## MEC 740 ENVIRONMENTAL CONTROL IN BUILDINGS

**Instructor:** Prof. Wey Leong

**Office:** KHS47B

**Telephone:** 416-979-5000 Ext. 7706 **E-mail:** weyleong@ryerson.ca

**Office hours:** Monday: 1:00 - 3:00 P.M. & 5:00 - 6:00 P.M.

Wednesday: 1:00 - 3:00 P.M. & 4:00 - 5:00 P.M.

Other hours: please make appointments

**Lecture classes:** Monday at BUS512: 3:10-5:00 P.M.

Wednesday at KHE118: 3:10 – 4:00 P.M.

**Teaching assistant (TA):** Rachit Bhambri (rbhambri@ryerson.ca)

**Course web page:** www.ryerson.ca/~weyleong/courses/mec740/

## **Detailed Course Outline:**

Week	<u>Date</u>	<u>Subject</u>	Text Reference
1	Sep. 6	Introduction	Chapter 1
2	13	Introduction	
		Air-Conditioning Systems	Chapter 2
3	20	Air-Conditioning Systems	
4	27	Moist Air Properties and Conditioning Processes	Chapter 3
5	Oct. 4	Comfort and Health	Chapter 4
6	11	Heat Transmission in Building Structures	Chapter 5
		Space Heat Load	Chapter 7
7	18	Space Heat Load	
		The Cooling Load	Chapter 8
8	25	The Cooling Load	_
		Energy Calculations	Chapter 9
9	Nov. 1	Energy Calculations	
		Fans and Building Air Distribution	Chapter 12
10	8	Fans and Building Air Distribution	
11	15	Space Air Diffusion	Chapter 11
12	22	Refrigeration	Chapter 15
13	29	Refrigeration	
14	Dec. 6	Energy Management and Conservation in HVAC Sy	ystems
		Economics of HVAC	

**Assignments:** There will be about **nine** assignments. Each assignment will be due in a week.

Late assignments will be penalized 20% per day.

**Project:** There will be **one** project. A project report will be due on Dec. 6, 2004. The

report must be professionally prepared. Late report will be penalized 20% per day.

**Term Tests:** The **two** term tests will be scheduled in the 6<sup>th</sup> and 11<sup>th</sup> weeks. Each test will be 2

hours in duration, open textbook and class notes; but no solved problems are

allowed. The term tests are worth 15% each, of course evaluation.

**Final Exam:** The final exam will be 3 hours in duration and will be scheduled within the

examination period. It will be open textbook and class notes; but no solved

problems are allowed.