

Forest Surveying (FOR 377) and Forest Mensuration (FOR 378)

Syllabus 2008

Instructor

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Introduction

Forest Surveying and Forest Mensuration provide hands-on learning experiences. Although Forest Surveying and Forest Mensuration are listed as two separate courses, I have integrated the two this year. Philosophically the two are intertwined. Forest Surveying is classically defined as *the project of gathering all the quantitative data required regarding a specific forest property; it includes a survey and maps of the area, thus locating the property and its subdivisions, a measurement of the volume and character of the timber, and it may cover other resources such as land classification, waters, forage, game, and fish* (Herman H. Chapman 1921). While Forest Mensuration is defined as *a branch of forestry which deals with the determination of the volume of the wood material contained in logs and portions of felled trees, in standing trees, in stands of timber and in forests, expressed in terms of cubic measure, board measure, or any other unit; it also determines the growth and future yields of trees, stands, forests in any of the above units of volume* (Herman H. Chapman 1921). The measurement of standing timber is termed Timber Cruising. We can view Forest Mensuration as a specific, timber-oriented forest survey.

We will use forests, meadows, and streams in the Robinson Forest to serve as our natural laboratories. During the week of May 12th, we will mainly concentrate on forest surveying, the following week will be a mixture of forest surveying and measurement with a group of guest speakers, and last week you will practice the knowledge you learned in the former two weeks to survey a track of Robinson Forest, analyze the inventory data, and present the inventory results and corresponding management recommendations. Upon successful completion of this course you will learn:

- Basic surveying skills,
- Basic GIS/GPS operation
- Forest inventory and measurement techniques
- Computer applications and analysis of inventory data.

You will be working with a team of 3 or 4 people most of the time. Active participation in all facets of the field program is required. Assignments will include pop quizzes, written assignments, and field report. Evaluations will be based both on group and individual performance.

Grading Policy

Students are expected to actively participate in all facets of the field courses. Attendance is mandatory. Persistent non-participation grounds for failure. If necessary, warnings will be formally issued at the end of Week 2. Grades will be based on a combination of individual and group performance.

Individual evaluations include:

Quizzes: Expect short quizzes on everything from field skills to major points from lectures (30% of the grade).

Written assignments: There will be three written assignments for the major topics discussed in the course (10% each, total 30% of the grade).

Group evaluations include:

Students will work in small groups to collect field data, analyze the results, and communicate the findings. All groups will write-up the stand inventory and will give a brief presentation to the class in last day of the course (May 30th). Total value for group work = 40% of the grade.

Grading will be on a straight scale, not on a curve. If you all do well, you will all get an A. The scale is: A 90 – 100 B 80 - 89 C 70 – 79 D 60 – 69

Academic Integrity

Cheating or plagiarism in any form is strictly prohibited. We will all follow the rules governing us set forth by the University of Kentucky. For more information, see Part II of “The Code of Student Conduct” (<http://www.uky.edu/StudentAffairs/Code/part2.html>) or can be obtained in the Dean of Students Office. The minimum penalty for either of these academic offenses is an "E" in the course, with suspension and dismissal also possibilities.

Note: The instructor reserves the right to modify the syllabus at any time in order to achieve the learning objectives of the class. This includes steps to correct errors and omissions that may have occurred.

May 2008

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
11	12 Introduction Equipment	13 Safety Basic Stats	14 Point/fix-plot sampling GIS	15 GIS/GPS	16 GIS/GPS	17
18	19 Two-dog system Dr. Lhotka	20 Two-dog Dr. Lhotka RF timber cruise Mr. Bowker	21 RF timber cruise Mr. Bowker Stream survey Mr. Reeves	22 Fire/ Ecosystem Dr. McCune	23 Wildlife Dr. Lacki	24
25	26 Memorial Day No class	27 RF inventory and analysis	28 RF inventory and analysis	29 Management options Dr. Lhotka RF inventory and analysis	30 RF analysis and presentation	31