Economics 507: Mathematical Economics

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Office Hours: TTh 3:15-4:00pm
Fri 11:30-12:30pm

San Diego State University
Spring 2014
Sched #: 21049
Lectures: TTh 2:00-3:15pm

Course Description:
This course is an introduction to the mathematics required for economic analysis. We will cover basic mathematical tools such as set theory, probability theory, matrix algebra, constrained and unconstrained optimization, and differential equations. The objective of the course is to prepare students with the necessary mathematical tools required in advanced microeconomics, macroeconomics, and econometrics courses.

Required Textbook:

Web Resources:
The class website will be available on Blackboard at https://blackboard.sdsu.edu/. When you enroll in this class you are automatically enrolled in the class website. Announcements, course materials, and grades will be posted on this site. Be sure to check for updates regularly.

Student Expectations:
You should be prepared to devote at least 2 hours of your time per lecture hour to studying, practicing techniques, and solving problems. This class is cumulative so it is essential that you not fall behind. I strongly encourage you to see me whenever you have difficulty understanding the material. You are encouraged to form a study group. Explaining the material to your peers is a great way to make sure you understand the material and helps identify your weaknesses.

Course Requirements, Due Dates, and Grading:
Course grades are a weighted average based on homeworks, two midterm exams, and a compulsory cumulative final. Students are expected to take each exam when scheduled and turn in all assignments on time. Failure to do so will affect your course grade. No extra credit assignments will be given.

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<tr>
<th>What</th>
<th>When</th>
<th>% of Grade</th>
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<tbody>
<tr>
<td>Homework</td>
<td>Throughout semester</td>
<td>25%</td>
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<tr>
<td>Midterm 1</td>
<td>February 27th</td>
<td>25%</td>
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<td>Midterm 2</td>
<td>April 10th</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>May 13th</td>
<td>25%</td>
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Exams:
There will be two midterm exams and a compulsory cumulative final. Each is individually worth 25% of your course grade—making exams worth a total of 75% of your course grade. The final exam is similar in style and content to the midterms but the final exam is cumulative (covers all of the material from the semester).

There are **no make-ups**. If you miss a midterm exam for any reason, then the final will carry the weight of the missed exam. The **cumulative final is not optional**. Missing the final results in a score of zero. Note the final exam date—**Tuesday, May 13th (1:00-3:00pm)**—and make any end-of-semester travel plans accordingly.

**Problem Sets:**
Problem sets will be assigned each class throughout the semester. It is a vital part of learning to practice the use of the tools developed in class. The problem sets will account for a total of 25% of your grade. The two lowest problem set grades will be dropped—consider these as two free passes, use them wisely. You must **SHOW YOUR WORK** in order to receive credit. Problem sets will be collected at the beginning of class on the due date posted for each assignment. **Late assignments will not be accepted under any circumstance—no exceptions.** Submit the completed assignment early when you know you will not be able to turn it in on time. You are encouraged to work together but your answers must be written by you to be sure you understand the material. Some class time may be set aside to go over particular assigned problems. Solutions will not be posted but can be reviewed before/after class and during office hours.

**Make-ups and regrading:**
Exams, the final, and problems sets cannot be made up nor can they be taken early. The deadlines are binding. Any missed exam/final/PS will be scored as a zero. As a last resort, the cumulative final can be used to carry the weight of a missed midterm. Since this applies no matter what the reason, there is no need to inform me that you will miss a midterm exam. Students who know in advance that they cannot take a midterm and/or final exam when scheduled should consider withdrawing from the course.

Requests for reconsideration of assigned scores should be submitted in writing by the class period after receiving the grade—no “oral arguments” will be considered. Attach the original graded exam or problem set to a typed letter explaining why you think the assigned score is incorrect (e.g., points were added incorrectly). Note, copies of a random subset of each set of assignments and exams will be made in order to minimize the perverse incentives induced by this policy.

**Students with Disabilities:**
If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact Student Disability Services at (619) 594-6473. To avoid any delay in the receipt of your accommodations, you should contact Student Disability Services as soon as possible. Please note that accommodations are not retroactive, and that I cannot provide accommodations based upon disability until I have received an accommodation letter from Student Disability Services. Your cooperation is appreciated.