



LAWRENCE TECHNOLOGICAL UNIVERSITY

Department of Civil Engineering

Fall 2003

ECE3324 Environmental Engineering 1

Dr. Yuen

E203 MW 5:45-7:00 PM

Office: E25

E203/E04C Lab. Thurs. 4:30-6:20 PM

Section: 01

Prerequisite: CHM1213 University Chemistry 1 & ECE3523 Hydromechanics.

Course Description: Environmental quality and objectives; standards and regulations, basic concepts of water purification; drinking water quality standards and the design of unit operations and processes in water treatment. Water plant waste management. Water quality management in rivers and lakes.

Text: 1. Introduction to Environmental Engineering, Davis and Cornwell, 3rd Edition, McGraw-Hill, 1998.

2. Laboratory Manual (provided by Instructor).

Microcomputer Literacy: MS WORD, MS PowerPoint, Mathcad and EXCEL spreadsheet.

Grading Scheme:

Exam 1	22.5% (50 minutes)
Exam 2	22.5% (50 minutes)
Final Exam	30.0% (100 minutes)
Oral Presentation	5.0%
Lab. Reports	12.0%
Assignments and Projects	8.0%

Scoring (%):

A	96-100	B ⁺	86-90	C ⁺	71-75	D ⁺	57-60	F	0-49
A ⁻	91-95	B	81-85	C	66-70	D	53-56		
		B ⁻	76-80	C ⁻	61-65	D ⁻	50-52		

Makeup Exams: Makeup exams will not be given, except in cases of emergencies. In such cases, the student must contact me (248-204-2523) or the CE secretary (248-204-2545) prior to the exam date/time.

Wee k	Date	Topic Outline	Chapter - Section
1	Aug. 28	Introduction	1-2, 1-3
			1-4
			1-5, 1-6
2	Sep.4		1-6
		Water	3-1
		Treatment	3-1
3	11		3-1
			3-1
			3-1
4	18		3-1
			3-1
			3-2
5	25		3-3
			3-3
			Exam 1
6	Oct. 2		3-4, 3-5
			3-5

			3-6
7	9		3-6
			3-7
			3-7
8	16		3-8
			3-9, 3-10
			3-10
9	23		3-10
		Water	4-1, 4-2, 4-3
		Quality	4-3
10	30	Management	4-3
			4-3
			Exam 2
11	Nov. 6		4-3
			4-3
			4-3
12	13		4-3
			4-4
			4-4
13	20	Introduction to Wastewater	5-1, 5-2
		Treatment Unit Processes	5-3
			5-4
14	Dec. 1	Introduction to Air Pollution	6-1, 6-2
			6-3, 6-4
			6-5
15	8	Oral Presentations	