Department of Economics
Course Outline

		Term:	Winter 2014
Course:	Engineering Economics 209 Engg 209 / Econ 209	**Section:**	01
Time:	TR 17:00 – 18:15	**Place:**	EDC 179
Instructor:	Mr. Doug McClintock		
Office:	SS 350	**Telephone:**	220- 5857 [for messages]
Office Hours:	TR 12:00 - 13:00 (or by appointment)	**E-mail:**	dmcclint@ucalgary.ca douglas.mcclintock@shaw.ca

Textbook(s)

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: Fourth or Fifth edition can also be used.

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

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

Please note that Blackboard features a class email-list that will be used. It is your responsibility to ensure that Blackboard uses the email address of your choice. The default is your University of Calgary email address.

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 the week of January 20th, 2014.

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 looks at the broad definition of economics and the concept of supply and demand and price elasticity. We then turn our focus on the important macroeconomic issues such as GDP, inflation, unemployment, business cycle theory, and the financial markets.

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.

	Course Topics	Text
1.	Introduction	*Lecture notes* Chapter 1 (*Mankiw* et al.*)*
2.	Micro and Macroeconomics	*Lecture notes* Chapters 4,5,6,9 & 10 (*Mankiw et al.*)
3.	Time Value of Money and Economic Equivalence	Chapters 3 and 4 (Park et al.)
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
9.	Project Risk and Uncertainty	Chapter 15 (if time permits)

The basic lecture notes for Course Topics #1 and #2 (without graphs) will be provided in Blackboard under Course Documents. These notes are usually posted after the lecture so attendance to the lecture is important. 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:

	Number	Percentage
Midterm Examination	1	30%
Quizzes	5	20%
(highest 4 marks will be selected)		(5% each)
Final Examination	1	50%
Total		100%

1. Quizzes 1 and 2 will consist of multiple choice questions and short answer questions. Quizzes 3 – 5 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 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

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 <u>not</u> 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 *15 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 to Blackboard at: http://blackboard.ucalgary.ca/webapps/login. Further announcements concerning Blackboard will be made throughout the semester. Practice questions will be available on Blackboard 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 fourteen (14) days after the start of this course.

Students' Union Vice-President Academic:
Emily Macphail
Phone: 220-3911
E-mail suvpaca@ucalgary.ca

Students' Union Faculty Representative (Arts)
Phone: 220-3913 Office: MSC 251
E-mail arts1@su.ucalgary.ca arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca

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. Join now by contacting 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. 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 3rd 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 Point – Scurfield Hall Atrium

* * * * * *

DM/mi
2013-11-04