DOC. #430

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON

COURSE OUTLINE

| | STRUCKER FLEEPORDARCE OBJECTIVES1 |
|-------------|------------------------------------------------------|
| CODE NO: | FOR 315-3 SEMESTER: V |
| PROGRAM: | INTEGRATED RESOURCE MANAGEMENT TECHNOLOGY |
| AUTHOR: | BOB CURRELL |
| DATE : | JUNE 1996 PREVIOUS OUTLINE: AUGUST 1995 |
| · · · · · · | Mark Ned and White Pine Stands for uniform shelterwo |

APPROVED:

n DEAN, SCHOOL OF SCIENCES &

NATURAL RESOURCES

une 28/96 DATE

ADVANCED SILVICULTURE

FOR 315-3

COURSE NAME

CODE NUMBER

TOTAL CREDIT HOURS:

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. Explain the value of Ecological Land Classification of forest lands in Ontario.
- 2. Classify forest sites and formulate management strategies using Ecological Land Classification systems.
- 3. Describe the silvics and ecology of Jack pine, Red pine and White pine forests.
- 4. Prescribe the management and regeneration of pine forest working groups.
- 5. Mark Red and White Pine stands for uniform shelterwood management.
- 6. Explain the silvics and ecology of Black spruce forest stands.
- 7. Choose the appropriate silviculture harvesting system for the management of Black spruce.
- 8. Summarize the ecology of Boreal mixed wood forests and be able to manage these forest sites.

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III. TOPICS TO BE COVERED:

UNIT 1

Ecological Land Classification

- background
- review of soil descriptions
- F.E.C. systems in use in Ontario
 - N.W. Ontario FEC
 - North-eastern Ontario FEC
 - Algonquin Pine Forest FEC

Test 1

UNIT 2

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Pine Management
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- Red pine and White pine
 - silvics ecology
 - silvicultural harvesting, establishment, tending
 - tree marking for white and red pine management
 - promoting wildlife values in pine forests
- Jack pine
 - silvics, ecology
 - management
 - establishment, tending

Test 2

UNIT 3

Spruce and Mixed wood Management

- Black spruce
 - silvicultural harvesting methods
 - management
- Boreal mixed woods (white spruce, poplar, white birch)
 ecology
 - management

Test 3

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IV. METHODS OF EVALUATION:

Tests (50%)

- tests following units 1, 2 and 3

Assignments (40%)

- including
 - soil descriptions
 - site classification exercises
 - White pine ecological survey
 - Jack pine and/or mixed wood assignment

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Quizzes (10%)

- following guest lectures

- to evaluate reading assignments

Marking Scheme:

| A+ | = | 85% + consistently |
|----|---|--------------------|
| A | = | 80-84% |
| В | = | 70-79% |
| С | = | 60-69% |
| R | = | < 60% |

V. REQUIRED STUDENT RESOURCES

- Field Manual for Describing Soils

- Sault College Silvicultural Study Guide

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.