# ECON 2060 Microeconomic Theory II Spring 2019

Instructor: Kareen Rozen Classtime: Mondays 1-3:30pm Office hours: Wednesdays 8:30-10:30am @ Robinson 102A Email: kareen\_rozen@brown.edu \*\*\*Note: Write 'ECON 2060' in the subject of any email sent to Prof. Rozen regarding class.

Teaching assistant: Ricardo Fonseca Discussion section: 2:30-3:30pm on Tuesdays @ Robinson 301 Office hours: 2-4pm on Fridays @ Robinson basement Email: ricardo\_fonseca@brown.edu \*\*\*Note: Write 'ECON 2060' in the subject of any email sent to Ricardo regarding class.

# **Course objective**

By the end of this course, and thus the end of the first-year microeconomics sequence, you should have a strong understanding of the core foundations of the field. The tools you will gain should equip you to better understand, evaluate, and communicate about all economic research, regardless of the field. It should give you insight into a variety of economic phenomena. You will learn what it means to think strategically and potentially make better decisions in your own experiences. It will also provide a solid basis for the continued study of microeconomics, should you choose that as your field.

### **Required textbooks**

- (1) Mas-Colell, A., M. Whinston and J. Green (1995), *Microeconomic Theory*, Oxford University Press **[MWG]**
- (2) A. Rubinstein (2016), *Lecture Notes in Microeconomic Theory*, Princeton University Press **[R]**
- (3) M. Osborne and A. Rubinstein (2012), *A Course in Game Theory*, MIT Press [OR]

Books (2) and (3) can be freely downloaded at http://arielrubinstein.tau.ac.il

### **Course requirements and grades**

There will be one midterm and one final exam. The midterm and final exam will be scheduled outside of the usual class time. The midterm is scheduled for March 20th,

1pm, in Robinson 301. The final exam date will be announced later on. I will assign a problem set most weeks, but not if there is an exam that week. Problem sets will count for 20%, the midterm will count for another 30% and the final exam will count for 50%. There will be no make-ups scheduled for exams. Problem sets will typically be due at the beginning of discussion section, one week after they are announced. Students are free to discuss problems sets with each other, but may not submit joint problem sets. Late problem sets will be penalized proportionally to the lateness, and problem sets submitted after the corresponding solutions are posted will be given a grade of zero.

### Tentative course outline

\*\*Note\*\* The University is closed on Feb. 18th, and Monday classes need to make up a lecture to reach the standard of 12 weeks of class. As your final exams start the week of April 29th, there is no choice but to "double up" one week. We will thus have our second lecture on January 30th, 1-3:30pm, in Robinson 301.

Lecture 1: Expected utility and its axioms Chapter 7 in [R], Chapter 6 in [MWG])

Lecture 2: Risk aversion and stochastic dominance *Chapter 8 in [R], Chapter 6 in [MWG]*)

Lectures 3-4: Static games Chapters 7-8 in [MWG], Chapters 2.1-2.5, 3.1-3.2 in [OR]

Lectures 4-5: Common knowledge, its relaxations and the implications *Supplemental notes and also Chapters 4-5 in [OR]* 

Lectures 6-7: Dynamic games Chapters 9A-9B in [MWG], Chapters 6.1-6.5, 8.1-8.2 in [OR]

Lectures 8-9: Bayesian games and applications Chapters 9C in [MWG], Chapters 11.4, 11.5, 12.1-12.4 in [OR], Supplemental notes

Lecture 10-11: Adverse selection (market unraveling, signaling, screening) *Chapter 13 in [MWG]* 

Lecture 12: Moral Hazard Chapters 14A-14B in [MWG]

\*If time permits, we'll also discuss the basics of mechanism design

### Expectations of time spent

Students will spend 2.5 hours per week in class for 12 weeks (30 hours total) and 1 hour per week in discussion section (12 hours total). Readings and problem sets are estimated to average about 9 hours per week for the 11 weeks without exams (99 hours total). In addition, there is a 3-hour midterm exam and a 3-hour final exam, with approximately 20 hours of review assumed for each (46 hours total). The total time expected is thus 187 hours over the semester.

### **Course Website**

Course assignments, announcements, etc. will all be posted on the course Canvas website (<u>canvas.brown.edu</u>). See the course calendar on that site for assignment due dates and exam dates.

### **Accessibility and Accommodations**

Brown University is committed to full inclusion of all students. Please inform me early in the term if you have a disability or other conditions that might require accommodations or modification of any of these course procedures. You may speak with me after class or during office hours. For more information, please contact Student and Employee Accessibility Services at 401-863-9588 or SEAS@brown.edu.

### Academic Integrity

All students are expected to follow Brown's academic code.