01:220:407: Economics of Information
Spring 2014

Instructor: Tomas Sjöström <tsjostrom@economics.rutgers.edu>

Time and Location: Tu, Th 2:50 - 4:10 in FH-A5. On certain days (see the course outline), we meet in the Satellite Computing Lab, located behind the Kreeger LRC: http://maps.rutgers.edu/building.aspx?id=282.

Office Hours: Tu, Th 4:30-5:30 or by appointment, New Jersey Hall 301C

T.A.: Basak Uysal <buysal@economics.rutgers.edu>. Office hours TBA.

Textbooks: "Markets, Games and Strategic Behavior" by C. Holt, ISBN 0321419316; "Thinking and Deciding" by J. Baron, ISBN: 0521680433

Prerequisites: 01:220:320, and 960:211 or 960:285, and 640:136 or 640:152

Grading: There will be 6 homework assignments, three midterm exams and a final exam. They will count toward the grade as follows.

Assignments	30%
Midterms	40%
Final	30%

The final is comprehensive: it covers all the chapters and handouts listed on the course outline. No books, no notes, no logging into the Sakai site during exams. It is OK to miss an exam for a legitimate reason (for example illness, family emergency) *but you must notify us no later than the day of the exam.* If you miss a midterm *for legitimate reasons* the weight will be increased on the other midterms and the final (but if there is no legitimate reason, you will simply be assigned 0 points). There will be *no* make-up midterms. For each homework, after the due date has passed the solutions will be posted on the Sakai site. At that time, if you did not hand in the homework assignment, you will be assigned 0 points for this assignment, unless you have notified me *before* the solutions were posted and have a legitimate excuse. If you hand in homework after the due date, but before the solutions are posted, you get partial credit. If you cannot hand in a homework for a legitimate reason such as illness, the weight will be transferred to the other homework. If you have questions about homework or midterm, including how it was graded, please ask Basak - if you are not happy with the answer, please talk to me. A Sakai site will be made available, containing documents for the class https://sakai.rutgers.edu/portal. Important announcements will be posted there occasionally - I will assume everybody reads the announcements. Students are expected to attend all classes, *including those in the computer lab*; if you expect to miss one or two classes, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. An email is automatically sent to me. Each student is responsible for knowing everything written on this syllabus (including this sentence).

Note: The class room, including the computer lab, is *not* a good place to take a nap, read newspapers, work on the laptop, or solve a crossword puzzle. *Turn off cell phones when the lecture starts.* This is just common courtesy.

Important dates: Tuesday, January 28: Last day to drop classes without a "W" grade; Wednesday, January 29: Last day to add classes; Monday, March 24: Last day to drop with a "W" grade

Learning Outcomes: Students who complete Econ 407 will understand the role of uncertainty and incomplete information in decision making and strategic interaction. They will have learned the classical theory of decision making under uncertainty (expected utility theory) as well as more modern theories such as prospect theory. The will understand how to optimally incorporate new information in order to improve decision making. They will understand how informational problems impact market situations such as auctions, matching markets, informational cascades, and statistical discrimination.

Current Academic Integrity Policy:

The usual rules about integrity and conduct apply to our class. Violations include: cheating, fabrication, plagiarism, denying others access to information or material, and facilitating violations of academic integrity. You are strongly advised to familiarize yourself with the following document:

http://academicintegrity.rutgers.edu/files/documents/AI_Policy_9_01_2011.pdf

Course Outline

Part I: Individual Decisions with Incomplete Information

Jan 21 Cancelled
Jan 23 Introduction (H1), Normative Theory of Choice I (B 10, H 4)
Jan 28 Normative Theory of Choice II (B 10, H 4)
Jan 30 Normative Theory of Probability I (B 5 *except* p 113-120; B 8; H 30)
Feb 4 Normative Theory of Probability II (B 5 *except* p 113-120; B 8; H 30)
Feb 6 *Satellite Lab I, Hand in homework 1*
Feb 11 Normative Theory of Probability III (B 5 *except* p 113-120; B8; H30)
Feb 13 Descriptive Theory of Choice I (B 11: p 257-271, H 28)
Feb 18 Descriptive Theory of Choice II (B 11: p 257-271, H 28) *Hand in homework 2*
Feb 20 Descriptive Theory of Choice III (B 11: p 257-271, H 28)
Feb 25 Search Theory (H 29)

Part II: Strategic Interaction with Incomplete Information

Feb 27 Game Theory (H 3, H23, handout: Game Theory) *Hand in homework 3*
Mar 4 Market for Lemons and Matching I (H 10, handout: Matching Markets)
Mar 6 *Midterm 1* (B 5 *except* p 113-120, B 8, B 10, B 11: p 257-271, H 4, H 28, H 30)
Mar 11 Market for Lemons and Matching II (H 10, handout: Matching Markets)
Mar 13 Market for Lemons and Matching III (H 10, handout: Matching Markets) *Hand in homework 4*
Mar 18 *Spring Break*
Mar 20 *Spring Break*
Mar 25 Pit Market (H 2)
Mar 27 *Midterm 2* (H 3, H 10, H 23, H 29, handouts: Game Theory, Matching Markets)
Apr 1 Information Cascades I (H 31)
Apr 3 Information Cascades II (H 31)
Apr 8 Auctions I (H 19, 20, 21, 22)
Apr 10 Auctions II (H 19, 20, 21, 22) *Hand in homework 5*
Apr 15 Auctions IIII (H 19, 20, 21, 22)
Apr 17 Auctions IV (H 19, 20, 21, 22) *Hand in homework 6*
Apr 22 *Midterm 3* (H 2, H 19, H 20, H 21, H 22, H 31)
Apr 24 *Satellite Lab II*
Apr 29 TBA
May 1 Statistical Discrimination (H 32)

Final Exam