

University of Minnesota
ECON 4113: Introduction to Mathematical Economics
Spring 2007

Lecture: 2:30pm – 3:45pm, Tu,Th, Blegen Hall 250

Instructor....Alexander Vostroknutov

Office.....1254 Heller Hall

Email.....aevk@econ.umn.edu

Phone.....(612) 625-7366

Website.....www.econ.umn.edu/~aevk

Office Hours...Tuesday 1:30pm - 2:30pm, 3:45pm - 4:45pm and by appointment

Textbooks:

C.P. Simon and L. Blume, Mathematics for Economists, W.W. Norton & Company, 1994
(required)

Prerequisites:

The prerequisites for this course are Econ 3101-3102 and Math 1271-1272, 2243 which you must have successfully completed **before** taking this course. If you think you are underprepared for this class, please talk to me as soon as possible (in the first week of class).

Grading Scale:

%:	100-92	91-90	89-88	87-82	81-80	79-78	77-72	71-70	69-68	67-60	59-0
grade:	A	A-	B+	B	B-	C+	C	C-	D+	D	F

This is the grading system used by the Department of Economics. At the discretion of the instructor this scale may be curved.

Course Requirements and Grading System:

There will be a cumulative final, non-cumulative midterm and 5-6 homework assignments.

Final: 2 hours, 10:30am – 12:30pm Sat, May 12, Blegen 250, top grade of 100%, problem oriented.

Midterm: 1 hour 15 minutes, top grade of 100%, problem oriented (rather than Multiple Choice)

No make-up Midterms are scheduled. In case of **emergency** documented absence, consult instructor.

HWs: Top grade of 100% each. Distributed in class and are posted on the website the same day.

Hws are problem oriented and are written by the instructor.

Late HWs are NOT ACCEPTED (in case of emergency contact instructor).

A paper copy must be submitted. Electronic copies are NOT ACCEPTED.

Consult the attached Schedule of Events for dates of the above requirements.

Should the class fall behind schedule, the date for Midterm will **NOT** change.

There will be **NO** individual extra credit.

Class Grade = 0.4*Final Grade + 0.3*Midterm Grade + 0.3*(Average Hw Grade)

Course Description and Objectives:

Economics is a quantitative discipline, and in recent decades the discourse of the profession has become substantially more precise, in the sense of utilizing formal mathematical models. This has many benefits: assumptions and lines of reasoning become completely explicit; exactly understood results can be used with confidence as a basis for more sophisticated reasoning; novel insights can be derived from the application of sophisticated mathematical methods.

The purpose of this course is to acquaint the students with the central mathematical methods utilized in the mathematical approach to economic analysis, and to show how these methods are applied in the central theories of economics. Specifically, the focus will be on optimization in the presence of constraints, emphasizing the approach derived from multivariate calculus.

Academic Dishonesty

All work submitted must be that of the student.

Excepting only the students' ingenuity, lecture and recitation notes, and the text listed above on the syllabus, all other sources of information used to solve an assignment must be **cited**. This includes, but is not limited to, help received during **office hours**. Also included as academic dishonesty by the student code of conduct is submission of false records of academic achievement; cheating on assignments or examinations; plagiarizing; altering, forging, or misusing a University academic record; taking, acquiring, or using test materials without faculty permission; and acting alone or in cooperation with another to enhance a grade.

A **minimum** penalty for academic dishonesty is a grade of 0 for the assignment. If the offense occurs on a final or midterm, a grade of F or N will be issued. Other penalties may include a complaint to the Office of Academic Integrity and Student Judicial Affairs.

Cooperation among students on Homework is allowed, though each student must hand in their own assignment with citations given for help received. Identical or **essentially similar** homeworks will receive a grade of zero.

Course Announcements:

Important information on the class will be sent to the students' University email account.

Note that I have the predisposition towards sending lots of e-mails.

You may have this account forwarded to another address if you wish.

Be sure to check your University email once a week for announcements.

Email can be activated at <http://www.umn.edu/validate>.

Other, less urgent announcements will be made on www.econ.umn.edu/~aevk

Schedule of Events

In the event the class lags behind this schedule, Midterm date will **NOT** change.
Rather the exams themselves will be altered to reflect what has been covered in class.

Week	Dates	Comments	Hand Out	Due	Returned
1	1/16,18	Topics in Math			
2	1/23,25	Topics in Math	HW 1		
3	1/30,2/1	Topics in Math		HW 1	
4	2/6,8	Topics in Math	HW 2		HW 1
5	2/13,15	Optimization		HW 2	
6	2/20,22	Optimization	HW 3		HW2
7	2/27,3/1	Optimization		HW 3	
8	3/6,8	Review (Tu) / Midterm (Th)		MD	HW 3
	3/13,15	SPRING BREAK			
9	3/20,22	Optimization	HW4		MD
10	3/27,29	Optimization		HW 4	
11	4/3,5	Applications to Economics	HW 5		HW 4
12	4/10,12	Applications to Economics		HW 5	
13	4/17,19	Applications to Economics	HW 6		HW 5
14	4/24,26	Applications to Economics		HW 6	
15	5/1,3	Applications to Economics			HW 6
	5/12	10:30am – 12:30am, Final, Blegen 250			