


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: AUGUST 1988  
Author: R. CURRELL

New: \_\_\_\_\_ Revision: X

APPROVED:  AUGUST 30, 1988  
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%~~ 50%

Assignments            30%

Technical Report        10%

Field Tour              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 site preparation equipment (during Unit 2), and development of silvicultural prescription for a particular site visited in the field (Unit 4).

The technical report will be assigned prior to the completion of Unit 3 and will be due November 28, 1988.

TEXTBOOK:

Silviculture Lab Manual, 1988, Sault College

Other publications will be distributed during the semester.

A pass in the course will be 60% overall; marks will be cumulative. Students receiving less than 60%, but above 50% will be required to write a test during the rewrite period, covering all the course material.

Topics studied:

Unit 1 - Cutting Systems

- clearcutting systems
- strip shelterwood
- seed trees
- harvesting and regeneration options (HARO)

Unit 2 - Scarification

- prime movers
- various types of equipment will be examined in detail, including descriptions, how and where to use, results expected, plus advantages and limitations

**UNIT TEST 1**

Unit 3 - Prescribed Burning

- P.B. plans
- burning objectives and desired results
- conducting the burn
- measurement and description of fuels

Unit 4 - Regeneration Systems

- jack pine
- blue spruce
- aspen and poplar
- white spruce and mixed wood

**UNIT TEST**

Unit 5 - Forest Tending

- vegetation management introduction
- cleaning, thinning
  - aerial and ground spraying
- mechanical tending
  - use of clearing saws and other mechanical tending methods

Unit 6 - Silvicultural Management

- an overview of boreal forest management

**UNIT**

**TEST**