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

COURSE OUTLINE

Course Title: POLLUTION ECONOMICS

Code No.: WTR 320-2

Program: WATER RESOURCES

Semester:

Date: SEPT. 1983

Author: S. VERMA

New: Revision:

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APPROVED;

Chairperson Date

WATER RESOURCES WTR 320-2 POLLUTION ECONOMICS

Pollution Economics
Course Name

WTR 320-2 Course Number

OBJECTIVES:

- 1. Understanding of the concepts of pollution and waste.
- 2. Knowledge about approaches to attack a pollution problem from economics point of view.
- 3. Developing economic models for simple problems related to pollution.

EVALUATION:

Mid-term Examination 50%

Project Report 50%

To achieve the objectives specified for this course in the first half of the course students will be given the basic principles of pollution economics through a series of lectures. On completion 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 weightage of report in determining the final mark is 50%. Following criteria will be used in evaluating the project;

a) Report

- 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

- 1) Preparation and delivery
- 2) Participation in discussion

WATER RESOURCES WTR 320-2 POLLUTION ECONOMICS

TEXTBOOK(S):

Dales, J.H., (1968) Pollution property and prices. An essay in policy-making and economics. University of Toronto Press, Toronto

REFERENCES:

Pearce, D.W., (1976) Environmental Economics, Longman, New York

COURSE OUTLINES:

- 1. Pollution and Waste
 - environment pollution cycle
 - economic definition of waste
 - types of wastes
 - physical, chemical, biological nature of wastes
 - factors controlling the amount and quality of waste
- 2. Costs of Waste Disposal
 - pollution prevention costs
 - pollution costs
 - minimizing waste disposal costs
 - pollution prevention measures and costs
 - damage avoidance measures and costs
- 3. Economic Analysis of Pollution Problems
 - economic analysis of simplified problems
 - benefit cost analysis
 - benefit cost analysis for various combination of alternatives to solve a problem
 - economic analysis of actual problems
 - political solutions
- 4. Case Studies
 - acid rain
 - pulp and paper
 - steel industry
 - others