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SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: WATERSHED MANAGEMENT

CODE NO.: FOR 318-4 SEMESTER: 6

PROGRAM: FISH & WILDLIFE/FOREST MANAGEMENT/PARKS & FOREST REC.

AUTHOR: VALERIE WALKER

DATE: SEPTEMBER 1991 PREVIOUS OUTLINE DATED: SEPT. 1990

APPROVED: _____ Sept 5/91
DEAN DATE

WATERSHED MANAGEMENT	FOR 318
COURSE NAME	COURSE NUMBER

III. TOPICS TO BE COVERED:

1. Important Physical Properties of Water Affecting Management
2. Control of Runoff in Watersheds
3. Flood Plain Mapping, Hazard Land Evaluation and Control Structures
4. Shore Processes and Shore Protection
5. Stream Improvement/Rehabilitation
6. Forestry Practices and Watershed Management

IV. EVALUATION METHODS:

Unit Tests	50%
Assignments	50%

Tests will be given approximately in weeks 5, 10, and 15 of the semester.

Assignments are due 2 weeks after assigned and late assignments will be penalized 10% per day. All assignments must be submitted to pass the course.

Marks are cumulative and 60% is considered a passing grade.

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

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.

WATERSHED MANAGEMENT **FOR 318**

COURSE NAME **COURSE NUMBER**

TOTAL CREDIT HOURS: 64

PREREQUISITE(S): None

I. PHILOSOPHY/GOALS:

A practical course designed for field personnel to provide information on watershed management and methods to assist in minimizing the impact on riparian areas undergoing development. Discussed are stream control structures and shore protection devices, flood plain mapping and the control of runoff. Specific reference is to the potential effects of forestry practices on the aquatic environment as well as measures which can be taken to prevent, mitigate or remedy potential negative effects.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

1. Describe the important physical properties of water affecting management.
2. Describe the physics of river meanders, particle movement and the measurement of stream flow.
3. Describe the basic runoff equation and the factors involved in its determination.
4. Outline the procedure for floodplain mapping and hazard land evaluation.
5. Discuss the role of wetlands in watershed management and the control of runoff by proper management practices.
6. Outline the importance of biological indicators in the assessment of water quality.
7. Describe shoreline processes, devices and guidelines for shore protection.
8. Discuss erosion control and stream improvement devices in the rehabilitation of streams.
9. Discuss the impact of forestry practices on aquatic environments and mitigating measures that can be taken.