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

# COURSE OUTLINE

COURSE TITLE:	SUSTAINABLE RESOURCE MANAGEMENT			
CODE NO.:	FOR 311-4	SEMESTER:	V & V	I
PROGRAM:	INTEGRATED RESOURCE	MANAGEMENT	TECHNOLOGY	
AUTHOR:	MARK HARVEY			
DATE:	DECEMBER 1994	EVIOUS OUTL		AUGUST 1993
APPROVED:	CAN, SCHOOL OF SCIENCES & NATURAL RESOURCES	x I	Die. 13	(94



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TOTAL CREDIT HOURS:

## PREREQUISITE(S):

# I. PHILOSOPHY/GOALS:

The concept of sustainability is being used as cornerstone in the development of policy and programs by governments throughout the world. This is especially true in the resource sector. Students graduating from resource based programs require a broad based understanding of the issues of sustainable development from a local to a global scale.

Students will discuss and debate the effects of global issues on our local resource based economies. Local and regional resource sustainable development policies and initiatives will be focused on through guest lectures, videos, reading assignments and case studies.

This course will provide the opportunity for students to participate in the processes needed to develop programs that will ensure sustainable resource management in the 21st century.

#### II. STUDENT PERFORMANCE OBJECTIVES:

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

- 1. List six methods promoted in "New Forestry" that will help ensure the sustainability of our forest resource.
- 2. List five or more current or past forest resource management practices that are not sustainable.
- 3. Describe a minimum of eight major global issues in sustainable development.
- 4. List and describe the major components of the OMNR's sustainable development programs.
- 5. Evaluate the effectiveness of Canada's "Green Plan".
- 6. Evaluate the effectiveness of UNECD to promote global sustainable development.
- 7. Demonstrate how global resource and economic issues can impact on the sustainability of the resource based industries in Canada.
- 8. Plan research and prepare an action plan to ensure the sustainability of the resource based economy in an Ontario community.
- 9. Evaluate the effectiveness of proposed Bill 171 to achieve sustainable forest resource management.

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### III. LEARNING ACTIVITIES:

Week 1&2 Defining Sustainable Development Concepts in Sustainable Development Video #1

Video #1 Video #2 Video #3

Assignment #1 "Our Common Future"

Week 3&4 Review of the Major Initiatives in Sustainable Development

1. Brundtland Report

2. UNCED Earth Summit Rio 1992

3. Canada's Forestry Accord and the National Forestry Strategy, Canadian Council of Forest Ministers

4. Ontario's Green Plan

5. Ontario's Sustainable Development Program

6. Bill 171

Week 5 Continuation of week 2 Assignment #2

Week 6 Sustainable Development in the Forest Community

1. Sustainable Development in the forest community

 New Forestry in North America, the work of Herb Hammond, Jerry Franklin, Hammish Kimmins and others

3. The paradigm shift in forestry

Week 7 Continuation of Week 5
Assignment #3

Week 8 Community Forests and Model Forest, presented by OMNR and Forestry Canada staff

Forest Resource Conflicts and Sustainability. Video

Week 9

1. Case Study from <u>Sustaining Our Natural Resources</u>. Students will be involved in a workshop activity in decision making for resource based communities. The activity will stress the team approach to decision making.

Week 10 Assignment #4

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III. LEARNING ACTIVITIES: (continued)

Week 11&12 Sustainable Development and the Developing Nations

1. Deforestation and Desertification

2. Population Pressures

3. Pollution

4. Poverty and Education

5. Urbanization

6. Biodiversity

7. Developed Nation Assistance to the Third World Countries

Week 13

Test

Assignment #5

Week 14

Presentations from Assignment #5

#### **ASSIGNMENTS**

# Assignment #1 "Our Common Future"

Students will read the introduction and Chapters 1 and 2 in "Our Common Future" and prepare a 3-page 800-word summary from this reading.

#### Assignment #2

Define the sustainable development of Ontario forest resource. What does the term mean? Students will interview 3 persons from each of the following groups:

- 1. Forestry students, Sault College
- 2. Forestry faculty, Sault College
- 3. OMNR staff
- 4. Forest Industry
- 5. Federation of Ontario Naturalists
- 6. Canadian Forestry Service
- 7. General Public

Students will compile 2 one-paragraph summaries of each response. Students will then attempt to create a reasonable definition of sustainable development as it relates to Ontario's forest resource.

### Assignment #3

Each individual student will read proposed Bill 171 the Crown Forest Sustainability Act, and then prepare a written critical analysis of the bill.

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ASSIGNMENTS (continued)

## Assignment #4

The sustainable development of a largely forested 3-township land base in Central Ontario. Students as a group will develop the strategic plan for the sustainable development within a series of constraints. Emphasis will be placed on creating innovative activities and techniques for creating economic ecological, and social sustainability. FRI, surficial geology and soil series maps will be provided.

## Assignment #5

Each individual student will be assigned a selected reading from either "Managing Sustainable Development" or "Global Outlook 2000". Each student will then make a 10-minute presentation to the class summarizing the contents of the reading. Students will be encouraged to participate in discussion following each presentation.

IV. EVALUATION METHODS: Test 25% Assignment #1 10% Assignment #2 10% Assignment #3 15% Assignment #4 20%

Assignment #5 15% Quizz 5%

100%

80% attendance is mandatory to achieve a C grade or higher.

A+ 90 - 100% A 80 - 89%

B 70 - 79%

C 60 - 69%

R < 60%

## V. REQUIRED STUDENT RESOURCES:

- 1. Our Common Future. The World Commission on Environment and Development 1987. Oxford University Press. Oxford UK. 400 p. References
- 2. <u>Global Outlook 2000</u>. United Nations Publications 1990. 340 p.
- 3. <u>Managing Sustainable Development</u>. Michael Carley and Ian Christie 1993. University of Minnesota Press Minneapolis USA 303 p.

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- VI. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY

  BOOK SECTION: (Other references available in Library or from the instructor)
- 1. <u>Caring for the Earth</u>. United Nations Environment Programme (UNEP) 1992. The United Nations New York NY. 10017 USA.
- 2. <u>Sustaining Our Natural Resources</u>. Ontario Ministry of Natural Resources. 1993. Queen's Printer Toronto, Ont. 37 p.
- 3. <u>Balancing Act</u>. Hammish Kimmins, 1992. University of British Columbia Press Vancouver BC. 244 p.
- 4. <u>Toward a Common Future</u>. Michael Keating 1989. Minister of Supply and Service Canada. Ottawa. 47 p.
- 5. <u>Sustainable Development and Forest Management, National Forum Proceedings</u>. Canadian Council of Forest Ministers 1990. N.S. Dept. of Lands/Forestry Canada.
- 6. <u>Sustainable Development Initiatives in Canada, Activities in Progress.</u> Sustainable Development/State of the Environment Reporting Branch, Environment Canada 1990. Minister of Supply and Service Canada.
- 7. <u>Nations of the Earth Report</u>. United Nations Conference on Environment and Development, 1992. United Nations Report Ottawa, Ont. 322 p.
- 8. The Global Partnership for Environment and Development. United Nations Report, 1992. 116 p.
- 9. <u>State of the World</u>. Lester R. Brown, 1992. World Watch Institute Report. 336 p.
- 10. <u>One World For One Earth</u>. Philip Sarre and Paul Smith With Eleanor Morris, 1991. 188 p.
- 11. The Global Ecology Handbook. What You Can Do About the Environmental Crisis. Edited By W.H. Corson 1990. Beacon Press Boston. 414 p.

#### VII. 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.