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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: SEPTEMBER. 1984
- Author: S. C. VERMA

New:

Revision:

APPROVED:

Chairperson ^ ^ 4 < ^ - ^ ' Date

CALENDAR DESCRIPTION

POLLUTION ECONOMICS Course Name WTR 320-2 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:

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 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 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