

Math Tools for Economists II. ECON 1088, Summer 2015.

Instructor	Amit Patel
Class Meetings	M-F 11:00-12:35, ECON 119
Email	ampa8130@colorado.edu This is the best way to contact me. I will try to respond within 24 hours to all emails.
Office	Econ 313
Office Hours	T 10-11 AM, W 12:45-1:45 PM, R 10-11 AM
Course Website	The course website is accessed through Desire2Learn where you will find all related course materials.

Course Description and Objectives

This class is the second of a two course sequence. It is a continuation of ECON 1078 which builds upon the basic foundation developed in that course. We will study derivatives, optimization, and integrals. These are Chapters 6,7,8,9, and 11 in the textbook. These tools will help you better understand the mathematical framework on which economics models are based and help prepare you for more advanced economics.

Expectations

You can expect me to do my best to help you succeed in this course. I will try my best to answer all questions, provide practice material, provide applications of the material and encourage active thought in the classroom. You may expect me to be respectful and professional at all times by arriving on time, silencing my phone, reserving personal conversation for before and after class, and being courteous with everyone.

I expect you to take the class seriously and to ask questions when something is unclear and actively participate to help us all understand the material better. I also expect you to be respectful and professional at all times by arriving on time, silencing your phone, reserving personal conversation for before and after class, and being courteous with everyone.

Succeeding in a Math class

Math is learned and mastered through practice. Anyone who practices math is capable of doing math well. Given the accelerated nature of this course, it is extremely important for you to keep up with course work. If at any time you feel you are struggling, PLEASE come talk to me in office hours. It is much better to come earlier rather than later, as the "semester" is so short, it may be too late. Do not wait until the first midterm to talk to me if you are having any problems at all.

Textbook

Essential Mathematics for Economic Analysis, 4th edition, by Knut Sydsaeter, and Peter Hammond with Arne Strom is required. Economics 1088 uses the same textbook. This is a very good reference book, which you may use in the future to refresh your knowledge of algebra and calculus.

Calculator Note

As this is a course designed to teach mathematical techniques you will need a calculator that can do basic mathematical functions. These include exponentials, logarithms, radicals, and factorials (\log , \ln , e^x , $n\sqrt{\quad}$ and $x!$). Any basic scientific calculator will perform these functions. Although you may find using a graphing calculator useful in doing some of the homework problems, **NO GRAPHING CALCULATORS, CELL PHONES, OR COMPUTERS WILL BE ALLOWED DURING EXAMS. NON-GRAPHING CALCULATORS ONLY!!!**

Laptop Note

Nothing works better than good, old fashioned paper and pencil for taking notes in a math class. In general, **NO OPEN LAPTOPS ALLOWED or Cell Phones** during lecture. If you have a specific, valid reason for a laptop in class, please speak with me about your situation individually. If I catch you on your cell phone, you will be asked to leave lecture.

Grading

Your grade will come from the following breakdown:

20% Midterm 1

20% Midterm 2

30% Final Exam (Cumulative)

20% Homework

10% Attendance/Participation

Exams

We will take a total of three exams in this course: two midterms and the final exam.

Midterms	Midterm 1 – Friday, July 17 th Midterm 2 – Wednesday, July 29 th
Final	Friday, August 7 th in Class

The final exam will be cumulative and cannot be dropped for any reason.

THERE ARE NO MAKEUP EXAMS !!! If you do miss a midterm exam, then the final will be worth 50% of your final grade. However, you must have a valid excuse and you must notify me prior to the missed exam.

Homework

Homework assignments will build on the material from lecture. Homework will be assigned daily and will be due at the beginning of the following class day. I will not accept any late homework. Each assignment will be worth 10 points. You will earn 5 points for turning in the assignment completed on time and the remaining 5 points will come from me grading one random problem.

Attendance

Attendance is extremely important. Mathematical concepts build on prior knowledge and it is very important not to get behind. I will take attendance every day. There are 21 class days excluding test days. Your grade will be determined by the percentage of days you attend out of 20. This allows you to miss one day without consequence.

Cheating

Anyone caught cheating will at minimum fail the assignment in question and will be referred to the University Honor Code Council. I will determine punishment for cheating instances on an ad hoc basis, but I will not hesitate to give a failing grade for the instance in question, or for the entire course. I will report all instances to the honor code, which will mete out their own punishment, in addition to the one I deem fit. **DON'T CHEAT!**

Tentative Schedule

Week	Course Material	Topics	Exam
1 July 7-10	6.1, 6.5, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8	Slopes, Tangents, Limits	
2 July 13-17	6.9, 6.10, 6.11, 7.1, 7.2, 7.7	Rates of Changes, Derivatives, Elasticities	Midterm 1 – Friday, July 17 th
3 July 20-24	7.9, 7.12, 8.1, 8.2, 8.3, 8.6, 8.7, 11.1, 11.2	Limits, Optimization, Economic Applications, Functions of More Variables	
4 July 27-31	11.5, 11.6, 11.7, 9.1, 9.2	Partial Derivatives, Applications	Midterm 2 – Wednesday, July 29 th
5 Aug 3-7	9.3, 9.4, 9.5, 9.6	Integration	Final – Friday, August 7 th

Additional Notes:

Students with Disabilities

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Center for Community N200, and <http://www.Colorado.EDU/disabilityservices>.

If you have a temporary medical condition or injury, see guidelines at <http://www.colorado.edu/disabilityservices/go.cgi?select=temporary.html>.

Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at <http://www.colorado.edu/disabilityservices>.

Religious Observance Policy

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. If you have a conflict, please contact me at the beginning of the term so that we can make proper arrangements. See full details at http://www.colorado.edu/policies/fac_relig.html.

Classroom Behavior Policy

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics,

veteran's status, sexual orientation, gender, gender identity, and gender expression, age, disability, and nationalities.

See policies at <http://www.colorado.edu/policies/classbehavior.html> and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

Discrimination and Harassment Policy

The University of Colorado at Boulder Discrimination and Harassment Policy and Procedures, the University of Colorado Sexual Harassment Policy and Procedures, and the University of Colorado Conflict of Interest in Cases of Amorous Relationships Policy apply to all students, staff, and faculty. Any student, staff, or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based upon race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127, or the Office of Student Conduct (OSC) at 303-492-5550. Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>.

Honor Code

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>.