

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



**COURSE OUTLINE**

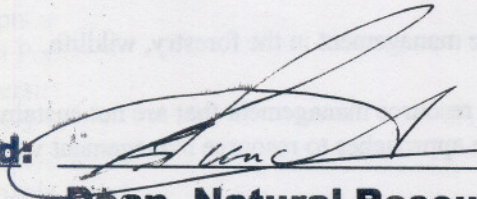
**Course Title: SUSTAINABLE RESOURCE MANAGEMENT**

**Code No.: FOR311      Semester: 6**

**Program: INTEGRATED RESOURCE MANAGEMENT TY**

**Authors: MARK HARVEY/MARGO SHAW**

**Date: JANUARY 98      Previous Outline Date: JAN97**

**Approved:**  JAN. 12, 1998  
**Dean, Natural Resources      Date**  
**Programs**

**Total Credits: 4**  
**Length of Course: 3 hrs/week x 16 weeks**  
**Total Credit Hours: 64**

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For additional information, please contact Brian Punch, Dean, Natural Resources Programs,  
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## SUSTAINABLE RESOURCE MANAGEMENT

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Course Name

Code No.

PREREQUISITE(S): None

## 1. PHILOSOPHY/GOALS:

The concept of sustainability is being used as a cornerstone in policy and program development by governments throughout the world. This is especially true for the resource sector. Students graduating from resource management programs need a broad understanding of the issues of sustainable development on a local, regional and global scale.

Students will research, discuss and debate the effects of global issues on our local resource based economies. Local, national and international sustainable development policies and initiatives will be addressed through readings, guest lectures, videos and case studies.

This course will provide students the opportunity to participate in the processes needed to develop programs to ensure sustainable resource management in the 21<sup>st</sup> century.

## II. STUDENT PERFORMANCE OBJECTIVES (LEARNING OUTCOMES);

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

1. *Define and give examples of ecosystem and sustainable resource management.***Potential elements of the performance:**

- Compare old versus new approaches to resource management in the forestry, wildlife, agricultural, and aquatic sectors
- List 20 or more past and/or current practices in resource management that are not sustainable
- Distinguish between ecosystem and multiple use approaches to resource management vs. single species or single use approaches.

(This outcome will constitute 25% of the final grade).

2. *Compare local, regional, national and international sustainable development accords, conventions and initiatives.***Potential elements of the performance:**

- Describe a minimum of 8 major global issues in sustainable resource use.
- Evaluate national initiatives within the federal departments of Fisheries & Oceans, Agriculture, Canada, Environment Canada and Natural Resources Canada to promote sustainable resource management
- Examine case studies in Canada such as:
  - the collapse of the northern cod stocks, and the decline of west coast anadromous fish stocks
  - the impact of exotic species on the Great Lakes fish stocks and ecosystems
  - the issue of old growth forests (eg. Temagami)

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- Give examples of sustainable initiatives on the part of private industry, and municipal governments.
- Analyze and assess the 6 criteria and indicators of sustainable forest management outlined under the National Forest Strategy.

(This outcome will constitute 40% of the final grade).

3. *Demonstrate how national and international standards and resource issues impact on Canadian resource sector economic activity.*

#### **Potential elements of the performance:**

- Demonstrate how global resource, economic and population issues can impact on the sustainability of the resource based industries in Canada.
- Evaluate how biodiversity, pollution abatement, and conservation strategies apply to sustainable resource management.

(This outcome will constitute 35% of the final grade).

### **III. TOPICS TO BE COVERED**

1. Defining Sustainable Development
2. Concepts in Sustainable Development
3. Human Population Dynamics
4. Biodiversity
5. Threats to Sustainable Resource Use
6. Sustainable Agriculture
7. Sustainable Aquatic Ecosystems
8. Sustainable Forestry
8. Economics of Sustainable Resource Use

### **PRACTICAL AND LABORATORY SESSIONS:**

1. Human population dynamics
2. Literature Search Techniques
3. Developing an Environmental Farm Plan
4. How to measure Biodiversity
5. Calculating Allowable Cottage Development
6. Predicting the Crash of the Atlantic Cod Stocks
7. Predicting the Crash of the Atlantic Cod Stocks

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9. Industry's Approach to Sustainable Resource Management
10. Case Study on Decision Making for Resource Based Communities
11. Individual Projects on Sustainable Resource Management

## IV EVALUATION METHODS:

Due dates for assignments will be clearly indicated when they are handed out. Penalties will apply for late submissions. Assignments will be due at noon on the date specified, regardless of class schedule.

A late penalty of 10% per college scheduled class day, or portion thereof will be assessed. After 10 late days, the assignment will be worth zero; however, it must still be submitted. The final grades will be based on 2 tests, 3 assignments, a research project, and a class presentation.

Tests (2 at 20% each)	Total = 40%
Assignments (3 at 10% each)	Total = 30%
Research Project (1 at 25%)	Total = 25%
Class Presentation (1 at 5%)	Total = 5%
	100%

The grading system will be as follows:

A+ = 90-100%	A = 80-89%
B = 70-79%	C = 60-69%
R = less than 60%	

Students with a final grade of 55-59% will have the option of writing a comprehensive supplemental exam provided they have completed all assignments and attendance is satisfactory.

## V. LEARNING ACTIVITIES/REQUIRED RESOURCES:

Learning Activities:

The topics above will be covered in class lectures, discussions, guest lectures, practical assignments and field trips.

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VI. RESOURCE MATERIAL:

A comprehensive reference list will be distributed to all students at the beginning of the semester. The Sault College library will have a number of texts, reports and videos on reserve for this course. Students will also gain experience in searching the Internet for relevant material.

VII. SPECIAL NOTES:

Students with special needs (eg. physical limitations, visual impairments, learning disabilities, etc.) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary.

