

FOR 101: INTRODUCTION TO FORESTRY

Discipline

FOR - Forestry

Course Number

101

Course Title

Introduction to Forestry

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 Purpose

Degree Applicable

Instruction Type(s)

Lecture
Online Education Lecture

Minimum Qualifications

Forestry/Biology

General Education/Degree/Transfer Course**Transferable to CSU**

Yes

Transferable to UC

Yes - Approved

CSU GE Areas**CSU GE Areas**

No

IGETC Areas**IGETC Areas**

No

Course Units/Hours**Credits**

3

Lecture Hours

54

For every hour of lecture, student is expected to spend two hours of study outside of class.

Lab Hours

0

Hours Arranged

0

Is this course repeatable?

No

Maximum Enrollment (Lecture):

48

Grading Method

Standard Letter, Pass/No Pass

Fee Information**Materials Fee**

No

Student Learning Outcomes

Upon satisfactory completion of the course, students will be able to:

Competencies

Communication
Information Competency

Outcome

Express knowledge of scientific terminology for the purpose of understanding the management of forest and other renewable resources

Assessment

through classroom discussion, field trips, written essays, and exams.

Competencies

Computation

Outcome

Collect and decipher data on wood (age, strength, and density) and interpret tables and graphs to understand timber parameters and demonstrate an understanding of the kinds of data available in the realm of forestry

Assessment

through group discussions, field trips, and exams.

Competencies

Creative, Critical, and Analytical Thinking

Outcome

Demonstrate an integrated approach to silvicultural practices in relationship to the policies related to harvesting, conservation, and management of forests and other renewable resources to obtain independent and objective thought to understand how lumber companies, researchers, and agencies approach the emerging mandates for biodiversity and ecosystem management

Assessment

through group discussions, field trips, and exams.

Competencies

Community/Global Consciousness and Responsibility

Outcome

Examine how human activities have contributed to changes in the forest environment to better understand and discuss past, current, and future issues within forestry and long-term forest conservation and environmental protection

Assessment

through group discussions, field trips, and examinations.

Course Objectives

Course Objectives

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

Course Content

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)

Requisites & Entrance Skills

Strongly Recommended

ENGL 101.

Methods of Assessment

Multiple measures may include, but are not limited to, the following typical classroom assessment techniques/required assignments:

Exams/Tests
Field Trips

Additional assessment information

Written exam consisting of an essay component
Synchronous and asynchronous discussion
Group discussion

Methods of Instruction

Methods of Instruction

Group Discussions
Lecture
Other (Specify)
Reading Assignments

Other Methods

Reading from assigned text, prepared notes, and other materials made available
Group discussion
Field Trips

Online Education

Sample Assignment

Accessibility

Course Textbooks/Resources

Resource Type

Book

Formatting Style

MLA

Required or Supplemental

Required

Description

Sharpe, G. W., Hendee, J. C. Sharpe, W. F. .*Introduction to forest and renewable resources*, 7th ed. Long Grove, IL: Waveland Press, 2002. Print.

Resource Type

Other

Formatting Style

MLA

Required or Supplemental

Required

Description

Goodman, R.
Forestry 101 Lecture Packet
Citrus College
8/24/2009

Course Assignments**Suggested reading other than required textbook:**

Not Applicable

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?

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.

Classification & Codes