infrastructure, policies or institutions.

**SUST 490. SUSTAINABILITY SENIOR CAPSTONE. 5 Credits.**

**Pre-requisites:** SUST 480.

The capstone is the third in the three course series, wherein the advanced student of sustainability synthesizes interdisciplinary scholarship with community-focused, practical application. Working collaboratively with the instructor and community partner organizations, student-groups will relate the theories and methods of sustainability in the built, natural, and social environments toward the resolution of unsustainable practices in public infrastructure, policies or institutions.

**SUST 495. INTERNSHIP. 1-5 Credits.**

Internship.

**SUST 499. DIRECTED STUDY. 1-5 Credits.**

**Pre-requisites:** permission of the instructor, department chair and college dean.

Directed study.

**Students who earn a Sustainability minor from EWU should be able to:**

- demonstrate a personal and interdisciplinary perspective on sustainability and its application to problem solving;
- demonstrate competence in evidence-based decision making;
- experience scientific foundations of sustainability;
- experience social foundations of sustainability;
- use leadership and communication skills to effectively advocate for change within diverse communities.