

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: SIX

Date: MAY 1988

Author: D.B. TROWBRIDGE

New:

Revision:

APPROVED:


Chairperson

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Date

MAY 16 1988

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CALENDAR DESCRIPTION

POLLUTION ECONOMICS

WTR 320-2

Course Name

Course Number

OBJECTIVES

1. Understanding waste, pollution and pollution problems.
2. Knowledge about approaches to find a solution to pollution problems based on economics and social laws.
3. Application of the principles of economics to simple pollution problems to make a sound judgement/decision as to the method/solution best suited under a given set of conditions.

EVALUATION;

Written 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 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 weightage 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.

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 OUTLINE;

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
 - economics of waste treatment
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 including: travel cost, compensation required, willingness to pay
 - political solutions
4. Case Studies
 - acid rain
 - pulp and paper
 - steel industry
 - others