

Economics 209(L01) (Engineering Economics)

Instructor:	Mr. Douglas McClintock	Lecture Location:	ICT 114
Phone:	403-220-2837	Lecture Days/Time:	MW 18:00 – 20:45
Email:	dmcclint@ucalgary.ca		
Office:	SS348		
Office Hours:	TR - 12:00 - 13:00 MW –16:00 - 17:00		Spring 2015

Textbooks

Park, Zuo et al., *Contemporary Engineering Economics (Canadian Perspective)*, Addison-Wesley, 3rd Canadian Edition [**Required Text**]

Mankiw et al. *Principles of Macroeconomics*. Sixth Canadian Edition. Toronto: Thomson Nelson. [**Optional Text**]

Note: the Fourth and Fifth edition can also be used.

Book(s) on Reserve: Mankiw et al. *Principles of Macroeconomics*. Fifth Canadian Edition. Toronto: Thomson Nelson.

Desire2Learn: This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <http://d2l.ucalgary.ca> or through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. The default is your University of Calgary e-mail address.

Tutorials

There will be an hour long tutorial – 2 times per week, scheduled by the Faculty of Engineering. Quizzes will be held in the tutorials. Tutorials will start Wednesday May 27th 2015.

Course Outline:

The purpose of this course is to introduce the engineering student to the discipline of economics and its importance in the field of engineering. The first part of the course examines economics in terms of scarcity, choice and opportunity costs. We then turn our focus on important macroeconomic issues such as GDP growth, inflation, unemployment, the financial markets and role of the Bank of Canada in determining interest rates.

The second (and most comprehensive) part of the course examines the time value of money and how engineers use the time value of money to make important economic decisions. In this section, we examine how interest rates and different compounding periods influence the future value of various capital investments. Future value and present value of annuities, bond and mortgages are also explored. Once we get a solid foundation in this area, we then use these tools to determine the net present value, internal rate of return and payback period of various investment options. The last part of the course deals with the effects of depreciation, taxes and inflation on capital budgeting decisions. Replacement analysis of equipment is also examined.

	<u>Course Topics</u>	<u>Text</u>
1.	Introduction	<i>Lecture notes</i> Chapter 1 (<i>Mankiw et al.</i>)
2.	Macroeconomics	Chapters 4,5,6,9 & 10 (<i>Mankiw</i>) (and lecture notes)
3.	Time Value of Money and Economic Equivalence	Chapters 3 and 4 (<i>Park et al.</i>)
4.	Analysis of Independent Projects / Mutually Exclusive Alternatives	Chapters 5 and 6
5.	Depreciation and Income Taxes	Chapters 8 and 9
6.	Developing After Tax Cash Flows (with and without borrowed funds)	Chapter 10
7.	Replacement Decisions	Chapter 11
8.	Inflation and Project Cash Flows	Chapter 14

Grade Determination and Final Examination Details:

	Number	Percentage
Midterm Examination (Monday June 8 th in class)	1	30%
Quizzes (6.7% each) (Quiz dates: May 27 th , June 15 th , June 22 nd)	3	20%
Final Examination	1	50%
Total		100%

1. Quiz 1 will consist of multiple choice questions. Quizzes 2 and 3 will consist of numerical problems. Quizzes will be held in tutorials.
2. The midterm exam will consist of multiple choice and short/answer questions. Some of the short answer questions will consist of a graph (together with a written explanation) and/or calculations. The midterm exam will be held during regular class time.
3. The final exam will last two hours and will be scheduled by the Registrar's Office. The final exam will consist of numerical problems.
4. A non-programmable calculator (non-graphing calculator) may be used in the quizzes and examinations.

Tests and final exams are marked on a numerical (percentage) basis, and 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+	97 - 100	B+	80 - 84	C+	67 - 69	D+	55 - 59
A	90 - 96	B	75 - 79	C	63 - 66	D	50 - 54
A-	85 - 89	B-	70 - 74	C-	60 - 62	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 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. No "make up" exams will be given. If you find it necessary to miss an exam, notify me (in advance if possible) and produce a valid medical certificate. I will re-adjust the weighing of the missed exam to other exams or work in the course (the weighing of the missed exam will be at the instructor's discretion). In the event that a deferred final exam is granted, keep in mind that this exam does not have to cover the same material or have the same structure (e.g. format) as the regular final exam.
3. Students should be aware of the academic regulations in the University of Calgary Calendar.
4. Programmable (graphing) calculators, Blackberry's, laptops, cell phones and any other electronic device are not to be used in any exam.
5. Plagiarism and Cheating: Students shall not submit words, ideas, images or data of another person as their own in any academic writing, essay, thesis, research, project or assignment in a course or program of study. Formula sheets and/or formulae written on (in) a textbook and/or computer (calculator) case is not allowed. Plagiarism and cheating are serious academic offences and will be dealt with severely.

6. Students seeking reappraisal of a piece of graded work (assignment, midterm test) should discuss their work with the instructor within *7 days* of the work being returned to the class.
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. Students who are registered in the course can log on directly to Desire2Learn at: d2l.ucalgary.ca. Further announcements concerning Desire2Learn will be made throughout the semester. Practice questions will be available on Desire2Learn and I will make available the answer keys to these questions. Submitting practice questions for grading is not required but it is highly recommended that students complete these questions, since success in engineering economics is highly related to learning by doing. In addition these questions are interesting and fun.
9. I try my best to respond to all emails but sometimes this is just impossible with both teaching and work commitments. However, due to the pervasiveness of computer viruses, I immediately delete all messages that I do not recognize. For this reason, please make sure that you identify yourself in the subject box of your email (which is common courtesy anyway).
10. 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 seven (7) days after the start of this course.

Students' Union Vice-President Academic:

Stephan Guscott
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Students' Union Faculty Representative (Arts)

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

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. They invite you to join by contacting sue@ucalgary.ca.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The Arts Students' Centre is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580 or email them at 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, including program planning and advice.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Library Block.
- Online writing resources are available at <http://www.ucalgary.ca/ssc/resources/writing-support>

Safewalk/Campus Security: 403 220 5333
Emergency Assembly Point: Social Sciences Food Court