

## Economics 389 (01) (Introduction to Mathematical Economics II)

Instructor:	Dr. L. Vojtassak	Lecture Location:	SA 015
Phone:	403 220 6550	Lecture Days/Time:	MWF 14:00 – 14:50
Email:	lvojtass@ucalgary.ca		
Office:	SS 336		
Office Hours:	T 14:00 – 14:50	Winter 2017	

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### Course Description

This is a continuation of Mathematical Economics I. This course focuses on mathematical techniques used in macroeconomic growth and dynamic models.

### Course Objectives/Learning Outcomes

This course introduces students to the application of mathematical methods in economic theory. Techniques discussed include optimization (unconstrained, equality constrained, inequality constrained), equilibrium analysis, comparative static analysis, and dynamic analysis. Applications from microeconomic and macroeconomic theory and econometrics are used to illustrate concepts throughout the course. Chapters twelve to nineteen in *Fundamental Methods of Mathematical Economics*, by Chiang and Wainwright, will be covered.

### Prerequisites/corequisites

Economics 387.

### Required Textbook(s)

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

### Reserved Readings

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

D. Wade Hands, *Introductory Mathematical Economics*, Oxford Press, 2004.

Peter N. Hess, *Using Mathematics in Economic Analysis*, Oxford Press, 2001.

Hoy et al, *Mathematics for Economics*, MIT, 2011.

Sydsaeter et al, *Essential Mathematics for Economic Analysis*, Pearson, 2012, 4<sup>th</sup> Edition.

**Course Requirements/Assessments:**

Midterm Examination		<b>20%</b>	March 1, 2017 Session in class
10 in class Quizzes	5% each	<b>40%</b>	<u>Wednesdays</u> : Jan 18, 25, Feb 1, 8, 15, March 8, 15, 22, 29
8 best count			April 5, 2017.
Final Examination		<b>40%</b>	
		<b>100%</b>	

**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> through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. These e-mails go to your University of Calgary e-mail addresses only.

**Grade Determination and Final Examination Details**

Department of Economics Criteria for Letter Grades. Economics professors use the following criteria when assigning letter grades:

Grade	Grade Point Value	Description	Grade	Grade Point Value	Description
A+	4.00	Outstanding	C+	2.30	
A	4.00	Excellent-superior performance, showing-comprehensive understanding of subject matter	C	2.00	Satisfactory – basic understanding of the subject matter
A-	3.70		C-	1.70	Receipt of a grade point average of 1.70 may not be sufficient for promotion or graduation. (See individual undergraduate faculty regulations.)
B+	3.30		D+	1.00	
B	3.00	Good – clearly above average performance with knowledge of subject matter generally complete.	D	1.00	Minimal pass – marginal performance; generally insufficient preparation for subsequent courses in the same subject.
B-	2.70		F	0	Fail – unsatisfactory performance or failure to meet course requirements
			I	0	Incomplete – unsatisfactory (effective January 2007)

**Grading Scale**

A+	95 – 100	B	73 – 76	C-	60 – 62
A	85 – 94	B-	70 – 72	D+	56 – 59
A-	80 – 84	C+	67 – 69	D	50 – 55
B+	77 – 79	C	63 – 66	F	0 – 49

Tests and final exams are marked on a numerical (percentage) basis. The course grade is then calculated using the weights indicated above.

A passing grade on any particular component of the course is not required for a student to pass the course as a whole.

### Quizzes and Examinations

1. The quizzes will be held during last 15 – 20 minutes of class time, on weekly basis.
2. The two lowest quiz marks will be ignored.
3. Weekly quizzes are designed to reward diligence. In particular, most students who diligently prepare for the weekly quizzes will go into the final exam with a sound mark. On the other hand, students who do not take the time to prepare for the weekly quizzes will go into the final exam with a weak mark, or will have dropped the course before the final exam.
4. Quizzes and exams will not consist of the multiple-choice questions.
5. The midterm examination will be held in classroom during regular lecture hours and will last 50 minutes.
6. There will be a Registrar scheduled final examination, lasting 2 hours. It will be a comprehensive examination of all-material covered in the course.
7. The exams must be completed during the specified time. Extra time will not be given for any reason.
8. All examinations will be closed-book.
9. Answers to the midterm test, the quizzes and the final exam questions must make use of equations and diagrams wherever possible. Numerical questions require numerical answers.
10. THERE WILL BE NO MAKEUP OR DEFERRED EXAMS under any circumstances, nor may the exams be written early. Students unable to write the exams because of documented illness, family emergency, religious observance, or university-sanctioned event will have the weight shifted to the final examination; otherwise a grade of zero will be assigned. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam [www.ucalgary.ca/registrar/exams/deferred\\_final](http://www.ucalgary.ca/registrar/exams/deferred_final) Under no circumstance will this be accommodated by the department. Any student who finds it necessary to miss the midterm must notify the instructor in advance and produce a valid medical certificate or other required documentation in order to have the weighting adjusted. This adjustment will result in the final exam counting for 60% of the final grade and the quizzes counting for 40% of the final grade.
11. Examinations will not be given before the indicated examination date. For further information see the 2016-2017 Calendar.
12. The use of a simple calculator during test and examination is permitted. The use of graphing calculators, cell phones, and computers is not permitted.

### Reappraisal of Grades

For reappraisal of graded term work, see Calendar I.2

<http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

**For reappraisal of final grade, see Calendar I.3**

<http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

A student who feels that a piece of graded term work (e.g., term paper, essay, test) has been unfairly graded may have the work re-graded as follows. The student shall discuss the work with the instructor within 15 days of being notified about the mark or of the item's return to the class; no reappraisal of term work is permitted after the 15 days. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next 15 days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within 15 days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

**Notes**

1. Students should be aware of the academic regulations outlined in The University of Calgary Calendar.
2. **The use of cell phones for any purpose in class is prohibited. Computers may be used for note-taking purposes only.**
3. 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.
4. 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.

**Plagiarism and Other Academic Misconduct**

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual Honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct,

<http://www.ucalgayr.ca/pubs/calendar/current/k.html>

**Academic Accommodation**

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities visit [www.ucalgary.ca/access/](http://www.ucalgary.ca/access/).

Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at

[www.ucalgary.ca/policies/files/policies/student-accommodation-policy\\_0.pdf](http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy_0.pdf)

### **Important Dates**

Please check: <http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>

Faculty of Arts Students' Association (F.A.S.A.):

Economics Department Representative

Office: SS 803, E-mail: [econrep@fasaucalgary.ca](mailto:econrep@fasaucalgary.ca) Web: [www.fasaucalgary.ca](http://www.fasaucalgary.ca)

Society of Undergraduates in Economics

[www.ucalgarysue.com](http://www.ucalgarysue.com)

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.

### *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](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, 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>

### **Evacuation Assembly Point**

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at

[www.ucalgary.ca/emergencyplan/assemblypoints](http://www.ucalgary.ca/emergencyplan/assemblypoints)

Please check this website and note the nearest assembly point for this course

### **Safewalk**

The Safewalk program provides volunteers to walk students safely to their destination anywhere on campus. This service is free and available 24 hrs/day, 365 days a year.

**Call 403-220-5333**