

Course Syllabus**

GENERAL INFORMATION

SPRING SEMESTER, 2006

Course Title: Forest Measurements, Forestry 122 3 credits
Required Text: Forest Measurements, Avery and Burkhart
Instructor: Steve Resh (full time)
Office: Career's Building Room T-127
Hours: Wednesday, 10:00 - 11:00, Thursday, 9:00 - 11:00
Open door policy at all times.
Phone: 301 784-5307 Email sresh@allegany.edu
Class Times: Lecture, Monday and Friday 1:00 - 1:50 T-105
Lab. Tuesday, 8:00 - 11:00 Usually held in the field.

** Please note: Under extenuating circumstances, the instructor has the right to change any course provision or requirement during the semester.

I. Purpose

A. Forest management decisions must be based on data that have been properly collected. This course introduces the student to the techniques needed to acquire, present and understand precise information about the forest resource.

Three Credits Prerequisites, Math 104 or 107 or 119

B. Objective - This course should enable a successful graduate to properly perform the field tasks and necessary office and computer compilations that a forester or forest technician will be expected to undertake in a timber or log inventory. These sampling procedures are applicable to the collection of data within any biological system.

II. Course Policies

A. Attendance - Laboratory sessions are usually held in an outdoor field setting by students in groups. This makes it difficult or impossible to make-up a missed lab. Copied assignments from labs where a student was absent will not be accepted. A three percent increase in the final grade will be awarded to any student that has had perfect attendance. One percent will be deducted from the final grade for each absence beyond the first. Being late two times will be counted the same as an absence. Late students will be marked as absent unless they request the instructor to change the record from absent to late following the class period.

B. Participation - Most forestry work is done as a part of a team. Therefore, one of the goals of forestry education is to teach the student how to be an effective part of a group. You will often work as part of a crew, and you are expected to do your fair share of the work. Failure to do so will have a negative impact on your final grade.

C. Grading - Three exams each worth 25% of the final grade will be given during the course. The remaining 25% of the final grade will be determined from lab reports and assignments. Instructions and grading criteria for these assignments will be distributed during the semester. Final grades will be assigned based on the percentage of the total possible points earned in the class. Those who earn 90 to 100% of the points possible will receive an "A" in the course, those who earn between 80 - 89% of the points will receive a "B" etcetera.

D. Extra Credit - There is no formal method available to earn extra credit in this course. If an innovative project can be devised by the student, extra credit might be a possibility.

E. Help Sessions - I would be glad to give extra help to any individual or group of students who seek it. I consider it a sign of intelligence and of good study habits to ask for help.

F. Acceptable style of assignments - Assignments very often take the form of tables, charts and graphs. These must be neatly done to receive credit for completion of the assignment.

G. Assignment deadlines - Assignments are usually due two weeks from the date they are assigned. There are individual assignments that are due in less than the normal two weeks.

H. Plagiarism and Cheating - Using someone's work without properly citing that individual is dishonest. Anyone who copies information, assignments or test answers from another individual will be dropped from the class. Persons allowing information to be copied from their papers will receive a zero grade on the assignment or test.

I. Exams. The exams will be given after the sections, as indicated on the attached schedule, are completed. Dates are always announced at least one week in advance. Make-up exams are discouraged, and will be given only in the case of illness **when the instructor is notified before the exam is given.**

J. Safety. Course requirements dictate that work be undertaken in a forested area or a wood products production area. Students are expected to be dressed properly for all labs. Field attire should include long pants, sturdy work boots, and clothing which will keep you warm and/or dry. Hard hats are required, and eye protection should be worn.

III. Course Requirements

A. Course Content:

Lecture Chapter in Avery	Topic
1	Need for, scales and Cost of measurement.
5	Volume, and weight scaling of forest products
6	Log rules and scaling practices
7	Measuring standing trees
Test 1	
8	Volume and weight of standing trees
parts of 3	Sampling Designs
9	Forest Inventory Planning
10	Inventories with Sample Strips or Plots
Test 2	
11	Inventories with point sampling Tally sheet design Computer processing of cruise data
12*	3P sampling
6*	Log grading
*	Covered as time permits
Test 3	

Lab Outline Week #	Topic
1 i	Data presentation and interpretation, lab report preparation and format.
2	Volume determination and a comparison of the three major cubic foot volume equations.
3 i	Cord measurement, weight scaling, and conversion from one unit of volume to another
4	Gross and defect scaling of sawlogs using various deduction methods and log scales.

- 5 Proper use of various equipment used to measure standing trees. Different measurements that are made on trees.
- 6 Form class measurement and estimation.
- 7 100% timber inventory of a small area. Individual reports are required.
- 8 i Local volume table construction, data compilation, stand-stock table construction.
- 9 i Systematic sample cruise layout using plots.
- 10 Line plot cruise.
- 11 Line plot cruise continued. Crew reports are acceptable
- 12 i Simple random sample layout of a point sample cruise.
- 13 Point sampling.
- 14 Point sampling continues, and data preparation.
- 15 Complete individual data workups for point sample. Please note, I will be accompanying the second-year forestry students on their tour of the eastern shore of Maryland.

i = indoor lab session

B. Library assignments - No library assignments are currently scheduled in this course.

C. Required reading - The chapters in Avery as outlined above should be read before they are covered in class.

D. Recommended readings - Pertinent materials of interest to this class may be suggested during the semester.

E. Blackboard course management software will be used to augment information exchange within this course. You will find your appropriate Blackboard postings at blackboard.allegany.edu.

F. Classroom demeanor. The classroom, both indoors and in the field, must be a place where learning can take place by everyone. Disruptive behavior, including cell phone interruptions, will not be tolerated. Failure to respect the rights of others will result in dismissal from the class.