DOC. #657

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

COURSE OUTLINE

POLLUTION ECONOMICS

COURSE TITLE:

WTR 320-2 VI

CODE NO.: SEMESTER:

WATER RESOURCES/ENVIRONMENTAL ENGINEERING TECHNOLOGY

PROGRAM:

BRAD KIRK

AUTHOR:

APRIL 1995 MAY 1993

DATE: PREVIOUS OUTLINE DATED:

APPROVED:

DEAN, SCHOOL OF SCIENCES &

NATURAL RESOURCES

DATE

POLLUTION ECONOMICS

WTR 320-2

COURSE NAME CODE NO.

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. The Industrial Economy
- 2. Distribution of Resources
- 3. Wealth and Well-being
- 4. Economic Policies and the Environment
- 5. Costs of Waste Disposal
- 6. Economic Analysis of Pollution Problems
- 7. Implementation of Pollution Prevention Policies

IV. LEARNING ACTIVITIES

- 1. The Industrial Economy
 - description
 - environmental impacts
- 2. Distribution of Resources
 - wants and needs
 - allocation and distribution of resources
 - money and resource flows
 - balancing the values

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IV. LEARNING ACTIVITIES (continued)

- 3. Wealth and Well-being
 - understanding wealth
 - capital and income
 - ecocapital
 - accounting for the environment
- 4. Economic Policies and the Environment
 - energy
 - industry
 - transportation
 - food and agriculture
 - human services
- 5. Costs of Waste Disposal
 - definition of waste
 - quantity and kinds of wastes
 - monetary and non-monetary costs
 - minimizing waste disposal costs
- 6. Economic Analysis of Pollution Problems
 - economic costs and benefits of pollution prevention
 - economic costs of environmental cleanup
 - non-monetary factors
 - cost-benefit analysis
- 7. Implementation of Pollution Prevention Policies
 - Environmental Assessment Act
 - Environmental Protection Act
 - tradeable permits for pollution control

V. EVALUATION METHODS:

A final grade will be determined as follows:

Midterm Test 30% Final Test 30% Essay 40%

Every student will be required to submit an essay on an approved topic related to the course material. The essay will be from 12 to 15 typed pages, double spaced. The essay will be graded based on the following criteria:

- quality of report from subject matter point of view
- presentation of the material in the report
- accuracy of the analysis

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V. EVALUATION METHODS: (continued)

In addition to the body of the report, the essay will also have a formal title page and a properly organized bibliography. Due dates for the approval of topics and presentation of the essay will be specified during the first week of classes.

A final letter grade will be assigned as follows:

A+ 90 - 100% A 80 - 89% B 70 - 79% C 60 - 69%

VI. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the instructor.

VII. REQUIRED STUDENT RESOURCES:

Ekins, Paul: The Gaia Atlas of Green Economics

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.