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

# COURSE OUTLINE

COURSE TITLE	MUNICIPAL ADMINIST	RATION AND SERVICE	S
CODE NO.:	CIV 110-4	SEMESTER:	IV
PROGRAM:	CIVIL ENGINEERING		
AUTHOR:	JOHN K. THEIL		
DATE:	SEPTEMBER 1990	PREVIOUS OUTLINE	SEPTEMBER 1989
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APPROVED:	DEAN	DATE	lept 27/90

MUNICIPAL ADMINISTRATION AND SERVICES

CIV 110-4

COURSE NAME

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TOTAL CREDIT HOURS: 45

PREREQUISITE(S): HYD 220 HYDRAULICS

### I. PHILOSOPHY/GOALS:

To introduce the basic principles and procedures for the design and construction of water distribution, sanitary sewers, and storm drainage systems. Also, conventional water and wastewater treatment processes are covered.

# II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will be able to:

- Apply the basic principles of hydraulics and hydrology applicable to water distribution, waste water collection, and storm drainage systems.
- Identify and apply water quality criteria and treatment requirements for ground and surface waters.
- 3) Describe conventional water and wastewater treatment methods.
- Prepare system layouts and perform basic designs of water and sewer systems.
- 5) Select appropriate materials for piping and appurtenances.

#### III. TOPICS TO BE COVERED:

TOPICS		HOURS
1.	Hydraulics and Hydrology	6
2.	Water Distribution System	10
3.	Sanitary Sewer System	8

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4. Storm Drainage	6
5. Water and Wastewater Treatment	8
	38
Review	2
Interim/Final Examinations	5
IV. METHOD OF EVALUATION:	
Assignments/Exercises	20%
Interim Tests 2 @ 20%	40%
Final Examination	40%
Grading:	
A+ = 90 - 100% A = 80 - 89%	

A passing grade will be based on a minimum composite grading of 60%. Students obtaining a composite grading of 55 to 59% may be allowed to complete a supplementary examination.

# V. REQUIRED STUDENT RESOURCES:

B = 70 - 79% C = 60 - 69%

# TEXTBOOK(S):

Hammer, Mark J.; <u>Water and Wastewater Technology, Second Edition</u>; John Wiley and Sons.

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VI. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY BOOK SECTION:

#### REFERENCES:

Ministry of the Environment; <u>Guidelines For the Design of Water Storage</u>
<u>Facilities</u>, <u>Water Distribution Systems</u>, <u>Sanitary Sewage Systems and Storm</u>
<u>Sewers</u>; <u>Government Bookstore</u>, 880 Bay Street, <u>Toronto</u>

# VII. 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.