Office Hours: Wednesday 4:00-5:00pm

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ECO2030H1S: Microeconomic Theory II (PhD) Winter 2015

CLASSES: 9:10-11:00am Mondays in WW120 and Wednesdays in WW126

TUTORIALS: Thursdays 2:10-4:00pm in OI8200

Required Textbooks:

A Course in Game Theory, by M. Osborne and A. Rubinstein, MIT Press. Microeconomic Theory, by A. Mas-Colell, M. Whinston, and J. Green, Oxford University Press.

Additional References:

Game Theory, by D. Fudenberg and J. Tirole, MIT Press. The Theory of Incentives, by J.-J. Laffont and D. Martimort, Princeton University Press. The Economics of Contracts, by B. Salanié, MIT Press.

GOALS:

This course is designed with several goals in mind. The first is to provide you with an understanding of the core elements of game theory and information economics that you can draw on regardless of what subfield you pursue (these ideas are becoming increasingly important in a wide range of subfields beyond micro theory, including, e.g., IO, macro, and health). Second, mastering the course material will ensure that those of you interested in pursuing research in micro (or macro) theory are adequately prepared. Finally, solving problems and working through the material will help to develop your facility with economic modelling in general.

EVALUATION AND REQUIREMENTS:

EVALUATION: Problem Sets - 10% Midterm Exam - 45% Final Exam - 45%

Problem sets will not be collected or marked directly. At each tutorial, there will be a sign-up sheets for students to identify which problems they have solved from the previous week's problem set. Students will be randomly selected from the sign-up sheet to present their solution. The problem set grade will be based primarily on how many problems you sign up for; however, there will be a penalty for students who present inadequate solutions when called upon.

Exams will be closed book with no aids permitted. The midterm will take place in class on February 11th. The final will take place during the exam period in April.

<u>TUTORIALS</u>: The TA for the course is Young Wu. His email is yiyang.wu@mail.utoronto.ca. He will conduct ten tutorials from 2-4pm on Thursdays starting on January 15th.

<u>COMMUNICATION</u>: Email should be used only for logistical questions about the course. Questions about course content should be asked in person, either at office hours or after class. If you do not receive a response to an email within two days, please resend the email.

Email will be the primary means of communication for announcements outside of class. If you are not an economics graduate student or you do not want me to use the address posted on the departmental website, please send me an email to add your address to the mailing list.

Course content will be posted on Blackboard.

OUTLINE OF TOPICS:

- 1. Strategic games with complete information: OR2–4, FT1–2
- 2. Bayesian games: OR2.6 and 5, FT6

- 3. Extensive games with perfect information: OR6, FT3
- 4. Bargaining: OR7 and 15, FT4.4 $\,$
- 5. Repeated games: OR8, FT5
- 6. Extensive games with incomplete information: OR11-12, MWG9, FT8
- 7. Signaling: MWG13, S4
- 8. Moral hazard: MWG14, S5, LM4–5
- 9. Adverse selection and screening: MWG13, S2-3, LM2-3
- 10. Mechanism design: MWG23
- 11. Social choice (time permitting): MWG21