



ECON*4700/6060 F15
Advanced Mathematical Economics /
Mathematical Methods for Economics
0.50 Credit weight

General Course Information

Instructor: Henry Thille
Email hthille@uoguelph.ca
Office Location MacKinnon 702
Office Hours TBA
Department/School Department of Economics and Finance

TA's TBA
Email ...
Office Location ...
Office Hours ...
...

Class Schedule: Lectures: Tues., Thur. 11:30AM–12:50PM MacKinnon, Room 232
Lab: Wed. 2:30-3:20PM MacKinnon, Room202

Pre-requisites: (ECON*3600 or ECON*3810), ECON*3710, ECON*3740

Course Description

This course will cover advanced topics in mathematical economics. The first half will focus on multivariate analysis and the second half on dynamic analysis. The topics examined will be applied to issues in economics. The first six weeks is a combined course with ECON*4700 and ECON*6060. The second six weeks is for ECON*6060 only.

Indicative Content

Approximate timing of topics covered:

Weeks 1&2: Review of multivariate calculus and optimization. Hoy Chs. 11, 12, 13.
Week 3: Comparative statics. Hoy Ch. 14.
Weeks 4&5: Concave programming. Hoy Ch. 15.
Week 6: Integration. Hoy Ch. 16.
Week 7: First order differential equations. Hoy Chs. 21, 22.
Week 8: Second order differential equations. Hoy Ch. 23.
Weeks 9: Systems of differential equations. Hoy Ch. 24.
Weeks 10&11: Dynamic optimization. Hoy Ch. 25.

Course Assessment

ECON*4700: There will be two in-class midterms worth 20% each, one on **Tues. October 6** and one on **Tues. November 10**. The final exam will be written on **2015/12/07 11:30AM-01:30PM** and is worth the remaining 60% of the course grade. The final exam will cover the entire semester's work. There will be no deferred midterms. If a student misses a midterm the weight will be transferred to the final exam.

ECON*6060: There will be one final examination, which will be pass/fail, on **Thurs. October 29**.

Course Resources

Texts:

Hoy, M., J. Livernois, C. McKenna, R. Rees, and T. Stengos. Mathematics for Economics. 3rd ed. MIT Press. 2011.

Course Policies

Grading Policies

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-grds.shtml>

University Policies

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08...>

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: <http://www.csd.uoguelph.ca/csd/>

Course Evaluation Information

Please refer to the [Course and Instructor Evaluation Website](#)

Drop date

The last date to drop one-semester courses, without academic penalty, is November 6, 2015. For regulations and procedures for Dropping Courses, see the Academic Calendar:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08>