

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

COURSE OUTLINE

COURSE TITLE: INTEGRATED RESOURCE MANAGEMENT

CODE NO.: FOR220-4 SEMESTER: 4

PROGRAM: FORESTRY TECHNICIAN

AUTHOR: BOB CURRELL

DATE: JANUARY 1997 PREVIOUS OUTLINE DATED: JANUARY 1996

APPROVED:

*[Signature]*  
DEAN, BUSINESS & HOSPITALITY,  
NATURAL RESOURCES PROGRAMS &  
COMPUTER PROGRAMS

*Dec 11/96*  
DATE

**INTEGRATED RESOURCE  
MANAGEMENT**

**FOR220-4**

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**COURSE NAME**

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**TOTAL CREDIT HOURS: 64**

**PREREQUISITE(S): None**

**I. PHILOSOPHY/GOALS:**

The course will explain the principles and practices involved in carrying out Sustainable Forestry.

The full range of values provided by forests will be described and methods of protecting or enhancing those values while carrying out forest management, will be provided.

**II. STUDENT PERFORMANCE OBJECTIVES:**

Upon successful completion of this course the student will be able to:

1. Explain the meaning of sustainable forestry and describe the principles which must be followed if it is to be carried out.
2. Describe the value of biodiversity in Ontario forests and describe ways that biodiversity can be maintained while carrying out forest management.
3. Know and describe the major global environmental problems which are threatening the earth. Be able to suggest ways to minimize these problems.
4. Describe past and present co-management arrangements. List the criteria upon which successful co-management agreements are based.
5. Understand, be able to list and know how to protect the values provided by forests.
6. Using a case study, describe the problems and possible solutions to regional land-use disputes.

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**III. TOPICS TO BE COVERED:**

<b>TOPIC. NO.</b>	<b>TOPIC DESCRIPTION</b>
<b>Unit 1</b>	Sustainable Forestry - Uses and values provided by forests and principles to follow when practicing sustainable forestry are described. Sustainable forestry practices will be discussed.
<b>Unit 2</b>	Sustainable Development - Human-caused environmental problems of global importance are introduced and ways to minimize these problems internationally are suggested.  Effects of climate change on Canadian forests will be discussed.
<b>Unit 3</b>	Forest Ecosystem classification - The Northwestern Ontario F.E.C. system is explained. Instruction will be provided on using soil and vegetation keys to provide site descriptions. Treatment Units are introduced and an explanation of interpretations possible using this information is given.  <b>TEST 1</b>
<b>Unit 4</b>	Old Growth Forests - Criteria by which to identify old growth forests will be given, then their value will be explained. The amount of Old growth forest in N. E. Ontario is described and suggestions are made about how much of these forest types we need to preserve.
<b>Unit 5</b>	Co-management of Natural Resources Co-operative management, self management and state management are defined. A process for developing co-management plans is proposed. Various case studies are used as examples.
<b>Unit 6</b>	Integration of Timber and Wildlife Management - The habitat needs of selected game and non-game species are described and the effects that timber management can have on these habitats are detailed. The concepts of featured species and endangered species management are introduced. The importance of managing for habitat diversity and ways to maximize diversity are suggested.

**TOPIC NO.****TOPIC DESCRIPTION**

Unit 7

Integrating Moose and Timber Management - Moose management operations are carried out, are shown.

**TEST 2**

Unit 8

Non Consumptive Forest Uses - The groups of stakeholders concerned with Ontario forest management are presented and the concerns of each group about forest development are explained. In particular, ways to minimize tourism concerns relating to timber management are presented.

Purposes, classes and examples of National and Provincial parks are listed. The meaning and value of wilderness is also suggested in this unit.

Unit 9

Protecting Forest Values - The timber management planning process in Ontario is described with emphasis on identifying and protecting non-timber values while carrying out forestry operations. The work permit system of regulating forest development is explained and the processes of compliance and effectiveness monitoring are described.

Unit 10

Temagami Case Study - A study of the Temagami land-use conflict is presented. The historical development of the area and the conflict is provided. Positions of the affected stakeholder groups are explained.

**TEST 3**

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**IV. METHOD OF EVALUATION:**

60% - Unit Tests (3); the tests will be held following unit 3, unit 7 and unit 10.

40% - Assignments

**V. REQUIRED STUDENT RESOURCES:**

Integrated Resource Management Study Guide; 1995 edition.

**VI. SPECIAL NOTES:**

A day long tour of maple syrup making operations on St. Joseph Island is planned for late March (for students at Sault College). A short test will follow this trip.

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.