

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

**COURSE TITLE:** POLLUTION ECONOMICS

**CODE NO.:** WTR 320-2 **SEMESTER:** VI

**PROGRAM:** WATER RESOURCES/ENVIRONMENTAL ENGINEERING TECHNOLOGY

**AUTHOR:** JACK BETHUNE

**DATE:** FEBRUARY 1993 **PREVIOUS OUTLINE DATED:** MAY 1990

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**TOTAL CREDIT HOURS: 32**

**PREREQUISITE(S):** None

**I. PHILOSOPHY/GOALS:**

This course is intended to give the student an understanding of the economic factors which have a bearing on pollution problems. The course is directed to a general knowledge of environmental economics, rather than specific economic analysis of environmental processes.

**II. STUDENT PERFORMANCE OBJECTIVES:**

Upon successful completion of this course the student will:

1. Define and discuss waste, pollution and pollution problems.
2. Describe approaches to solving pollution problems based on economic **and** social factors.
3. **Use** cost-benefit analysis to evaluate pollution prevention.
4. Describe economic instruments including regulations, charges and **tradeable** permits for pollution control.

**III. TOPICS TO BE COVERED:**

1. **Pollution and Waste**
2. **Costs of Waste Disposal**
3. **Economic Analysis** of Pollution Problems
4. **Implementation** of Pollution Prevention Policies
5. **Case Studies including** acid rain, pulp and paper industry and **steel industry**

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IV. EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE REQUIREMENTS ETC.)

Written Examination 50%

Project Work 50%

To achieve the objectives specified for this course, students will be given the basic principles of pollution economics through, a series of lectures. On completion of this, students will be given an examination which will contribute 50% to the final mark.

In partial fulfillment of this course every student will be required to submit a project report on a topic related to the subject. The size of the report may not be more than fifteen typed pages. Based on the report every student will present a seminar in the class and invite questions from audience. The weight of project in determining the final mark is 50%. Following criteria will be used in evaluating the project:

a) Report (60% of Project Mark)

- 1) Quality of report from subject matter point of view
- 2) Presentation of the material in the report
- 3) Accuracy, purpose and utility of the analysis

b) Seminar (40% of Project Mark)

- 4) Preparation and delivery
- 5) Participation in discussion

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**VI. REQUIRED STUDENT RESOURCES:**

Economics and the Environment; A Reconciliation, edited by Walter E. Block.

**VII. ADDITIONAL RESOURCES:**

Book Section:

1. Economic Thinking and Pollution Problems, edited by D.A.L. Auld, published by University of Toronto Press, 1972.  
Call No. TO 176.7 A8
2. Pollution, Property and Prices by J.H. Dale, published by University of Toronto Press, 1968.
3. Environmental and Natural Resource Economics, by T. Tietenbery, published by Scott, Foresman and Co., 1988.
4. Environmental Economics, by D.W. Pearce, published by Longman, 1976.

Periodical Section

Magazines:

AWWA Journal

Environment (Algoma College Library)

Environmental Science and Engineering

**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.