NRM 70 Course Outline as of Fall 2019

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:

AS Degree: **Area** Effective: Inactive:
CSU GE: **Transfer Area** Effective: Inactive:

IGETC: **Transfer Area** Effective: Inactive:

CSU Transfer: Transferable   Effective: Fall 1981   Inactive:

UC Transfer: Effective: Inactive:

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Evaluate and apply procedures in timber stand thinning and harvesting.
2. Evaluate other forest attributes on the site including water, range, recreational use, wildlife carbon storage and wildfire risk.
3. Evaluate diseases and insect damage and how to control them.
4. Apply forest measurement skills.

Objectives:
At the conclusion of this course, the student should 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

All topics are covered in the lecture and lab portions of the course.

Assignment:

Lecture-Related Assignments:
1. Reading assignments that will average 10 - 15 pages per week
2. Two timber inventory reports totaling ten pages
3. Quizzes (6); midterm and final exam

Lab-Related Assignments:
1. Laboratory exercises: field trips emphasizing the collection, examination, and evaluation of field data
2. Prepare simple and accurate maps from field data

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, prepare maps from field data	Skill Demonstrations 20 - 30%

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

Quizzes, midterm 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:
Forest Mensuration. 5th ed. Husch, Bertram, et al. Wiley Blackwell. 2017
Introduction to Forests and Renewable Resources. 8th ed. Sharpe, Grant, et al. Waveland Press Inc. 2012 (classic)
A Landowner's Guide to Managing Your Woods: How to Maintain a Small Acreage for Long-Term Health, Biodiversity, and High-Quality Timber Production. 1st ed. Hansen, Sverson, et al. Storey Publishing, LLC. 2011. (classic)
Instructor prepared materials