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

COURSE OUTLINE

POLLUTION ECONOMICS

COURSE TITLE:

WTR 320-2

VI

CODE NO.:

SEMESTER:

PROGRAM:

WATER RESOURCES

D.B. TROWBRIDGE

**AUTHOR:** 

MAY 1990

MAY 1988

DATE:

PREVIOUS OUTLINE DATED:

APPROVED:

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POLLUTION ECONOMICS

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COURSE NAME

COOE NO.

TOTAL CREDIT HOURS: 32

PREREQUISITB(S): None

#### I. PHILOSOPH Y/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

Note: The seminar will be videotaped so presenters will be able to evaluate his/her own presentation.

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### VI. REQUIRED STUDENT RESOURCES:

Economics and the Environment; A Reconciliationy 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