

FOR 101: INTRODUCTION TO FORESTRY

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2021
Credits:	3
Total Contact Hours:	54
Lecture Hours :	54
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	108
Strongly Recommended:	ENGL 101.
Transferable to CSU:	Yes
Transferable to UC:	Yes - Approved
Grading Method:	Standard Letter, Pass/No Pass

Catalog Course Description

Covers the relationship of forests to our national and local life. The various forest sciences and the uses of the forest including timber, water, recreation, grazing, and wildlife. The forest organizations: federal, state, county and private. 54 lecture hours.

Course Objectives

- describe the parts of a tree and the functions including how a tree grows
- define silviculture and explain the overall processes
- explain fire protection theories for forests
- assess the advantages and disadvantages of logging operations
- list methods used to protect forests from insects and diseases
- define problems of watershed and range management

Major Course Content

1. Introduction - Course Orientation
2. Forests and People
 - a. Forests down through the ages
 - b. Development of forestry in the United States
 - c. The forest situation in the United States today
 - d. What we get from trees
 - e. What we get from forests
 - f. What a forest is
 - g. Forestry as a public policy
3. Our Forests
 - a. Comparison with rest of the world
 - b. Forests in the United States (northern, central, southern, rocky mountain, pacific coast, Alaskan & Hawaiian forests)
4. Trees of the Forest
 - a. What a tree is
 - b. Tree parts and their functions
 - c. How a tree grows (height, depth, diameter, transpiration, and photosynthesis)
 - d. Age of trees

5. Forest Soils
 - a. Rocks and minerals in soil formation
 - b. Soil (development, classification, physical properties, moisture, and chemical properties)
 - c. Site quality
6. Dendrology (tree classification, nomenclature, and identification)
7. Forest mensuration (Units of measure – trees, logs, and forests)
8. Silviculture
 - a. Tree reproduction (natural seeding, artificial seeding, and tree planting)
 - b. Systems of cutting
 - c. Timber stand improvement
 - d. Forest nurseries
 - e. Christmas tree production
9. Logging (history and methods)
10. Protecting Forests from Fire (prevention, pre-suppression, fire behavior, and suppression)
11. Protecting Against Forest Insects (damage, control, and classification based on damage)
12. Damage to Forests by Animals (large and small animals and domestic animals)
13. Protecting Against Forest Diseases (kinds, classification and defense against diseases)
14. Damage from Weather Elements
15. Forest Range Management (inventory checks and systems of management)
16. Watershed Management (hydrologic cycle, erosion and its control, and water yield)
17. Recreation (past, present, and suppliers of recreation areas)
18. Forest Wildlife (management and research)
19. Agencies Managing Our Forested Lands (federal, state, country, and private)
20. Forestry as a Profession (education and employment opportunities)

Suggested Reading Other Than Required Textbook

Not Applicable

Examples of Required Writing Assignments

Answer a short essay question on an exam such as: There are three forms used today for the removal of trees. Explain the three types of tree harvesting and indicate which method is the most damaging (remember there are two types of this form – describe both) to the environment and the most successful in terms of natural reproduction.

Examples of Outside Assignments

Homework for Silviculture and Forest Ecosystem Management (Chapter 5):

Please answer the following chapter questions:

1. Distinguish between forest ecology and silviculture.
2. Describe the following methods for reproducing a forest stand: clearcutting, shelterwood, selection system.
3. What three things are likely done in site preparation?

4. Explain the reasons for the following intermediate cultural operations: liberation cutting, pruning, sanitation cut, thinning.
5. Explain the reasons for the following kinds of thinning: selection thinning, pre-commercial thinning, mechanical thinning.
6. Give several reasons for fertilizing forests. What nutrients are involved?
7. Why should seed be collected from areas near where the seedlings will be planted? What term refers to this concept?
8. How do ecosystem management approaches differ from traditional forestry practices?
9. Define forest health.
10. How has efficient fire control affected forest health?

Instruction Type(s)

Lecture, Online Education Lecture