SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE MARIE, ON

COURSE OUTLINE

Course Title: ADVANCED SILVICULTURE

Code No.: FOR359-3 **Semester:** 5

Program: INTEGRATED RESOURCE MANAGEMENT

Author: BOB CURRELL

Date: SEPT 1998 **Previous Outline Date:** JUNE 1998

Approved: _____ _____
Dean Date

Total Credits: 3 **Prerequisite(s):**

Length of Course: 3 hrs/week **Total Credit Hours:** 48

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I PHILOSOPHY/GOALS

Combining frequent field trips, lab exercises and lectures this course is designed to prepare students for the silvicultural management of Ontario's forests. The course explains the methods used to classify, regenerate and tend forest lands.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the students will be able to:
1. Describe silvicultural operations as they are carried out in Ontario
2. Describe the silvics and ecology of Jack pine, Red pine and White pine forests.
3. Prescribe the management and regeneration of pine forest working groups.
4. Mark Red and White Pine stands for uniform shelterwood management.
5. Explain the silvics and ecology of Black spruce forest stands.
6. Choose the appropriate Silviculture harvesting system for the management of Black spruce.
7. Summarize the ecology of Boreal mixed wood forests and be able to manage these forest sites.

III. TOPICS TO BE COVERED:

UNIT 1

Silviculture Review
- silviculture programs in Ontario
- silvicultural harvesting systems
- site preparation; scarification, prescribed burning
- planting, seeding, tending
- tree improvement

Test 1

UNIT 2

Pine Management (Red pine, White pine and Jack pine)
- silvics and ecology
- tree marking for Red and White pine
- promoting wildlife values in pine forests

Test 2

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UNIT 3

Spruce and Boreal Mixedwood Management
- silviculture and management of spruce using natural regeneration systems
- layout and pre-harvest assessment of blocks of CLAAG
- ecology and management of Boreal mixedwoods

Test 3

IV   METHODS OF EVALUATION

Tests (50%)
- Silviculture Review   10% (week 3)
- Pine Management   20% (week 7)
- Spruce, Mixedwoods   20% (end of semester)

Assignments (50%) - including:
- white pine marking exercise
- pine wildlife writing assignment
- pre-harvest assessment of spruce harvesting blocks
- Boreal mixedwood assignment
- quizzes following guest lectures

Marking Scheme:

A+ = 90% + consistently
A = 80-89%
B = 70-79%
C = 60-69%
R = < 60%

V   REQUIRED STUDENT RESOURCES

- Field Manual for Describing Soils
- Sault College Silvicultural Study Guide
- Silvicultural Guide to Managing Black Spruce, Jack Pine and Aspen, Book 3

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VI SPECIAL NOTES

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

Students must attend 80% or more of the classes to obtain a C grade or higher.

Special Needs:
If you are a student with special needs (e.g. Physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office, Room E1204, Ext. 493, 717 or 491 so that support services can be arranged for you.

Plagiarism:
Students should refer to the definition of "academic dishonesty" in the "Statement of Students Rights and Responsibilities."

Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor.

In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Advanced Standing:
Students who have completed an equivalent post-secondary course should bring relevant documents to the Coordinator, Natural Resources Programs.

Retention of Course Outlines:
It is the responsibility of the student to retain all course outlines for possible future use in gaining advanced standing at other post-secondary institutions.

Substitute course information is available at the Registrar's Office.

VII.   PRIOR LEARNING ASSESSMENT:

Please contact the Prior Learning Assessment Office (E2203) for further information.