

Economics 4808
Introduction to Mathematical Economics
Fall 2014

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Office Hours: M,W,F 11:00-11:40am; M. 1:00-4:00pm.

Course Description

Econ 4808 is a course that will improve your math skills and will introduce you to how mathematical tools are applied in economic analysis. The ability to apply mathematics is crucial for economic analysis. Thus, this course is essential for anyone who wants to pursue graduate work in economics or a career in economic analysis.

The course covers the mathematics and economic applications of equilibrium, slopes and derivatives, differentials, optimization (maximizing profit and utility, and minimizing cost), constrained optimization (e.g., maximizing utility subject to the budget constraint) and integration. Applications include problems in consumer and producer theory, general equilibrium, and welfare economics. The course will also somewhat follow the unpublished text written by Professor Edward Morey. The material is available at: <http://www.colorado.edu/Economics/morey/4808/4808read.html>

Prerequisites

Principles of Economics, Econ 2010 and Econ 2020, are prerequisites, as are Econ 1078 (Mathematical Tools for Economists 1) and Econ 1088 (Mathematical Tools for Economists 2), or the equivalent. One or more semesters of Calculus would suffice for Econ 1078 and 1088. Econ 3070 is a prerequisite, but this course and 3070 are complements so you may be able to take them at the same time. It is **very** important that you fulfill the prerequisites **before** you take this course, and **still** understand the materials in the prerequisites. To be successful in mathematical economics, you need to first be comfortable with algebra and derivatives. If you have any uncertainty as to whether you are under or over qualified to take the course, please talk to me ASAP.

Class format

The course includes both lectures and problem-solving. In-class problems will be performed both

Readings

Essential Mathematics for Economic Analysis (by Knut Sydsaeter and Peter Hammond) is the official math text for undergraduate economics majors here at C.U. You are expected to own a copy and understand much of the material in this book. The book is the required text for Econ 1078 and Econ 1088 and students in those courses are told to keep and use the book until they fin

Attendance Policy

There is no strict attendance policy, but we will do problems in class each day that will count towards your overall grade. If you miss in-class projects it will affect your grade!

Grading

Homework	12%
In-class Problems	8%
In-class Projects	8%
Exam I (Monday 9/29)	17%
Exam II (Monday 10/27)	17%
Exam III (Friday 12/5)	17%
Final Exam (Wed. 12/18 at 4:30pm)	21%

Incompletes, Extra Credit, etc.

I adhere strictly to the University guidelines on Incompletes (“An I is given only when students, *beyond their control*, have been unable to complete course requirements. A substantial amount of work must have been *satisfactorily completed* before approval for such a grade is completed.”). Bad grades, unsatisfactory performance, too many credit hours, work conflicts, etc. are not reasons for an incomplete.

I am adamant about giving each student an equal opportunity to perform well in the course, so there will be no extra credit opportunities that are not offered to the entire class. You should focus your efforts on learning the material and doing well on the exams.

Grading Scale:

Your Score	Grade
92% to	

