

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



**COURSE OUTLINE**

**Course Title:** ENVIRONMENTAL IMPACT ASSESSMENT

**Code No.:** ENV324

**Semester:** 6

**Program:** ENVIRONMENTAL ENGINEERING TECHNOLOGY

**Author:** BRAD KIRK/LORY VANDERZWET

**Date:** NOVEMBER 1998 **Previous Outline Date:** APRIL 1997

**Approved:**

*K. DeRosario*

**Dean**

*Nov. 11/98*

**Date**

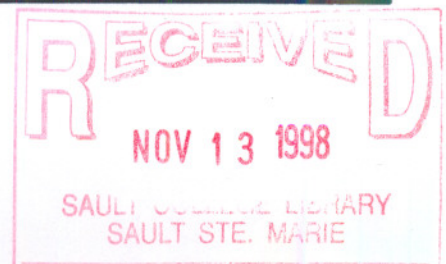
**Total Credits:** 4

**Prerequisite(s):**

**Length of Course:** 16

**Total Credit Hours:**

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For additional information, please contact Kitty DeRosario, Dean, School of Trades  
& Technology Studies, (705) 759-2554, Ext. 642.



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COURSE NAME

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CODE NO.

- I. COURSE DESCRIPTION:** This course will present information on the environmental impact assessment process, covering both economic and legislative considerations, with a view toward the preparation of environmental impact reports.
- II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**  
(Generic Skills Learning Outcomes placement on the course outline will be determined and communicated at a later date.)

Upon successful completion of this course the student will demonstrate the ability to:

- 1) Discuss the basic economic aspects of pollution control.

Potential Elements of the Performance:

- i) Define waste, pollution, and residual management
- ii) Perform a benefit-cost analysis on simplified problems
- iii) Explain the limitations of benefit-cost analysis

- 2) Describe the Legislative requirements of Environmental Impact Assessment in Ontario.

Potential Elements of the Performance:

- i) Define "environment" according to the Environmental Assessment Act
- ii) Describe the Environmental Assessment Process in Ontario
- iii) Describe the documents required in an environmental assessment process

- 3) Describe the purpose and nature of a Class Environmental Assessment.

Potential Elements of the Performance:

- i) Explain the application of a class EA
- ii) Describe the planning and design process in class EA
- iii) Discuss the main features of a typical class EA

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COURSE NAME

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CODE NO.**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE  
(Continued)**

- 4) Describe methods of forecasting environmental impacts.

Potential Elements of the Performance:

- i) Describe the uses of judgmental approaches, physical models, and mathematical models in forecasting environmental impacts.
- ii) Apply environmental audits to forecast environmental impacts.

- 5) Describe methods and processes for evaluating environmental impacts.

Potential Elements of the Performance:

- i) Describe some of the issues in multi-criteria evaluation
- ii) Explain the need for and methods of involving the public in evaluation

**III. TOPICS:**

- 1) Environmental Quality and Decision Making
- 2) Residuals Management
- 3) The Environmental Assessment Process
- 4) Guidelines for the Preparation of Environmental Assessments
- 5) Class Environmental Assessments
- 6) Forecasting Environmental Impacts
- 7) Evaluating Environmental Impacts
- 8) Environmental Audits



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**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

Environmental Assessment Act, MOEE

Municipal Engineers Association, Class Environmental Assessment for Municipal Sewage and Water Projects.

Optional: The Handbook of Environmental Compliance in Ontario, 2<sup>nd</sup> Edition, Phyper & Ibbotson

**ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY BOOK SECTION:**

Canter, Larry W., Environmental Impact Assessment, McGraw-Hill Book Company.

Ortolano, Leonard, Environmental Planning and Decision Making, John Wiley & Sons

**V. EVALUATION PROCESS/GRADING SYSTEM**

	Assignments	40%		
	Mid Term Test	30%		
	Final Exam	30%		
A+	90 - 100%		A	80 - 89%
B	70 - 79%		C	60 - 69%
R	Below 60%			

Due dates will be specified for all assignments. Late assignments will be assessed a penalty in accordance with the attached policy. Dates and times for the mid term test and final exam will be announced at least one week in advance and attendance at these is mandatory.

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## VI. SPECIAL NOTES:

- Special Needs  
If you are a student with special needs (eg. physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office, Room E1204, Ext. 493, 717, 491 so that support services can be arranged for you.
- Retention of Course Outlines  
It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions.
- Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.
- Substitute Course Information is available at the Registrar's Office.
- Any Other Special Notes appropriate to your course.

## VII. PRIOR LEARNING ASSESSMENT

Students who wish to apply for advanced credit in the course should consult the instructor.

