Economics 200c, Core Microeconomics III
Spring 2011 Syllabus

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Course description

This is the third and last part of the graduate microeconomics core sequence. The second half of 200B already offered an introduction to noncooperative game theory with complete information; we will build on that knowledge. We list below the topics covered in each half of 200C.

Nageeb's Part:

1. Repeated Games: Folk Theorem and the Dynamic Programming Approach.
2. Games with nature: Definition, Bayesian Equilibria, Auctions, Lemons' Markets, Oligopolistic Competition with Imperfect Information, Higher-order beliefs, Robustness.
3. Dynamic games of incomplete information: Definition and solution-concepts, Refinements, Signaling and reputation models.

David's Part:

1. Social choice: Social welfare functions, Arrow's Impossibility Theorem, Gibbard-Satterthwaite Theorem.
2. Mechanism design: Ex post and Bayesian implementation, Groves mechanisms, auctions, public goods, externalities.
3. Cooperative game theory: Nash bargaining, matching, network formation.
4. Contracts: Principal-agent settings, contractual equilibrium, strategic theory of the firm.

Logistics

- Professor:
  - S. Nageeb Ali, Econ 214, snali@ucsd.edu, Office Hours: By Appt.
  - David A. Miller, Econ 228, d9miller@ucsd.edu. Office hours: TBA
- TA: Aislinn Bohren, abohren@gmail.com. Office hours: Thursdays, 9–11am, in Sequoyah 206.

- Required textbook: *Microeconomic Theory*, Mas-Colell, Whinston & Green
- Lectures: MW 12:00–2:00pm, Economics 300
- Sections with the TA to review practice problems and lecture material: Wednesdays at 5:15pm, in Sequoyah 244.
- Course web site: webct.ucsd.edu
  All course announcements and other materials will be posted on WebCT; students are responsible for reading them. No handouts will be distributed in class; please download them yourself.
  Use your regular username and password to log in. You should gain access to the course web site within 48 hours of registering for the course or the waitlist. If you have difficulty accessing the website, contact iwdc@ucsd.edu. For other website issues, please email us.

Prerequisities

- There are no formal prerequisites to this course, although a good background in math is necessary (in particular, we will use multivariate optimization, linear algebra, and real analysis). You will also find various examples we discuss more illuminating if you have taken at least an intermediate microeconomics course. If you are not a Ph.D. student in Economics, please consult with one of the instructors.

Assignments

- Problem sets are due every Friday by 5pm in Aislinn Bohren's mailbox in Sequoyah Hall or via email to her. You are encouraged to work in groups on these problem sets, but you should write them individually, along with the names of all classmates with whom you have discussed the problems. The problem sets are designed to be difficult and time-consuming so budget time accordingly. Problem sets will be graded on a scale of $\checkmark+, \checkmark, \checkmark-$.
- The course will have one exam, during exam week, which will cover both parts of the course.

Grading

- Grades are based on the exam and problem sets.
- Satisfactory/Unsatisfactory grading: The minimum standard for a satisfactory grade is the same as the minimum standard for a B-minus grade.