Course Outline

RSM 3011 H1 S
Advanced Topics in the Theory of Industrial Organization
Spring 2016
Course Meets: TBA

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Office Hours: By appointment

Course Scope and Mission
This course has two objectives: i) to introduce students to the game-theoretic models that are
the foundation of the modern theory of firm behavior and ii) to take students to the frontier of
Industrial Organization Theory by introducing them to the latest research in the Field. The
ultimate goal of the course is to help students develop research topics that will form the basis of
their PhD thesis research.

Evaluation and Grades
Grades are a measure of the performance of a student in individual courses. Each student shall
be judged on the basis of how well he or she has command of the course materials. Each
student will be required to do an in-class presentation of one of the papers on the reading list.
The particular paper will be decided in consultation with the instructors. Prior to the presentation,
the student will be required to submit a “referee report of the paper and a slide deck for the
presentation. The referee report, slide deck and presentation will be graded (20% for referee
report and 20% for slide deck and presentation). Students will also be required to develop and
submit a research proposal. This proposal will account for the remaining 60% of the grade and
will include the following: i) Introduction: What’s the question and why is it interesting?, ii)
Literature review, iii) discussion of modeling possibilities and testing.

Tips for reading papers
A good way to think about how to read papers is to think about how to write them to this end,
see McCloskey Economical Writing and Thomson’s Guide to the Young Economist.
There are a number of questions worth keeping in mind when reading a theory paper,
unsurprisingly perhaps they turned out not to be shockingly different to those you should
consider when reading an empirical paper as well...

1. What is the paper about?
   • What is the central question in the paper?
   • What is the bottom line?
If Victor stopped you in the elevator and asked you “What was that paper about?” What would you tell him?

2. Even before getting into the nuts and bolts.
   - Is it in an interesting question? Is it one you have given any thought to before? Do you care what the answer will be? How does it help you understand the world?
   - Given the question, what would you answer? What do you think are the key forces/mechanisms at work in the economic situation? (if you have a view, you can better assess whether the paper is reasonable and/or insightful)
   - What is their basic answer? What is the consequence/implications of the result? Are there are other relevant applications of the insight?

3. Next (if you still care) take a look at the model. In most new applied theory, things are set up as a game, and so get clear the underlying structure of the game.
   - Who are the players and how many?
   - What are actions/strategies
   - Rules/timing etc
   - Payoffs
   - Information assumptions (what do they know, about each other, structure of game etc and when)
   - What is the equilibrium notion?

4. As you get more experience this will be easier to address, in the meantime, this may require going back and reading through the references etc. What is unusual in the structure of the game (Different functional form for payoff, different kind of information problem? Etc)

5. (Usually this will have something to do with step 4) What is the key driver of the result? What is the driving economic mechanism, where are any unusual assumptions really playing a role (If you can’t see what the driving economic mechanism is, be suspicious!)

6. If you’ve seen the central forces, how they tie up to the particular set-up of the model, it’s easier then to think about how plausible the mechanism in the application, how particular it is to the set-up, how robust the effect is, or how sensitive to particular and/or peculiar assumptions.

7. Remember Alfred Marshall’s advice to Pigou: "(1) Use mathematics as shorthand language, rather than as an engine of inquiry. (2) Keep to them till you have done. (3) Translate into English. (4) Then illustrate by examples that are important in real life (5) Burn the mathematics. (6) If you can’t succeed in 4, burn 3. This I do often." (Buchholz, Todd G. 1989. New Ideas from Dead Economists. New York: Penguin Group. p. 151) ... in much of the course we may be focused on stage (1) and (2), this is not to say that the other steps are unimportant!
I. Communication Games, The Revelation Principle and Mechanism Design


II. Learning


III. Repeated Games


IV. Reputations


V. Search


**VI. Vertical Foreclosure and Exclusive Dealing**


**VII. Boundaries of the Firm**


**VIII. Platforms and Intermediaries**


IX. Behavioral IO


