



## Department of Economics Course Outline

		<b>Term:</b>	Winter 2012
<b>Course:</b>	Economics/Engineering 209 [Engineering Economics]	<b>Section:</b>	[01] & [02]
<b>Time:</b>	[01] TR 9:30–10:45 [02] TR 17:00-18:15	<b>Place:</b>	[01] ENA 101 [02] ENA 101 (subject to change)
<b>Instructors:</b>	Professor R.C. Schlenker		
<b>Office:</b>	SS 548	<b>Telephone:</b>	220-4096 220-5857 (messages)

**Office Hours :** TR 12:30-13:00

### **Textbook(s):**

Newnan, et al., *Engineering Economic Analysis*, Oxford University Press, 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 <http://blackboard.ucalgary.ca/webapps/login>

### **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 24/25.

### **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 3 and 4
3. Project Evaluation - Chapters 5-9
4. Public Sector Projects - Chapter 16
5. Analysis of Uncertainty and Risk – Chapters 9 and 10
6. Depreciation and Taxation - Chapters 11 and 12
7. Inflation - Chapter 14
8. Replacement Analysis – Chapters 13

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 24/25, Jan 31/Feb 1, Feb 7/8, 14/15, 28/29 Mar 20/21, 27/28, Apr 3/4)
Midterm Examination (out of class)	35%	(March 12: 18:30-20:30)
Final Examination	50%	(April 15-26)

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 non-programmable 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	B	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

**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. Many practice questions are from the textbook. Answers to practice questions from the textbook can be found at

[http://www.oupcanada.com/higher\\_education/companion/engineering/9780195430172/student\\_resources.html](http://www.oupcanada.com/higher_education/companion/engineering/9780195430172/student_resources.html)

Answers to other practice questions and quizzes related to project evaluation from previous semesters can be found on Blackboard.

4. Students should be aware of the academic regulations outlined in The University of Calgary Calendar.
5. **The use of cell phones for any purpose in class is prohibited. Computers may be used for note-taking purposes only.**
6. Students seeking reappraisal of a piece of graded term work should discuss their work with the instructor *within fifteen days* of 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.
7. 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.
8. 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.

Students' Union Vice-President Academic:

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

[www.ucalgary.ca/sue](http://www.ucalgary.ca/sue)

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students succeed both academically and socially at the University of Calgary. Services include access to the exam bank, career partnerships with the Career Centre through hosting industry nights and information sessions, recognizing achievements in teaching, and organizing social events for members. Join now by contacting [sue@ucalgary.ca](mailto:sue@ucalgary.ca).

*Faculty of Arts Program Advising and Student Information Resources*

- Have a question, but not sure where to start? The new Faculty of Arts Program Information Centre (PIC) is your information resource for everything in Arts! Drop in at SS110, call us at 403-220-3580 or email us at [artsads@ucalgary.ca](mailto:artsads@ucalgary.ca). You can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate> which has detailed information on common academic concerns.
- For program planning and advice, contact the Student Success Centre (formerly the Undergraduate programs Office) at (403) 220-5881 or visit them in their new space on the 3<sup>rd</sup> Floor of the Taylor Family Digital Library.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210-ROCK [7625] or visit them at the MacKimmie Library Block.

Safewalk / Campus Security: 220-5333

Emergency Assembly Location – MacEwan Student Centre – North Courtyard

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RCS:mi

2012-01-05