

10 - FOREST MEASUREMENTS

OBJECTIVES

This course is designed to introduce the student to the art and science of mensuration (measurements) of forest resources. Much of the course will deal with the measurement of growth and yield of a forest. The student will also become familiar with the various forest products other than saw logs. Experience in timber and other resource inventory systems, cruise design, stand type, interpretation, and log scaling will be provided.

Since this course is basic to understanding the quality and quantity of forest resources, good lecture and lab attendance is encouraged. Arriving for class on time and ready to go to work is essential.

Projects in forest inventory will be assigned at our school forest, Sequoia Lake. Students will be assigned to small crews of 3 - 4 to accomplish the field work. We can expect snow and inclement weather at the school forest until mid to late April or later, so dress for labs accordingly.

TEXTBOOK

Log Scaling and Timber Cruising by J.R. Dilworth. Handout materials will be provided to students that deal with various aspect of timber inventory, growth, log scaling, and stand analysis. All other materials used for the course will be purchased or otherwise provided by the student.

ATTENDANCE

The class will meet promptly at 10:00 a.m. each Monday and Wednesday. Lab is scheduled on Wednesday at 2:00 p.m. as per the attached schedule. Regular attendance is required throughout the course.

When you know you are going to be absent, it is your responsibility to contact the instructor at 638-3641, extension 260 or 310. Some missed work may be allowed to be made up at the discretion of the instructor. There is no make-up for missed quizzes. Regular exams and lab assignments missed must be made up in one week.

The responsibility to drop a course lies with the student. THE LAST DAY TO DROP A CLASS WITHOUT PENALTY [REDACTED] 2000. After that date, a grade must be assigned.

EVALUATION

Students will be graded based upon the results of written exams, field trip exercises, and lab exercises.

Exams 2 @ 100 pts./each	200
Quizzes 4 @ 25 pts./each	100
Labs	<u>100</u>
Total	400

Grading is based upon percentiles of the high score. For instance, a student with a high score of 90 on a midterm would set the standard. For example, 90% of 90 = 81 points, therefore, 81-90 = A, 72-80 = B, etc.)

TENTATIVE SCHEDULE

<u>Date</u>	<u>Lecture</u>	<u>Lab</u>
1/10	Orientation, Introduction	
1/12	Math Review	Direct Measurements & Instruments
1/17	NO CLASS - King's Birthday Holiday	
1/19	Direct Measurements	Hand Instruments
1/24	Predictions in Measurements	
1/26	Tree Height Measurements	Tree Heights & Diameters
1/31	Measurements of Diameter	
2/2	Measurement of Site Quality & Index Curves	Tree Heights & Diameters
2/7	Measurement of Site Quality & Index Curves	
2/9	Log Scaling Concepts	Basal Area Determination
2/1	Review	
2/16	Exam I	Log Scaling Techniques
2/21	NO CLASS - Washington's Birthday	
2/23	Sampling Techniques	Log Scaling Techniques
2/28	Probability & Statistics	
3/1	Probability & Statistics	Stand Typing
3/6	Stand Typing, Interpretation	
3/8	Statistics & Cruise Design	Cruise Design
3/13	Cruise Design	
3/15	Cruise Design	Inventory Design
3/20	Cruise Design	
3/22	Inventory Panel Cruising, 3P, V Bar	
3/27	Inventory Panel Cruising	Cruising for Quality
4/3	Timber Marking Procedures	
4/5	Exam II	
4/10	Timber Sale Preparation	Guest Speaker
4/12	Timber Sale Appraisal	Data Recorders
4/17-21	Spring Break	
4/24	Timber, Other Products & Resources	
4/26	Timber, Other Products & Resources	Wood Identification
5/1	Wood Identification & Uses	Water Shed Management
5/3	Wood Identification & Uses	
5/8 & 10	Review for Final Exam	(Open Lab)

OFFICE Forestry (FE) Building - Room 10
 Telephone: 638-3641, Ext. 260 or 310
 Hours: Monday, Wednesday - 12:00-13:00
 Tuesday - 13:00-14:00