ECO6383-701

**Managerial Economics**

**Fall 2019**

**Instructor:** Bo Chen

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**Webpage:** http://econbc.weebly.com

**Meeting Times:** T 6:30-9:20 PM

**Location:** ULC 0303

**Office Hours:** T 10:30-11:59 AM and by appointment.

**Course Description:**

This course introduces a set of tools for economic analysis from classic economics as well as from more modern economics including game theory and information with the intention of showing how each of these analytic tools can be useful in managerial decision making.

**Learning Objectives:**

By the completion of the course the students should be a qualified:

1. Conflict solver
2. Marriage agent/merger
3. Contract maker
4. Seller
5. Sports competition organizer

**Grading:**

Homework 20%

Midterm Exam (Tuesday October 8th 6:30-9:20 PM) 40%

Final Exam (Tuesday December 17th 6:30-9:20 PM.) 40%

Numerical scores will be adjusted for final grades. Problem sets will likely be given out every week.

**Class Sessions and Expectations:**

The class meets weekly for a total of three hours. Each session consists of a detailed explanation of the models discussed throughout the course and their applications. If needed, time will also be devoted to go through crucial steps of the homework assignments.

This course is laptop free. Students are expected to spend most of their time taking notes and discussing about the material covered in class.

Students are expected to come to class on time and to behave politely throughout the lecture. Eating and drinking is allowed only during class breaks.

Last but not the least, students are expected to be motivated and focused, able to work
independently but also to contribute to the classroom environment. Students should not expect to be spoon fed.

The emphasis in this course is on the learning process and not on the memorization of few formulas. In addition, there is no text book for this course (see below).

**Recommended Course Text and Reading:**

There is no text book. The following list of readings will constitute the main bibliographical source. Students are not expected to read all the chapters from all the books. This list is sufficiently rich so that students can eventually find the reference that fits their style and needs the best. Books marked with an asterisk are for the intrepid. In addition, I will provide some notes during the semester to complement the material. Taking good notes during lectures remains the best way to learn.

To review the basics of Mathematics for Economics and Game Theory
Refer to any textbook for Intermediate Mathematics for Economics

 E.g., *Essential Mathematics for Economic Analysis*

Refer to any textbook for Intermediate Microeconomics or Game Theory

 E.g., *An Introduction to Game Theory* by Martin J. Osborne

Decision under Uncertainty
\*MasColell, Whinston and Green (1995). “*Microeconomic Theory*” (MWG)

Moral Hazard and Adverse Selection
M. Stadler and P. Castrillo “*An Introduction to the Economics of Information*” (MSPC)

\*Salanie “*The Economics of Contracts*” (S)

J. Church and R. Ware “*Industrial Organization: A Strategic Approach*” (CW) [[ebook](http://homepages.ucalgary.ca/~jrchurch/page4/page5/page5.html)]

Auctions and Mechansim Design
V. Krishna “*Auction Theory*” (K) [[ebook](https://www.sciencedirect.com/book/9780123745071/auction-theory)]

Menezes and Monteiro “*An Introduction to Auction Theory*” (MM)

**Course Outline:**

This course consists of four parts. The plan is to cover approximately one numbered element of the outline in each class period though that pace will vary over the course of the semester.

1. **Cooperative Games**
	1. Shapley Value (Shapley, 1953)
	2. Assignment Games (Shapley and Shubik, 1972)
	3. Two-side Matching (Shapley, 1962)
2. **Contract Design and Pricing Strategies**
	1. Review of Math
		1. Optimization
		2. Choice under Risk and Stochastic Dominance (MWG Ch 6)
	2. Moral Hazard (Principle-Agent Problem) (MSPC Ch 2, 3; S Ch 1, 5; CW)
	3. Adverse Selection (MSPC Ch 4, 5; S Ch 2, 4)
3. **Auctions and Mechanism Design** (K Ch 2,4; MM Ch 3)
	1. Review of Game Theory
	2. First-Price/ Second-Price /All-pay Auctions and Revenue Equivalence
	3. Optimal Auctions/Mechanisms
4. **\*Contest Design (if time permits)**
	1. Basic Models
	2. Effects of Bid Caps
	3. Disclosure Policies in Contests

**University Policies:**

**\* Disability Accommodations**: Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS) to verify the disability and to establish eligibility for accommodations. Students may call 214-768-1470 or visit http://www.smu.edu/alec/dass.asp to begin the process. Once registered, students should then schedule an appointment with the professor to make appropriate arrangements.)

**\* Religious Observance:** Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

**\* Excused Absences for University Extracurricular Activities:** Students participating in an officially sanctioned, scheduled University extracurricular activity should be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. (University Undergraduate Catalogue)