



## Department of Economics Course Outline

		<b>Term:</b>	Fall 2009
<b>Course:</b>	Economics 387 [Introduction to Mathematical Economics I]	<b>Section:</b>	01
<b>Time:</b>	TR 14:00-15:15	<b>Place:</b>	ST 125 (subject to change)
<b>Instructor:</b>	Dr. L. Yuan		
<b>Office:</b>	SS 416	<b>Telephone</b>	220-5863 (Office) 220-5857 (Department)
<b>Office Hours:</b>	TR 1:00 – 1:50	<b>E-mail:</b>	<a href="mailto:yuan@ucalgary.ca">yuan@ucalgary.ca</a>

### Textbook(s):

#### Required:

Chiang, A. and K. Wainwright, *Fundamental Methods of Mathematical Economics*, McGraw-Hill, 2005, 4<sup>th</sup> edition.

#### Recommended:

Dowling, E., *Schaum's Outline of: Theory and Problems of Introduction to Mathematical Economics*, McGraw-Hill, 2001, 3<sup>rd</sup> edition.

### Book(s) on Reserve:

- Baldani, J., Bradfield, J., & R. Turner, *Mathematical Economics*, Thomson, Southwestern 2005, 2<sup>nd</sup> edition.
- Chiang, A. and K. Wainwright, *Fundamental Methods of Mathematical Economics*, McGraw-Hill, 2005, 4<sup>th</sup> edition.
- Dadkhah, Kamran, *Foundations of Mathematical and Computational Economics*, Thomson, South-Western, 2007.
- Dowling, Edward T., *Schaum's Outline of: Theory and Problems of Introduction to Mathematical Economics*, McGraw-Hill, 2001, 3rd edition.
- Glaister, S., *Mathematical Methods for Economists*, Blackwell, 1984, 3rd edition.
- Hadley, G., *Linear Algebra*, Addison-Wesley, 1961.
- Hands, D. Wade, *Introductory Mathematical Economics*, Oxford University Press, 2004, 2<sup>nd</sup> edition.
- Hess, Peter, *Using Mathematics in Economic Analysis*, Prentice Hall, 2002.
- Hoy, M., Livernois, J., McKenna, C., Rees, R. & T. Stengos, *Mathematics for Economics*, Addison-Wesley, 2<sup>nd</sup> edition, 2001.

- Klein, Michael, *Mathematical Methods for Economics*, Addison Wesley, 2nd edition, 2002.
- Ostaszewski, A., *Advanced Mathematical Methods*, Cambridge University Press, 1990.
- Rowcroft, John E., *Mathematical Economics: An Integrated Approach*, Prentice Hall, 1994.
- Simon, C. and L. Blume, *Mathematics for Economists*, W.W. Norton and Co., 1994.
- Sydsaeter, K. and P. Hammond, *Mathematics for Economic Analysis*, Prentice-Hall, 1995.
- Toumanoff, P. & F. Nourzad, *A Mathematical Approach to Economic Analysis*, West Publishing Co., 1994.
- Birchenhall, C. et al *Mathematics for Modern Economists*, Barnes and Noble Books, 1984.

### Course Outline:

This course provides instruction in basic tools of mathematical economics and their applications to economic analysis. Techniques discussed include elementary algebra, linear algebra, single and multivariable calculus, optimization, equilibrium analysis and comparative static analysis.

### Grade Determination and Final Examination Details:

Midterm Exam I	25%
Midterm Exam II	25%
Final Examination	50%

In addition to the exams, several assignments (not to be graded) will be distributed. Students will be strongly encouraged to complete the assignments as preparation for the exams.

All examinations will be *closed book*. Calculators *will not be allowed* on any examination.

The final examination will be scheduled by the Registrar in the classroom and will last two hours. It will be a comprehensive examination of all material covered in the course. A numerical grade will be determined for each exam and a final numerical grade will be determined using the above percentage weighting scheme. A course letter grade will be assigned based upon the following conversion chart. A passing grade on any particular exam is not essential to pass the course as a whole.

A+	90 – 100	B	73 – 76	C-	60 – 62
A	83 – 89	B-	70 – 72	D+	57 – 59
A-	80 – 82	C+	67 – 69	D	50 – 56
B+	77 – 79	C	63 – 66	F	0 – 49

Tests and exams will not involve multiple choice questions.

Finally, special attention should be directed toward the sections concerning attendance, tape recording of lectures, and student misconduct, on pages 40-42 and pages 46-52 of the 2009-2010 Calendar.

Students' Union Vice-President Academic:

Meg Martin

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Chris Kalantzis

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

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

**Notes:**

- Students seeking reappraisal of a piece of graded term work (term paper, essay, etc.) should discuss their work with the Instructor *within fifteen days* of the work being returned to the class.
- Make-up or deferred examinations will not be given. Any student who finds it necessary to miss an exam must notify the instructor in advance and produce a valid medical certificate or other required documentation in order to have the weighting transferred to the final exam. Exam answers submitted late will receive a grade of zero. Also, exams will not be given *before* the above-indicated dates.
- E-mail Policy: The Instructor strongly prefers to interact with students in person. If necessary, use e-mail only to arrange a time to see the Instructor.
- Although no grades are awarded for assignments, students are strongly encouraged to undertake problem solving as the principal way to learn course material. Numerous solved (and unsolved) problems are available in the required and recommended texts and in the books on reserve. **Procrastination in tackling and solving problems can have serious adverse consequences because the course material is cumulative.**
- **CAUTION:** Lectures and text readings are complements, not substitutes, and students are responsible for material presented in both lectures and readings. **Regular class attendance is very strongly advised.**
- 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.

Safewalk / Campus Security: 220-5333  
Emergency Assembly Point – SS Food Court

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