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

COURSE OUTLINE

COURSE TITL	SUSTAINABLE RESOURCE MANAGEMENT		
CODE NO.:	FOR 311-4 V & VI		
PROGRAM:	INTEGRATED RESOURCE MANAGEMENT TECHNOLOGY		
AUTHOR:	MARK HARVEY		
DATE:	AUGUST 1993 PREVIOUS OUTLINE DATED:		
APPROVED:	DEAN, SCHOOL OF SCIENCES & DATE NATURAL RESOURCES		



SUSTAINABLE	RESOURCE
MANAGEMENT	

FOR 311-4

COURSE NAME

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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.

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III. LEARNING ACTIVITIES:

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

Video #1 Video #2 Video #3

Assign Reading Our Common Future

Week 2 Review of the Major Initiatives in Sustainable Development

1. Brundtland Report

2. Unced Earth Summit Rio 1992

- Canada's Forestry Accord and the National Forestry Strategy, Canadian Council of Forest Ministers Sustainable Forests
- 4. Canada's Green Plan
- 5. Ontario's Sustainable Development Program
- 6. Any Major New Initiatives in 1993

Week 3

Week 4 Sustainable Development in the Forest Community

1. Sustainable Development in Tropical Forests

- New Forestry in North America, the work of Herb Hammond, Hammish Kimmins and others
- 3. Forest Resource Conflicts and Sustainability
- 4. Economics of Sustainable Forest Resource Management

Week 5 1. Test #1

2. Review of text Our Common Future

- 3. Students will prepare for written book review during week 9.
- Week 6

 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. Small groups of students will act as representatives of industry, interest groups and communities. Activity will stress the team approach to decision making.
 - 2. Students will be assigned topics for presentation in Week 12.

Week 7

Week 8 Sustainable Development and the Developing Nations

1. Over population

- 2. Deforestation and Desertification
- 3. Air Pollution
- 4. Water Pollution
- 5. Poverty
- 6. Urbanization
- 7. Biodiversity
- 8. Developed Nation Assistance to the Third World, Foreign Aid, the World Bank

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LEARNING ACTIVITIES: (continued)

- Week 9 Book Review of Our Common Future
 - 1. Students will prepare written summaries for 2 sections from this document. Instructor will assign sections to each student. About 400 words per section.
 - 2. Students will be assigned topics for a debate on "Selected Sustainable Resource Management Issues Important to Canadians".
 - i) Should Canada Sell Large Volumes of Water to the U.S. and Mexico?
 - ii) Wilderness, How Much is Enough in Canada?
 - iii) The Ethics, Human Rights Issues and Necessity of Human Population Control for Sustainability of Resources.
 - iv) One other topic to be decided by the class.
- Week 10 Student Debates as Assigned in Week 9
- Week 11 The Ontario Ministry of Natural Resources and Sustainable Resource Management. The resource persons from the OMNR will be dependent on current and future structural changes in that organization.
- Week 12 Students will now present their strategies for sustainable resource management assigned week 6. These will be 15 minutes each with 5 to 10 minutes for questions and discussion. Each group should outline 6 to 10 methods that could be used to help ensure the sustainability of the resource.

Presentation Topics will be

- i) Soil and Agriculture
- ii) Waste Management
- iii) Terrestrial Ecosystem Management
- iv) Aquatic Ecosystem Management
- v) Energy
- vi) The Atmosphere

Week 13 Short Test

V. EVALUATION METHODS:

Test #1	25%
Test #2	15%
Book Review	25%
Debate	10%
Presentation	15%
Participation	10%

1987. Oxford University Press. Oxford UK. 400 p. References

- VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY BOOK SECTION: (Other references available in Library or from the instructor)
- 1. Caring for the Earth. 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. Toward a Common Future. 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. Sustainable Development Initiatives in Canada, Activities in Progress. Sustainable Development/State of the Environment Reporting Branch, Environment Canada 1990. Minister of Supply and Service Canada.
- 7. Nations of the Earth Report. 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. Global Outlook 2000. United Nations Publications 1990. 340 p.
- 10. State of the World. Lester R. Brown, 1992. World Watch Institute Report. 336 p.
- 11. One World For One Earth. Philip Sarre and Paul Smith With Eleanor Morris, 1991. 188 p.
- 12. The Global Ecology Handbook. What You Can Do About the Environmental Crisis. Edited By W.H. Corson 1990. Beacon Press Boston. 414 p.

VIII. 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.