

ECO 288
Game Theory
FALL 2020

Instructor: Paulo Barelli, paulo.barelli@rochester.edu

TAs: Jihwan Do, econ.jihwando@gmail.com and Naoki Fujiwara, nfujiwar@ur.rochester.edu

Time and Location: TR 9:40 - 10:55, Goergen 101

Zoom: Meeting ID: 914 8688 4295 Passcode: 042088

Office Hours: By appointment, via Zoom.

Recitations: F 9:00 - 10:00 AM (Jihwan), F 6:00 - 7:00 PM (Naoki)

TA's Office Hours: By appointment, via Zoom.

Textbook: *Game Theory for Applied Economists*, Robert Gibbons, Princeton University Press, 1992, and *Strategy: An Introduction to Game Theory*, Joel Watson, W.W. Norton & Company, 2013.

Credits: 4.0

Game theory is a systematic study of strategic situations. It is a theory that helps us analyze economic and political strategic issues, such as behavior of individuals in a group, competition among firms/buyers in markets, platform choices of political candidates, and so on. We will develop the basic concepts and results of game theory, including simultaneous and sequential move games, repeated games and games with incomplete information. The objective of the course is to enable you to analyze strategic situations on your own. The emphasis of the course is on theoretical aspects of strategic behavior, so familiarity with mathematical formalism is recommended.

Course Organization:

1. For social distancing compliance, only 32 students will be allowed in the class in each lecture. This will be implemented automatically: at each lecture, **a group of students will not be allowed to attend the lecture in person**, only remotely online. Each member of this group will receive an email the day before the lecture informing that they are not allowed in the classroom for the upcoming lecture. Students who do not receive this email are allowed to attend the lecture in person.

2. Please be familiar with the University rules of safe conduct during the Pandemic. **Face masks are mandatory.** In particular, when you come in and out of the classroom, maintain 6 feet distance from one another, and sit on the marked chairs to respect distancing. Here's the official statement from the University:

The University is committed to protecting the health and safety of the entire community – students, faculty and staff. For this reason, it is mandatory that everyone wear a mask in University buildings and observe appropriate social distancing, including classrooms. Masks have been provided to students, faculty and staff and classrooms have been specifically assigned to allow for social distancing to support these requirements. You must wear a mask appropriately (e.g. over nose and mouth) if you are attending class in person, and you must do this for every class session and for the entire duration of each class session. If you fail to do this, you will be politely reminded of the requirement and then asked to leave if you do not comply.

If you do not want to wear a mask, you may consider taking the course remotely (online). This may require you to complete a set of online requirements different from the in-person requirements, although these will be equivalent in their learning objectives.

Students who refuse to adhere to requirement for mask wearing or social distancing the course will be in violation of the COVID-19 Community Commitment and will be referred to the Student Conduct system through a COVID-19 Concern Report. Such referrals will lead to student conduct hearings and may result in disciplinary action. Students who feel unable to wear a mask may contact the Office of Disability Resources to explore options for accommodations. Students requiring accommodations may be asked to participate in the course through synchronous or asynchronous learning as part of this accommodation.

3. Every lecture will be broadcast synchronously via Zoom. Lectures will be recorded and posted on Blackboard.

4. In-person classes will go on until November 24. After Thanksgiving, classes will be fully online.

5. I will also use Blackboard to post material and announcements. I will provide notes with a summary of the material covered in class so you will have a concise source to follow the lectures without worrying too much about taking notes. This year this is particularly the case since lectures will be posted. The textbooks listed above *are therefore not mandatory*. On the other hand, some of you may appreciate obtaining material from more than one source, I would certainly encourage you to do so. So you will do well to have access to either or both of the textbooks

6. There will be weekly homework assignments. You will submit your completed assignments electronically, using Blackboard. I strongly encourage you to type your solutions and submit in pdf format. It is not required – you can handwrite your solution and submit a scanned or photocopied version (scanning with a smartphone nowadays is very simple).

7. Recitations are primarily aimed at providing examples and applications of the material covered in class with a view to aid you in solving the homework questions. Solutions to the homework and exam questions will be posted on Blackboard.

8. If you are registered for the W section (ECO 288W), *please set up an appointment to talk to me by the second week of classes* so I can give you the guidelines for the required research paper. If you could not register to the W section because it was full and want to transfer into 288W, please let me know.

9. There will be two midterm exams and a final exam.

Midterm 1	October 1st
Midterm 2	November 10th
Final Exam	December 18th.

The final exam is cumulative. Midterms are not (the material for midterm 2 is what is covered since midterm 1.)

Grading:

Homework	20%
Midterm 1	25%
Midterm 2	25%
Final	30%.

Academic Honesty:

Honesty is taken very seriously in this institution and in this course in particular. All assignments and activities associated with this course must be performed in accordance with the University of Rochester's Academic Honesty Policy. All submitted work (assignments, quizzes, tests) must be completed by the student alone. You are allowed to discuss homework assignments with other students in the course, but the final submitted version must be done by you alone. Use of any source other than your peers to discuss homework assignments is not allowed. Posting a question, or consulting its answer, to a platform like Chegg.com to get help from an anonymous tutor is a violation of academic honesty.

For exams, **you are not allowed to have access to help of any sort**, be it other students, other people, online sources, Chegg.com and similar platforms, past exams, notes, recorded lectures, etc.

More information is available at: www.rochester.edu/college/honesty.

Academic Support:

You should reach out to either myself or the TA in case you are facing any sort of difficulty in the course. In addition to scheduled office hours, we are generally available either "in person" (Zoom) or via email. Please do not hesitate to seek help if you need it. The University also offers help, with programs in Center for Excellence in Teaching and Learning, <https://www.rochester.edu/college/cetl/about/index.html>, and also the Writing, Speaking and Argument Program <https://writing.rochester.edu>.

Disability Resources:

The University of Rochester respects and welcomes students of all backgrounds and abilities. In the event you encounter any barrier(s) to full participation in the course due to the impact of disability, please contact the Office of Disability Resources. The access coordinators in the Office of Disability Resources can meet with you to discuss the barriers you are experiencing and explain the eligibility process for establishing academic accommodations. You can reach the office at [http://disability@rochester.edu](mailto:disability@rochester.edu); (585) 276-5075; Taylor Hall.