

Landscape Ecology: Concepts, Issues, and Interrelationships

Landscape Architecture Dept., Cal Poly-SLO

Instructor: Cathy Corlett

CATALOG DESCRIPTION

This introductory course will present students with a range of concepts and materials related to environmental planning and ecological awareness. It will be structured to emphasize issues such as landscape sustainability, land health, environmental protection, and natural resource management.

A. LEARNING OUTCOMES

The course will explore a range of ecological concerns at different scales and resolutions using case studies as guides for developing actual site-related projects. Additionally, discussions and student projects will be developed concerning the role of humans in the environment, and the associated responsibilities toward land stewardship. This course is to be co-taught by the Landscape Architecture and Biology Departments.

The course will introduce environmental parameters with recognized community/regional concerns, and will require each student to investigate issues of environmental awareness in the context of their personal ethical approach. Students will be expected to meet the following learning objectives:

- Comprehend consequences of proposed design and planning statements, within the context of the site and region
- Define and interpret terminology, related vocabulary, and personalities of natural sciences and cultural systems
- Identify and comprehend basic natural science theories and principles
- Define principles of sustainability
- Distinguish between sustainable and non-sustainable actions
- Understand the concept of a *land ethic*.

B. COURSE CONTENT

Landscape ecology: Concepts, Issues, and Interrelationships is a lecture course, supported by readings and written assignments. The primary mode of instruction will be lectures and group discussions, with the entire enrolled student group taking part in these activities. Videos and guest lectures will complement lectures by the instructor(s).

More informal course instruction using field trips, and outside or off campus experiences may also be employed to reinforce certain ecological concepts presented during lectures. The course may also develop a community service component, reviewing regional issues with environmental concerns, and then development projects that explore alternative problems and solutions.

Course content areas will include, but will not be limited to the following topics in this representative sample of the ten week course schedule:

- Weeks 1 and 2: Introduction and overview: landscape, sustainability, and environmental systems
- Week 3: Environmental ethics
- Weeks 3 and 4: Ecological restoration and preservation
- Weeks 5 and 6: Natural rights – balancing community growth and ecological health
- Weeks 7 and 8: Environmental management
- Weeks 9 and 10: New technologies in environmental design and sustainable technologies

C. ASSESSMENT METHODOLOGIES

The main mode of summative course assessment could include tests and quizzes, plus individual and group projects and writing assignments. These assessments will be structured to test each student’s knowledge of previously learned concepts.

<i>Learning Objective</i>	<i>Assessment</i>
Comprehend consequences of proposed design and planning statements, within the context of the site and region.	Test, quiz, written assignment, site-related project, and/or case studies.
Define and interpret terminology, related vocabulary, and personalities of natural sciences and cultural systems.	Test, quiz, and/or written assignment.
Identify and comprehend basic natural science theories and principles.	Test, quiz, and/or written assignment.
Define principles of sustainability	Test, quiz, and/or written assignment.
Distinguish between sustainable and non-sustainable actions.	Test, quiz, written assignment, site-related project, and/or case studies.
Understand the concept of a <i>land ethic</i>.	Test, quiz, and/or written assignment.