FOR 102: INTRODUCTION TO FOREST ECOLOGY

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2024
Credits:	3
Total Contact Hours:	54
Lecture Hours :	54
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	108
Total Student Learning Hours:	162
Strongly Recommended:	ENGL 101.
Transferable to CSU:	Yes
Transferable to UC:	Yes - Approved
Grading Method:	Standard Letter, Pass/No Pass

Catalog Course Description

A lecture course examining the forest as a biological community, through which sustainability, biodiversity, ecosystem health and integrity, old growth, climate change, rainforest, and clear cutting are evaluated. 54 lecture hours.

Course Objectives

- understand the influences of solar radiation, atmospheric conditions, climate, and soil on the individual forest plant
- describe the relationships in a biological community dominated by trees and other woody vegetation
- maintain records used in the study of soil and environment
- classify climate and soil
- measure moisture
- direct measurement of forest productivity
- explain the historical development and spatial distribution of the North American forests

Major Course Content

1. Sustainability of Forest Ecosystems
2. Development of Forestry and Forest Ecology
3. Ecology and the Ecosystem Concept
4. Production Ecology
5. Biogeochemistry
6. Adaptation and Evolution
7. Ecological Role of Solar Radiation
8. Temperature as an Ecological Factor
9. Wind
10. Soil
11. Water
12. Fire
13. Population Ecology
14. Community Ecology
15. Ecological Succession
16. Ecosystem Classification
17. Models and Their Role in Ecology and Resource Management
18. Renewability of Natural Resources and Implication for Forest Management
19. Environmental Issues in Forestry

Suggested Reading Other Than Required Textbook

Not Applicable

Examples of Required Writing Assignments

Answer a short essay question on an exam such as: Over what time scale should one compare the ecosystem effects of “natural” and management-induced disturbance?

Examples of Outside Assignments

Study Questions: Chapter 13 - Patterns of Biotic Communities along Environmental Gradients
1. What do we mean by plant physiognomy?
2. What is a biome, and how is it defined?
3. What is a plant association?
4. How are plants distributed along environmental gradients?
5. Which ecological factors act to determine high elevation tree lines?

Instruction Type(s)

Lecture, Online Education Lecture

IGETC Area 5: Physical and Biological Sciences

5A. Physical Science