

FORS 3610
Forest Biometrics
Fall Semester 2003

Instructor:

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Office hours: MW 9:00 am – 10:00 am; F 9:00-11:00 am; or by appointment;
Class time: MW 10:10 – 11:00 am; F 1:25-3:25 pm.

Course Description:

Basic parametric statistical methods and concepts, including linear models, sample survey design and analysis, and applications to problems in forest resources. Analysis of forest resources data using standard statistical software.

Textbook:

Elementary Survey Sampling – fifth? edition. R.L. Scheaffer, W. Mendenhall, R. Lyman. 1996. 5016p. Duxbury Press. (Not Required)

Course Objectives:

Students successfully completing FORS 3610 will gain the ability to:

- A. Select and apply appropriate basic statistical techniques to data from biological populations.
- B. Prescribe and use appropriate sample survey designs to make inferences about biological populations.
- C. Determine the sample size, for each of several different sample survey designs, necessary to estimate biological population parameters to meet specified precision requirements.
- D. Apply simple and multiple linear regression techniques to predict natural resource system responses.
- E. Use computer software for the analysis of forest resource data.

Grading:

There will be three exams during the semester, each will be worth 20% of your final grade. The comprehensive final will be worth 30% of your grade. Homework will be worth 10% of your final grade. If you keep up with assignments and understand the homework you will most likely do well on the exams.

Topics Covered:

Review of Basic Statistical Concepts

Principles of Survey Sampling: Simple Random and Stratified Random Sampling

Estimating Wildlife Abundance

Simple Linear Regression with Applications to Forest Resources Problems

Multiple Linear Regression with Applications to Forest Resources Problems

Use of Computer Spreadsheets for Analysis of Forest Resources Data

Academic Honesty Policy

The University of Georgia policies and procedures on academic honesty apply for students who seek and use unauthorized assistance on individual assignments and exams. You are encouraged to work and learn cooperatively when this is appropriate, but be certain that the work you turn in is your own.

Exam Dates

Test 1 – September 19

Test 2 – October 24

Test 3 – November 21

Final Exam – December 15 – 8:00 am – 11:00 am

Make up exams – exams may be made up if the student has to miss class for a legitimate reason (e.g. death in family, illness, etc.)