

**BPHD 8110-001**  
**Microeconomic Theory II**  
**Spring 2019**

**Class:** 10:00am-12:45pm T, Friday 207

**Instructor:** Shuwen Li

217C Friday Building

704-687-7659, [lshuwen@uncc.edu](mailto:lshuwen@uncc.edu)

**Office hours:** 10:30am-12:00pm M, 217C Friday Building;

3:00pm-4:30pm T, Center City 7<sup>th</sup> Floor and by appointment

**Course Description and Prerequisites**

This is a second semester course in Microeconomic Theory for the Business Administration PhD. This course provides a rigorous introduction to game theory and its applications in microeconomic theory and finance. We will cover topics including simultaneous-move games, sequential-move games, market power, games with incomplete information, mechanism design and the principal-agent problem. The prerequisite is BPHD 8100.

**Course Objectives**

By the end of the course, students should be familiar with core concepts of game theory and be able to apply these concepts to building their own theoretical models.

**Textbooks**

(Required) Andreu Mas-Colell, Michael D. Whinston and Jerry R. Green (MWG).

*Microeconomic Theory*. Oxford University Press, 1995. ISBN-13: 9780195073409.

(Recommended) Robert Gibbons (G). *Game Theory for Applied Economists*. Princeton University Press, 1992. ISBN-13: 9780691003955.

(Recommended) Drew Fudenberg and Jean Tirole (FT). *Game Theory*. The MIT Press, 1991. ISBN-13: 9780262061414.

These books are available at the UNCC Bookstore.

**Course Website**

I will post course materials on Canvas (<https://canvas.uncc.edu/>) during the semester.

**Grading**

Presentation	15%
In-class Exam	50%
Research Project	35%

Each student will need to present a published research article. I will provide a list of papers at the beginning of the semester and each of you will choose one to present. The presenter is encouraged to incorporate his own thoughts in the presentation. Students who are not presenting are also required to read the paper before class and come with some questions for each paper to be discussed. More information about the presentation will be provided separately.

There will be one closed-book in-class exam on Apr. 23, 2019 from 10:00am to 12:30pm. I will not give make-up exams. Missed exams will only be excused without penalty if the absence is due to a reason that the university officially recognizes as legitimate. In that case, the weight of all other grading components will be scaled up proportionally. Exams missed for unexcused reasons will receive a score of 0. Solving more problems will help you better master the course materials. I will post problem sets and answers on Canvas, but you do not need to turn in any answer.

A third component of the grading is based on a research project. You need to submit a paper where you model preferences and behavior of a chosen situation of interest. The paper is due by email at 9:00pm on our scheduled final exam date May 7, 2019. More information about the research project will be provided separately.

### **Course Policies**

- Class attendance is not required but highly recommended because of the rigorous nature of the course.
- Please turn off/silence all electronic devices before class starts. Please be considerate to me and your fellow students. I reserve the right to lower the grade of any student who exhibits disruptive behavior.

### **Academic Integrity**

All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online at <https://legal.uncc.edu/policies/up-407>. Faculty may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.

### **Diversity Statements**

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socioeconomic status.

### Disability Accommodation

UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from Disability Services early in the semester. For more information on accommodations, contact the Office of Disability Services at 704-687-0040 or visit their office in Fretwell 230.

### Enrollment Information

Students are responsible for verifying their enrollment in this class.

Last day to register, add, drop with no grade via the web Jan. 16, 2019

Last day to withdraw; grade subject to Withdrawal Policy Mar. 19, 2019

### Tentative Course Schedule

Date	Topic	Readings	Presentation
1/15	Simultaneous games of complete information	MWG 7-8, G 1	
1/22	Sequential games of complete information	MWG 7-9, G 2	
1/29	Games of complete information with a continuum of strategies	MWG 12, G 1-2	
2/5	Simultaneous games of incomplete information	MWG 8, 23, G 3	
2/12	Simultaneous games of incomplete information	MWG 8, 23, G 3	
2/19	Simultaneous games of incomplete information	MWG 8, 23, G 3	
2/26	Sequential games of incomplete information	MWG 9, G 4	Fellingham and Newman, 1985
3/5	====Spring recess, no class=====		
3/12	Sequential games of incomplete information	MWG 9, G 4	
3/19	Sequential games of incomplete information	MWG 9, G 4	Maksimovic, 1990
3/26	Mechanism design	MWG 23	
4/2	Mechanism design	MWG 23	Bruche and Llobet, 2014
4/9	Principal agent problem	MWG 14	
4/16	Individual meetings about research paper		
<b>4/23</b>	<b>In-class exam, 10:00am-12:30pm</b>		
4/30	Bonus topic		
<b>5/7</b>	<b>Research paper due by email, 9:00pm</b>		

### Revision of the Syllabus

The standards, requirements and course schedule set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and via email.