

# SUSTAINABILITY (SUS)

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## SUS 102, \*INTRODUCTION TO ENVIRONMENTAL SCIENCE AND SUSTAINABILITY, 4 Credits

An introduction to the science behind critical environmental issues and the biological basis of creating and maintaining sustainable ecosystems. Focus on such questions as: how do we decide what to believe about environmental issues? How do we quantify, restore, and value biodiversity? What is valid science in the global warming debate? Lec/lab. (Bacc Core Course)

**Attributes:** CPBS – Core, Pers, Biological Science

**Equivalent to:** SOIL 102

*Available via Ecampus*

## SUS 103, \*INTRODUCTION TO CLIMATE CHANGE, 4 Credits

An introduction to the principles of climate change science with an emphasis on the empirical evidence for climate change. Students will learn critical thinking skills to assess such questions as: How do we determine the processes controlling global warming? How do we predict trends in climate change? How do we calculate and understand uncertainty in these predictions? What is valid science in the global warming debate? Lec/lab. (Bacc Core Course)

**Attributes:** CPPS – Core, Pers, Physical Science

*Available via Ecampus*

## SUS 304, \*SUSTAINABILITY ASSESSMENT, 4 Credits

Explores theories and application of sustainability assessment techniques and analysis methods. Practical application of globally recognized assessment protocol, including checklists, footprinting, life-cycle analysis and the indicators used to conduct these analyses. Emphasis on ecological and social indicators, although economic indicators are explored. (Bacc Core Course)

**Attributes:** CSST – Core, Synthesis, Science/Technology/Society

*Available via Ecampus*

## SUS 325, ^AG AND ENVIRONMENTAL PREDICAMENTS: A CASE STUDY APPROACH, 3 Credits

Analyze controversial agricultural and environmental issues, synthesize information from diverse sources, and apply scientific knowledge to recommend specific courses of action to solve real world problems. Develop oral and written communication skills through individual and group work. CROSSLISTED as CROP 325/SOIL 325/SUS 325. (Writing Intensive Course)

**Attributes:** CWIC – Core, Skills, WIC

**Equivalent to:** CROP 325, SOIL 325

## SUS 331, \*SUSTAINABILITY, JUSTICE, AND ENGAGEMENT, 3 Credits

Many sustainability crises are local, and the people most impacted tend to be groups already experiencing difference, lack of power, and discrimination. Transformational responses led by those most affected will be examined – responses that address the environmental problem while also building social and economic power for those affected. The tools and tactics used to achieve positive changes will be analyzed.

(Bacc Core Course)

**Attributes:** CPDP – Core, Perspective, Difference/Power/Discrimination

**Equivalent to:** SUS 331H

*Available via Ecampus*

## SUS 331H, \*SUSTAINABILITY, JUSTICE, AND ENGAGEMENT, 3 Credits

Many sustainability crises are local, and the people most impacted tend to be groups already experiencing difference, lack of power, and discrimination. Transformational responses led by those most affected will be examined – responses that address the environmental problem while also building social and economic power for those affected. The tools and tactics used to achieve positive changes will be analyzed.

(Bacc Core Course)

**Attributes:** CPDP – Core, Perspective, Difference/Power/Discrimination; HNRS – Honors Course Designator

**Equivalent to:** SUS 331

## SUS 350, \*SUSTAINABLE COMMUNITIES, 4 Credits

Introduction to the concept of sustainable communities from a multidisciplinary perspective. Instructors from a broad array of disciplines and professions. Development of holistic thinking skills and innovative solutions to complex problems. (Bacc Core Course)

**Attributes:** CSGI – Core, Synth, Global Issues

**Equivalent to:** NR 350

*Available via Ecampus*

## SUS 401, RESEARCH, 1-16 Credits

*This course is repeatable for 16 credits.*

*Available via Ecampus*

## SUS 410, INTERNSHIP, 1-16 Credits

*This course is repeatable for 16 credits.*

*Available via Ecampus*

## SUS 420, SOCIAL DIMENSIONS OF SUSTAINABILITY, 3 Credits

Focuses on the social aspects of sustainability, including how the environment, the economy, social life interact to create the world we live in. Explores how social institutions (school, government, business, family) contribute to sustainability and promote or discourage social and environmental justice at local and global scales. Also offered at OSU-Cascades and via Ecampus.

*Available via Ecampus*

## SUS 499, SPECIAL TOPICS, 1-16 Credits

*This course is repeatable for 16 credits.*

## **SUS 512, TOPICS IN THE SCIENCE OF SUSTAINABILITY, 4 Credits**

Provides a graduate-level introduction to key concepts and issues in environmental science and sustainability, targeted at business-oriented graduate and post-bacc students who do not have a science background. The course is a core requirement of the Sustainable Business certificate program offered jointly by the College of Business (COB) and the College of Agricultural Sciences' (CAS) Sustainability Double-Degree (SDD) Program.

## **SUS 514, SUSTAINABILITY PLANNING AND ASSESSMENT, 4 Credits**

Sustainability is fundamentally about balancing social, economic and ecological systems. This course examines a range of different methodologies for measuring and evaluating performance towards established sustainability criteria and indicators. Students will critically evaluate tools for making sustainable decisions and understand the limitations of individual assessment approaches in different contexts. Specific assessment techniques to be explored include ecological footprinting, sustainable community indicators, greenhouse gas emissions inventories, sustainability checklists, environmental management systems (ISO standards), life-cycle analysis, and business sustainability reporting. Students will leave the course with the fundamental skills required to complete sustainability assessments via globally relevant approaches.

## **SUS 599, SPECIAL TOPICS, 0-16 Credits**

*This course is repeatable for 16 credits.*