

# **Department of Economics Course Outline**

**Term:** Winter 2008

**Course:** Economics/Engineering 209

[Engineering Economics]

**Section:** [01] & [02]

**Time:** [01] TR 09:30 – 10:45

[02] TR 17:00-18:15

**Place:** [01] ENE 241

[02] ENE 243

(subject to change)

**Instructors:** Professor R.C. Schlenker

**Office:** SS 1050 **Telephone:** 220-4096

220-5857 (messages)

**Office Hours:** TR 8:30-9:15

**Textbook(s):** 

Park, Porteous, et al., *Contemporary Engineering Economics (Canadian Perspective)*, Addison-Wesley, 2<sup>nd</sup> Canadian edition.

**Book(s) on Reserve:** None.

**Blackboard:** This course will make use of Blackboard - students who are registered in the course can log on at <a href="http://blackboard.ucalgary.ca/webapps/login">http://blackboard.ucalgary.ca/webapps/login</a>

### **Tutorials:**

There will be an hour long tutorial each week, scheduled by the Faculty of Engineering. Quizzes will be held in the tutorials. Tutorials will start January 29/30.

# **Course Outline:**

A successful engineer requires a basic knowledge of economics, in addition to science and engineering. This course will introduce you to the concepts and methods utilized in engineering economics. The primary concept that you will learn is the time value of money. You will also learn problem solving methods and apply these to a variety of engineering decisions such as equipment replacement and selection among new investment alternatives.

## **Outline of Topics and Textbook References:**

- 1. Introductory Micro and Macroeconomics Chapter 1 and lecture notes
- 2. Interest and the Value of Money over Time Chapters 2 and 3
- 3. Project Evaluation Chapters 4, 5 and 6
- 4. Public Sector Projects Chapter 14
- 5. Analysis of Uncertainty and Risk Chapter 13
- 6. Depreciation and Taxation Chapters 7, 8 and 9
- 7. Inflation Chapter 12
- 8. Replacement Analysis Chapters 6 and 11

The basic lecture notes for Topic 1 (without graphs) appear under Course Documents in Blackboard. It is expected that students will have a copy of these notes with them in lectures and lectures will proceed at a speed that is consistent with this expectation. Any graphs and additional notes that students may wish to take down can be added to the notes from Blackboard.

#### **Grade Determination and Final Examination Details:**

8 quizzes (best 7 counted)	15%	(Jan 29/30, Feb 5/6, 12/13, Feb 26/27,
		Mar 4/5, 25/26, Apr 1/2, 8/9)
Midterm Examination	35%	(March 17: 18:30-20:30)
Final Examination	50%	(April 21-30)

- 1. Quizzes 1, 2 and 3 will consist of multiple choice questions. Quizzes 4-8 will consist of numerical problems. Quizzes will be held in tutorials.
- 2. The Midterm Examination will consist of multiple choice questions and numerical problems.
- 3. The final examination will last two hours, will be scheduled by the Registrar and held in a Gymnasium. The final examination will consist of numerical problems.
- 4. A <u>non-programmable</u> calculator may be used in the quizzes and examinations.

Tests and final exams are marked on a numerical (percentage) basis, then converted to letter grades. The course grade is then calculated using the weights indicated above. As a guide to determining standing, these letter grade equivalences will generally apply:

A+	98-100	В	75-79	C-	60-62
A	90-97	B-	70-74	D+	55-59
A-	85-89	C+	67-69	D	50-54
B+	80-84	C	63-66	F	0-49

If, for some reason, the distribution of grades determined using the aforementioned conversion chart appears to be abnormal the instructor reserves the right to change the grade conversion chart if the instructor, at the instructor's discretion, feels it is necessary to more fairly represent student achievement.

#### Notes:

- 1. A passing grade on any particular component of the course is not required for a student to pass the course as a whole.
- 2. Students should be aware that generally no "make-up" exams will be given. Any student who finds it necessary to miss an examination or quiz must notify the instructor in advance and produce a valid medical certificate or other required documentation in order to have the weighting moved to another piece of work. Note that deferred final examinations do not have to cover the same material or have the same format as the regular final examination.
- 3. Practice questions will be assigned. Students are not required to hand these in, but it is highly recommended that they be completed. Answers to practice questions and quizzes related to project evaluation from previous semesters can be found on the Engineering Drop-In Centre (EDIC) website (<a href="http://www.schulich.ucalgary.ca/EDIC/index.html">http://www.schulich.ucalgary.ca/EDIC/index.html</a>). You need a U of C email address and must be registered in the course in order to access the EDIC website. Please contact the Information Technology department of the U of C if you wish to get a U of C email address (<a href="http://www.ucalgary.ca/it">http://www.ucalgary.ca/it</a>).
- 4. Students should be aware of the academic regulations outlined in The University of Calgary Calendar.
- 5. Students seeking reappraisal of a piece of graded term work should discuss their work with the instructor *within fifteen days* of the work being returned to class. However, the earliest that grades will be discussed will be two days after the return of a quiz or examination.
- 6. Students will be responsible for all material listed on the course outline, regardless of whether or not the material has been covered in class, unless the instructor notifies the class that the material will not be covered.
- 7. Please note that the following types of emails will receive no response: emails not addressed to anyone in particular; emails where the recipient's name is not spelled correctly; anonymous emails; emails in which the sender has not identified which course and section he/she is taking; and, emails involving questions that are specifically addressed on the course outline.

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8. It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not

registered with the Disability Resource Centre, please contact their office at 220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

Students' Union Vice-President Academic:

Brittany Sargent Phone: 220-3911

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Students' Union Faculty Representative (Social Sciences)

Nav Thind

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Society of Undergraduates in Economics (S.U.E.):

www.ucalgary.ca/sue/

Safewalk / Campus Security: 220-5333

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RCS/mi 2007-11-14