

**Math Tools for Economists II**  
**Econ 1088-200**  
**Summer 2009**

University of Colorado at Boulder  
Department of Economics

Instructor: Stephen Nicar  
Office: Econ 304  
email: nicar [at] colorado.edu  
Office hours: W, R, F from 1:30 - 2:15

Class time: M - F from 2:30 - 4:05 pm, July 7 - August 7  
Classroom: Econ 119  
Course website: Most material will be made available via CU Learn.  
Past exams are available at:  
<http://www.colorado.edu/economics/courses/ECON1088/1088home.html>.

**Required Text:**

*Essential Mathematics for Economic Analysis, 3d edition*, by Knut Sydsæter and Peter Hammond, Prentice Hall, 2008.

**Course Description and Objectives:**

This class is the second of a two-course sequence, and a continuation of ECON 1078. We will cover two broad topics: derivatives and integrals. These tools will help you better understand the mathematical framework on which economic models are based and help prepare you for more advanced economics courses.

**Grading:**

Your grade will consist of three exams, a cumulative final exam and homework assignments. All exams are in-class. I will not give any make-up exams and will not give exams early. Each portion of your grade will be weighted as follows:

|                       |     |                  |
|-----------------------|-----|------------------|
| Midterm 1:            | 25% | Friday, July 17  |
| Midterm 2:            | 25% | Friday, July 24  |
| Midterm 3:            | 25% | Friday, July 31  |
| Final Exam:           | 30% | Friday, August 7 |
| Homework Assignments: | 20% |                  |

To make your total grade add up to 100%, I will drop the lowest of the three midterm scores. In addition, I will drop the lowest of the homework grades. **Your grade on the final exam will not be dropped for any reason.**

Homework assignments are due at the beginning of class on the due date. I will not accept late assignments for any reason.

### Tentative Schedule:

This schedule is subject to change. Any changes will be announced in class.

| Date   | Book                          | Topics  | Homework   |
|--|-------------------------------|---|--|
| 7-Jul<br>8-Jul<br>9-Jul<br>10-Jul              | Chapter 6                     | Differentiation   | Homework 1   |
| 13-Jul<br>14-Jul<br>15-Jul<br>16-Jul<br>17-Jul | Chapter 7<br>&<br>Chapter 8   | Derivatives in Use<br><br>Single Variable Optimization<br><br><b>Midterm 1</b>                                    | Homework 1 Due<br>Homework 2<br><br>Homework 2 Due |
| 20-Jul<br>21-Jul<br>22-Jul<br>23-Jul<br>24-Jul | Chapter 11                    | Functions of Many Variables<br><br><br><b>Midterm 2</b>   | Homework 3<br><br>Homework 3 Due                   |
| 27-Jul<br>28-Jul<br>29-Jul<br>30-Jul<br>31-Jul | Chapter 12<br>&<br>Chapter 13 | Tools for Comparative Statics<br>(12.1 - 12.4)<br>Multivariable Optimization<br>(13.1 - 13.2)<br><b>Midterm 3</b> | Homework 4<br><br>Homework 4 Due                   |
| 3-Aug<br>4-Aug<br>5-Aug<br>6-Aug<br>7-Aug      | Chapter 9                     | Integration<br>(9.1 - 9.6)<br><br>Review<br><b>Final Exam</b>   | Homework 5<br><br>Homework 5 Due                   |

### Grading Scale:

|            |    |           |    |
|------------|----|-----------|----|
| 93 - 100 % | A  | 73 - 76 % | C  |
| 90 - 92    | A- | 70 - 72   | C- |
| 87 - 89    | B+ | 67 - 69   | D+ |
| 83 - 86    | B  | 63 - 66   | D  |
| 80 - 82    | B- | 60 - 62   | D- |
| 77 - 79    | C+ | 0 - 59    | F  |

**Disability Policy:**

If you qualify for accommodations because of a disability, please submit a letter from Disability Services to me in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and <http://www.colorado.edu/disabilityservices>.

**Religious Observance Policy:**

Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal 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 semester so we can make proper arrangements.

**Classroom Behavior Policy:**

Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which they and their students express opinions. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

**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](mailto:honor@colorado.edu); 303-725-2273). 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/>.

**Discrimination & Harassment Policy:**

The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships applies to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>.