



Brown University

Economics 216 – Risk, Uncertainty and Information

Fall 2007

Professor: Geoffroy de Clippel (declippel@brown.edu)
Class meets MW 10:30-11:50am (Blistein house, room 101)
Office hours: MW 9-10am (Robinson hall, room 102D)

Course website: available through mycourses.brown.edu

Assignments: There will be four homework assignments. I will post them on September 24, October 15, November 5, and November 26. They are due respectively on October 3, October 24, November 14, and December 5. I will correct them within a week. Homework assignments must be solved individually.

Talks: The last few classes (exact number depending on the number of students enrolled) will be devoted to students' presentations. Each student has the choice between two options: either he/she presents an original idea, or he/she surveys some previous contributions. In both cases, the content must of course be directly related to the topic of the class. Students will have 50 minutes to present their material. Students must decide on the format of their presentation, and on the topic they plan to cover by October 19. Their decision must be summarized in a short abstract of approximately 20 lines presenting their preliminary objectives for the talk. In addition to the abstract, students must indicate the paper(s) and/or chapter(s) in textbook(s) they have looked at, and plan to cover in the talk. Students are most welcome to discuss with me beforehand different topics they are interested in, but I will not distribute topics. Some significant work thus needs to be done before October 19. I will let chance decide (throwing a coin) in the unlikely event that two students choose the exact same topic, and that there is no way to settle the matter to the satisfaction of both students. I would also discuss with the 'unlucky' student to find another subject. I will review all the proposals, and give you some feedback within a week. You then have roughly a month to study your subject in detail and prepare the talk. I expect the talk of a student that presents a survey to be as clear as a lecture. Those students will have to submit one question of 'average difficulty' (i.e. comparable to an average question in a homework assignment, or slightly easier) that is directly related to the topic of their talk. They will also need to provide its answer, of course. All these questions must be submitted to me before December 3. I will review them, and perhaps modify them a bit. Some or all of them will then be part of the final take-home exam (more on this in the next paragraph). Students choosing to present some original ideas do not have to submit a question. I will evaluate those students mainly on the originality of the problem they try to solve, on their understanding of the existing literature within which their research fits, and on the consistency of the model they built. Students that choose to present a survey in the form of a lecture will be graded on their understanding of the literature, on the clarity of their exposition, on the difficulty of their topic (is it a survey of papers, or just the presentation of a chapter from a textbook?), on their ability to identify open problems, and on the question they submit for the final take-home exam. Submitting an original and thoughtful question leads of course to a higher score, but I will also accept a question selected from an existing source, provided that its solution is not available

in that source. In such cases, I expect the student to include a reference. Extra credit will be given to students that are especially active during the other students' talks. To monitor each student's progress, it is expected that each student comes to see me at least once, a week or two before his/her talk. Students are most welcome to arrange additional meetings.

Final take-home exam: I will post online the final take-home exam on Thursday December 6 at noon. Students will have at most four hours to solve the questions. They are free to choose when to pass the exam, but all solutions must be submitted before Monday December 10 at noon. The exam will consist of questions from all the material I taught, plus a selection of questions submitted with the talks (see previous paragraph). For those questions related to the talks, students will have to choose one question out of the list (one that is different from the one they submitted, of course). Students may use the slides, their handwritten notes from the classes, and more generally any material related to the theory part of the class (e.g. articles and chapters in textbooks). No other reference is allowed. Particularly, students are not allowed to look back at previous homework assignments. The final take-home exam must be solved individually.

Grading: Your numerical grade in the course will be determined as the simple average of your scores on the assignments, the talk, and the final take-home exam. Each part is thus weighted identically. I will take into account the absolute value of this numerical grade, as well as its relative position in the overall distribution, to decide on the final letter grade for the course.

Plan (possibly subject to changes)

1. Individual Decision Making under Uncertainty
2. Principal-Agent Models with Hidden Knowledge (aka Adverse Selection)
3. Principal-Agent Models with Hidden Actions (aka Moral Hazard)
4. Competitive Screening
5. Incomplete Contracts
6. Basics in Interactive Epistemology
7. Bayesian Games
8. Applications: Cheap Talk, Informed Principal, (Non-Cooperative) Bargaining under Asymmetric Information, Auctions
9. Mechanism Design
10. Core under Asymmetric Information