

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE


COURSE TITLE: FOREST MENSURATION II

CODE NO.: FOR239-4 SEMESTER: TWO

PROGRAM: FORESTRY TECHNICIAN

AUTHOR: WARREN ROBERTSON

DATE: DECEMBER 1991 PREVIOUS OUTLINE DATED: NEW

APPROVED:  DEAN, SCHOOL OF SCIENCES & NATURAL RESOURCES
DATE Dec 18/91

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TOTAL CREDIT HOURS: 64

PREREQUISITE(S): FOR119-4 Forest Mensuration I

I. PHILOSOPHY/GOALS:

This course includes log and wood identification, an introduction to tree grading, a review of measurement instruments and then concentrates on forest resource sampling. It covers timber cruising field work and compilations using strip, plot, and point sampling procedures in detail. The course briefly covers tree growth and volume and introduces wildlife sampling procedures.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will, to a cumulative minimum 60% accuracy:

1. be able to identify 22 species of logs.
2. be able to identify basic tree defects and separate standing trees into 3 grades.
3. be able to correctly identify all trees encountered on a winter timber cruise in the Sault Ste. Marie area.
4. be able to identify 15 species of sawn wood.
5. given a forest stand, map and the percentage of cruise required, be able to lay out and conduct a strip, plot, or point sample timber cruise.
6. be able to compile sample area, percent sample, volume/ha and total volumes from timber cruise field data.
7. be able to construct stand and stock tables.
8. be able to calculate data from a wedge prism cruise utilizing Normal Yield Tables.
9. be able to describe the theory of point sampling.
10. be able to calculate log and tree volumes using geometric formulae.
11. be able to conduct a strip census to determine wildlife populations.

III. TOPICS TO BE COVERED:

Log identification; tree defects and tree grading; identification of standing trees in winter; wood block identification; strip cruising; plot cruising; point-sampling theory; use of a wedge prism; Cruise compilation; set-up of a timber cruise by 3 methods; Review of measurement of tree diameter and height and age; calculation of tree volumes; wildlife survey.

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IV. EVALUATION METHODS:

Practical tests and Assignments	- 60%
Theory quizzes and tests	- 35%
Attendance	- 5%
	100%

V. REQUIRED STUDENT RESOURCES:

Point sampling Lab Manual

VI. SPECIAL NOTES:

Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.

