

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: APPLIED SILVICULTURE

Code No.: FOR 354-5

Program: FOREST MANAGEMENT TECHNOLOGY

Semester: SIX

Date: SEPTEMBER 1987

Author: R. CURRELL

New: X Revision:

APPROVED:  Chairperson  Date

CALENDAR DESCRIPTION

APPLIED SILVICULTURE

FOR 354-5

COURSE NAME

COURSE NUMBER

PHILOSOPHY/GOALS:

This is a course designed to explain in depth the methods used to regenerate boreal forest sites, with an emphasis on Site Preparation and stand tending.

After completing the course, the student should be able to:

1. Write an overall regeneration prescription for a variety of site types in Northern Ontario.
2. Recommend the type of site preparation to carry out on any cutover forest area including (if applicable) the type of machine to use, and results expected.
3. Prescribe and supervise a forest tending project and be familiar with the safe operation of mechanical or chemical tending devices.

METHOD OF ASSESSMENT (GRADING METHOD):

Unit tests (3)	50%
Assignments	40%
Technical Report	10%

Unit tests will take place at the end of Units 2,4 and 6. Major assignments will include an oral presentation describing a particular piece of scarification equipment (during Unit 2), a completed post-burn fuel analysis and report concerning the degree of achievement of burn objectives (Unit 3) and finally, development of silvicultural prescription for a particular cutover site visited in the field (after Unit 4).

The technical report will deal with site preparation, will be assigned prior to the completion of Unit 3 and will be due November 27, 1987.

TEXTBOOK(S):

Silviculture Lab Manual, 1987, Sault College

A pass in the course will be 60% overall; marks will be cumulative. Students receiving less than 60% will be required to write a test covering the entire course material, during the rewrite period.

Topics studied:

Unit 1 - Harvesting Systems

- clearcutting
- shelterwood
- seedtree

Unit 2 - Site Preparation (Mechanical)

- scarification
- various types of equipment will be examined in detail; descriptions, how to use, results expected, sites and conditions best-suited, advantages and limitations

UNIT TEST

Unit 3 - Prescribed Burning

- P.B. plans
- burning objectives and desired results
- sites (where to apply)
- conducting the burn
- measurement and description of fuels

Unit 4 - Artificial Regeneration Systems

- direct seeding
- natural regeneration (when to use)

UNIT TEST

Unit 5 - Forest Tending

- when to tend
- mechanical tending (use of brush sawa)
- chemical tending; aerial and ground

Unit 6 - Seed Collection and Handling

- crop forecasting
- collection methods
- seed extraction and storage

UNIT

TEST