

**Syracuse University**  
**Department of Economics**  
**ECN 611: Microeconomics I**  
**Fall 2021**

**SYLLABUS**

**Class Meetings:**

MW 2.15-3.35 PM; W 3.45-5.05 PM (for block sessions or problem sessions)  
Shaffer 221D

**Instructor:**

Leyla D. Karakas

Email: [lkarakas@syr.edu](mailto:lkarakas@syr.edu)

Office Hours: Tuesdays 9.30-11.30 AM (on Zoom) and by appointment (Zoom or in-person at Eggers 133)

**Course Description**

This course is part of the microeconomic theory sequence of the PhD program. It introduces students to game theory and covers general equilibrium theory. Students will be taking ECN 606 (Microeconomic Analysis) concurrently.

**Textbooks**

"Microeconomic Theory" by Mas-Colell, Whinston and Green, Oxford University Press.

The following books are not required for this course, but they are good references:

"Microeconomic Analysis" by Hal R. Varian, Norton Publishers, 3rd Edition, 1992.

"Game Theory" by Drew Fudenberg and Jean Tirole, The MIT Press, 1991.

"General Equilibrium and Welfare Analysis" by James Moore, Springer, 2007.  
"Advanced Microeconomic Theory" by Jehle and Reny, Prentice Hall, 3rd Edition, 2011.  
"Theory of Value: An Axiomatic Analysis of Economic Equilibrium" by Gerard Debreu, Yale University Press.

## **Course Requirements**

*Exams:* There will be two in-class exams on October 20 and December 8, each accounting for 30 percent of your course grade. The exams are not going to be "cumulative", to the extent that you can say this for a course in microeconomics.

*Problem Sets:* There will be weekly problem sets throughout the semester that will account for 30 percent of your course grade. You are allowed (and encouraged) to work together on them, but each student must turn in his or her own problem set.

*Class Participation:* I expect each student to be actively present in class. This may be in the form of participation when working through proofs or examples together in class, or volunteering to offer answers to a selected question from the week's problem set assignment. Participation accounts for 10 percent of your course grade.

## **Course Policies**

Serious illness, family emergencies or religious observances are the only reasons a student can miss an exam or fail to turn in a problem set. Students should contact me to make arrangements as soon as they know that they will be missing an exam. For religious observance excuses, the student should notify me before the end of the second week of classes as per University policy. Failure to turn in a problem set due to one of the above reasons will result in that assignment not being counted towards the overall grade. No late problem sets will be accepted.

## **Academic Integrity**

Syracuse University's Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the policy and know that it is their responsibility to learn course-specific expectations, as well as about University policy. The University policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same written work in more than one class without receiving written authorization in advance from both instructors. The presumptive penalty for a first offense by an undergraduate student is course failure, accompanied by a transcript notation that the failure resulted from a violation of Academic Integrity Policy. The standard sanction for a first offense by a graduate student is suspension or expulsion. For more information and the complete policy, see <http://academicintegrity.syr.edu>.

## **Accommodations**

If you believe that you need accommodations for a special need or disability, please contact the Office of Disability Services (ODS), located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

## **COURSE OUTLINE**

### **I. Game Theory**

- Basics of non-cooperative games: MWG Ch. 7.
- Simultaneous-move games and Nash equilibrium: MWG Ch. 8A-D.

- Incomplete information and Bayesian Nash equilibrium: MWG Ch. 8E.
- Sequential-move games and Subgame Perfect Nash equilibrium: MWG Ch. 9A-B.
- Imperfect information and Perfect Bayesian equilibrium: MWG Ch. 9C.
- Bargaining (if time permits): MWG Ch. 9, Appendix A.

## **II. Partial Equilibrium**

- Competitive markets in a partial equilibrium framework: MWG Ch. 10.
- Topics:
  1. Externalities: MWG Ch. 11, Varian Ch. 24.
  2. Public goods: MWG Ch. 11, Varian Ch. 23.

## **III. General Equilibrium**

- Pure exchange economy: MWG 15.B, Varian Ch. 17.
- Economies with production: MWG 15.C-D.
- Welfare properties of equilibrium: MWG Ch. 16, Varian Ch. 18.
- Cooperative games and the core: MWG Ch. 18.