

CATALOG INFORMATION

Dept and Nbr: NRM 70

Title: FOREST MGMT AND ASSESS

Full Title: Forest Management and Assessment

Last Reviewed: 9/24/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	4.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	4.00	Lab Scheduled	3.00	6	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	6.00		Contact Total	105.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 210.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: FOR 70

**Catalog Description:**  
Applied forestry as related to forest stand improvement, harvest methods, fire control, disease, damage, insects, manufacturing and management of forested lands. Quantity, and quality, and other forest resources, including water, range, wildlife, and outdoor recreation, carbon storage and fuel loading. Field trips are mandatory.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Applied forestry as related to forest stand improvement, harvest methods, fire control, disease, damage, insects, manufacturing and management of forested lands. Quantity, and quality, and other forest resources, including water, range, wildlife, and outdoor recreation, carbon storage and fuel loading. Field trips are mandatory. (Grade Only)  
Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 1981	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon successful completion of this course, students will be able to:

1. Discuss the objectives and goals of a forest inventory project.
2. Analyze data on the growth and yield of forest products over time.
3. Apply procedures in timber stand thinning.
4. Apply harvesting planning and how it relates to forestry using appropriate measuring tools.

### **Topics and Scope:**

I Disease, damage and insects

A. Causes, costs, general solutions

B. Disease identification

C. Types of damage

II Timber Stand Improvement

A. Stand survey

B. Stand selection

C. Stand removal

III Harvesting

A. Planning, requirements for harvesting

B. Effects of harvesting upon recreation and silviculture

IV Other Forest Measurements

A. Wood products

B. By-products

C. Water

D. Range

E. Wildlife

F. Recreation

G. Soils

- H. Fisheries
- I. Fuel loading
- J. Carbon storage

### Assignment:

1. Reading assignments that will average 10 - 15 pages per week.
2. Two timber inventory reports totaling ten pages.
3. Laboratory exercises: field trips emphasizing the collection, examination, and evaluation of field data.
4. Prepare simple and accurate maps from field data.
5. Quizzes (6); mid term and final exams.

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Timber inventory reports

Writing  
20 - 30%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, field work, field notebook; lab exercises

Problem solving  
20 - 30%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Lab exercises, field trips

Skill Demonstrations  
20 - 30%

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes and final exam: completion, short essay questions

Exams  
30 - 40%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation

Other Category  
0 - 10%

### Representative Textbooks and Materials:

Introduction to Forests and Renewable Resources. Sharpe, Grant; Henlee, John; and Sharpe, Wenonah; Waveland Pr Inc., 7th ed., 2009.

Forest Mensuration. Husch, Bertram, Thomas Beers, and John A. Keershaw, Jr. John Wiley and Sons, 2003.(classic)

Trees and Forest Measurement. West, Phil. Springer Verlag, 2009.

Aerial Photography and Image Interpretation. Paine, David P. and James D. Kaiser. John Wiley

& Sons, 2012

Instructor prepared materials