EC 703a Advanced Microeconomic Theory

Spring 2020

Prof. Juan Ortner E-mail: jortner@bu.edu Department of Economics, 270 Bay State Road Room 552

Time and Location: Lectures: Mon, Wed 2.30-3.45pm, CAS 106 TA Sessions: Thu 3.30-4.45pm, CAS 201

Office hours: Mon 1-2pm; Wed 9-10am

Teaching Assistant: Nan Zhao; email: zhaonan@bu.edu; office hours: TBD

Course description: This part of the course will primarily focus on non-cooperative game theory and its applications.

Course website: the material for this class will be posted on Blackboard (http://blackboard.bu.edu).

Grading: Your grade for my part of 703 will be based on weekly problem sets and the midterm exam. The exam will count for 80% of your grade in my part of the class, the problems for the remainder. You will receive one grade for 703 based on combining Professor Lipman's evaluation for the second half of the course with my evaluation.

Midterm date: Wednesday, March 4, in class.

Homework: Problem sets will be posted on Blackboard. The TA will grade a random selection of the problems. You are encouraged to form small groups to work on the problem sets but you must take into account that (i) the final aim is to develop the ability to solve the problems by yourself, (ii) everyone has to turn in personal answers.

Academic Conduct: It is your responsibility to know and understand the provisions of the CAS Academic Conduct Code (copies are available in room CAS 104). Cases of suspected academic misconduct will be referred to the Dean's Office.

Textbooks: The textbook for the course is: Mas-Colell, A., Whinston, M., and Green, J. (1995), *Microeconomic Theory*, New York: Oxford University Press. I will also make use of Fudenberg and Tirole, *Game Theory*, MIT Press, 1991.

Note: I'm traveling on Feb. 18-19, and won't be able to teach. To make up for this, I'll teach classes on the TA sessions of Jan. 23 and Feb. 13. Nan will make up his lost TA session on Feb. 18.

Course Outline and Readings

All dates are approximate.

Introduction to game theory (Week 1). Chapter 7 of MWG Simultaneous-move games of complete information (Weeks 1 and 2). Chapter 8, sections A-D. Dynamic games of complete information (Weeks 2 and 3). Chapter 9. Incomplete information (Weeks 4 and 5). Chapter 8, Section E. Repeated Games (Week 6). Chapter 5 of Fudenberg and Tirole.