NRM 52 Course Outline as of Fall 2011

CATALOG INFORMATION

Dept and Nbr: NRM 52 Title: FOREST SURVEYING
Full Title: Park and Woodland Surveying
Last Reviewed: 11/27/2000

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	10	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00 Total Student Learning Hours: 157.50

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 52

Catalog Description:
Measurement of distance, direction and elevation using basic surveying equipment, including the abney, clinometer, compass, engineer's tape and level rod. The interpretation and use of topographic maps for wildland navigation.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100 and completion of AG 78.

Limits on Enrollment:

Schedule of Classes Information:
Description: A basic surveying course involving the measurement of distance, direction, & elevation under forest field conditions. (Grade Only)
Prerequisites/Corequisites:
Recommended: Eligibility for ENGL 100 or ESL 100 and completion of AG 78.
Limits on Enrollment:
Transfer Credit:

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:	Effective:	Inactive:
UC Transfer:	Effective:	Inactive:

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
The student will:
1. Know and be able to describe the United States public land survey system.
2. Organize and assemble accurate surveying field notes.
3. Prepare planimetric and topographic maps from field notes.
4. Understand and competently operate surveying equipment and instruments (compasses, steel tapes, levels, abneys, clinometers, etc.)
5. Demonstrate accurate field measurements of distance, direction and elevation.
6. Comprehend and demonstrate basic surveying computations.

Topics and Scope:

I. Introduction and terminology
   A. Surveying and forest surveying defined
   B. Uses of survey information
   C. Equipment; uses and limitations
   D. Field notes
II. Public land survey system
   A. History
   B. Subdivisions
   C. Use in the legal description of rural property
III. Measurement of horizontal distance
   A. Terminology and definitions
   B. Pacing
   C. Steel tapes
IV. Measurement of direction
   A. Terminology and definitions
   B. Hand compass

C. Staff compass
D. Reddi-mapper

V. Measurement of vertical distance
A. Terminology
B. Aneroid barometer
C. Abney
D. Clinometer
E. Differential leveling

VI. Mapping
A. Types of maps
B. Preparation of maps from field notes
C. Reading, interpreting and using contour maps

Assignment:

Students will be required to complete:
1. Reading assignments that will average 10 pages per week.
2. Written and laboratory field assignments - approximately 12 assignments during the semester.
3. Demonstrations (field) of use of surveying equipment.
4. An accurate and up-to-date field surveying notebook - approximately 25 pages of measurements and computations during semester.
5. Approximately five practice sets of survey computations during the semester.
6. A planimetric (or topographic) map constructed from field measurements.

The method of instruction shall be a combination of lecture, discussion, written in-class and out-of-class assignments in addition to hands on laboratory exercises.

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.

Written homework	Writing 0 - 0%

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

Homework problems, Field work, Lab reports, Exams	Problem solving 70 - 70%

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

Class performances, Field work	Skill Demonstrations 30 - 30%

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

None	Exams 0 - 0%

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

None	Other Category 0 - 0%

Representative Textbooks and Materials:
WILSON, R.L. - ELEMENTARY FOREST SURVEYING AND MAPPING 1974
OREGON STATE UNIVERSITY PRESS 183 PP