

# COURSE SYLLABUS

## Spring, 2020

- Course:** Econ 323, Section 501 (Microeconomic Theory)
- Instructor:** Dr. Guoqiang Tian  
Professor of Economics  
Phone: 845-7393  
E-mail: [gtian@tamu.edu](mailto:gtian@tamu.edu)  
<http://people.tamu.edu/~gtian/>
- Lectures:** TR 9:45-11:00 am  
NCTM 122
- Office Hours:** TR 8:40-9:40 am or by appointment  
LASB 256
- TA:** Jinliang Liu  
[jl716@tamu.edu](mailto:jl716@tamu.edu)  
Office hours: M 12:45-2:45 pm  
LASB 260
- Text:** Microeconomics  
(Ninth Edition) by Robert Pindyck and Daniel Rubinfeld. I will post slides, lecture notes, and other additional materials on eCampus. The lecture notes can also be downloaded from my homepage at:  
[http://people.tamu.edu/~gtian/teaching\\_and\\_class\\_materials.html](http://people.tamu.edu/~gtian/teaching_and_class_materials.html)
- Study Guide:** Study Guide to Accompany Microeconomics (Ninth Edition) by Jonathan Hamilton and Valerie Suslow
- Prerequisites:** ECON 202 and MATH 142 or get permission from me.
- Course Objectives:** In this course, we will explore the foundations of microeconomic theory, focusing on the behavior of individuals and firms, and the interaction of these agents in various types of markets. How to think about economic problems and how it can be used as a practical tool for decision making in consumption, management and public policy are the emphasis of the course. A central topic in this course is the price determination. By examining the demand and supply responses of consumers and firms, each of whom treat prices as parameters in their decision making. Of affordable “baskets” of goods, consumers choose the one which maximizes

their utility or well being, from which we derive the demand curve. Firms choose the combination of inputs and outputs that maximizes their profits, subject to the constraints imposed by their technology, from which we derive the supply curve. Students enrolled in this course should be comfortable with algebra, including quadratic and simultaneous equation; differential calculus is useful to the problem solving and concepts of marginal rate of changes. Upon completion of the course, students should know how to analyze economic issues using theories or models learnt from the course.

**Course Policy:**

All students are required to come and participate in class, take all homework assignments and exams. Classroom attendance is required and will be checked regularly. Student Rule 7 explains attendance policies and excused absences (see [student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07)). All assignments must be turned in on time. Late work and missed exams will be governed by university rules on university-excused absences (see <http://studentrules.tamu.edu/rule07>).

**Homework:**

There will be three homework assignments. The questions in these problem sets can help you understand the Text's materials and lectures. You are asked to form study groups yourself to work on these homework assignments. A study group should consist of three to five students. You are also strongly suggested to study the questions in Exercise, Problem Set and Self-Test in the Study Guide. All of these serve as the guidance for preparing the exams.

**Course Grades:**

Your grade will be mainly based on the performance of *three* homework assignments and *three* 75-minute tests. Each of homework assignments and exams is up to 100 points. Your grade will be calculated using the method listed below:

Homework: 20%  
Exam: 80%

That is given by the formula:

$$(\text{HW 1} + \text{HW 2} + \text{HW3}) \times 20\% + (\text{Test 1} + \text{Test 2} + \text{Test 3}) \times 80\%$$

The maximum total points you can earn from homework assignments and tests are thus 300. The grade distribution is as follows. A student with points between 270-300, 240-269, 210-239, 180-209, or 0-179 will receive a grad A, B, C, D, or F, respectively, which may yield approximately 15% A's, 30% B's,

30% C's, 20% D's, and 5% F's.

**Attendance Bonus Points:** You are responsible for providing satisfactory evidence to the instructor to substantiate the reason for absence. Attendance will be regularly checked. To implement this policy effectively, 15 bonus points are given to students with perfect attendance. Every two points will be deducted for each missing class without my prior approval till all of 15 bonus points are taken off.

**Exam Schedule:** I have set up tentative dates of the exams, which may be changed depending on the progress of lectures.

*Test # 1:* Thursday, February 20, 9:45-11:00 am

*Test # 2:* Thursday, March 26, 9:45-11:00 am

*Test # 3:* Thursday, April 23, 9:45-11:00 am

**Make-Up Guidelines:** Make-up exams are allowed only for the reasons and following the rules stated in Section 7.1-7.4 of the University Students' Rule. To have my permission to make-up exams, you should especially follow the rules stated in Section 7.3: "Except in the case of the observance of a religious holiday, **to be excused the student must notify his or her instructor in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. accident, or emergency) the student must provide notification by the end of the second working day after the absence.** This notification should include an explanation why notice could not be sent prior to the class. Accommodations sought for absences due to the observance of a religious holiday can be sought either prior or after the absence, but not later than two working days after the absence."

**Study Habits:** Attend classes regularly as required. Students who do not attend classes virtually all the time do not do well. Read the relevant materials in the textbook and lecture notes in advance. If you walk into class with some background, it can help you understand new materials and it not easily get lost. Also, study those lecture presentations extensively on the same day as the lecture. Take most of your time on the materials covered in class. I lecture over the things that I think most important. The textbook is back-up to help you learn, and contains some useful information that I may not have time to cover, or that I think is fairly transparent and that you can get on your own.

***Agreement in Writing:*** All agreements should be in writing. If you inquire for the possibility to obtain an excuse, or any other circumstance that requires any special accommodation in class, we need to communicate in writing the scope of any arrangement. If a conversation with me makes you think that you are entitled to any special accommodation, you need to send me an email and inquire for a confirmation of this. Unless there is a written communication from me, you are not entitled to any special accommodation.

***University Education Goal:*** Texas A&M University has identified student learning outcomes that describe our institutional commitment to your educational goals. These include the ability to demonstrate critical thinking, effective communication, and social, cultural, and global competence. Please see: [http://provost.tamu.edu/essentials/pdfs/copy\\_of\\_UndergraduateLearningOutcomesFinal.pdf](http://provost.tamu.edu/essentials/pdfs/copy_of_UndergraduateLearningOutcomesFinal.pdf).

***ADA Policy Statement:*** Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit <http://disability.tamu.edu>. Disabilities may include, but are not limited, to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

***Title IX and Statement on Limits to Confidentiality Statement:***

Texas A&M University and the College of Liberal Arts are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally considered confidential pursuant to student record policies and laws, University employees — including instructors — cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community. As the instructor, I must report the following information to other University offices if you share it with me, even if you do not want the disclosed information to be shared:

- Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or

staff.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Student Counseling Service (<https://scs.tamu.edu/>). Students and faculty can report concerning, non-emergency behavior at <http://tellsomebody.tamu.edu>

**Academic Integrity Statements:** “An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/)

Academic dishonesty will not be tolerated. Representing someone else’s work as their own or **cheating in any other manner** will be pursued with disciplinary action and will result in an “F\*” grade for the class (F\* means that a student gets an F in the course and has to go through a remediation course about the ethics relating to breaking the Aggie code of Honor).

It is prohibited to use a smartphone, cellphone, or other electronic communication device during an exam. If a student is found using such a device during an exam, texting, chatting, messaging, calling, reading a message from its screen, etc., the student will be reported to the honor system and will result in an “F\*” grade for the class.

### **Math Review Materials (Links to the videos):**

- Basic Explanation of Functions:  
<https://www.youtube.com/watch?v=GS5Shg15Qwk>
- Slopes and Inverse Demand: [https://www.youtube.com/watch?v=\\_n3T3c\\_Fqm8](https://www.youtube.com/watch?v=_n3T3c_Fqm8)
- Cobb-Douglas and Leontieff Production Functions:  
<https://www.youtube.com/watch?v=eg2mCrpUy8E>
- Systems of equations and solving for equilibrium:  
[https://www.youtube.com/watch?v=Z1rypET8\\_Io](https://www.youtube.com/watch?v=Z1rypET8_Io)
- Consumer and Producer Surplus and Deadweight Loss:  
<https://www.youtube.com/watch?v=QZfsPC0b12s>

- Percent changes and elasticity:  
<https://www.youtube.com/watch?v=T4nR4OGInhU>
- Derivatives: <https://www.youtube.com/watch?v=eEWCLuGEgVA>
- Optimization: <https://www.youtube.com/watch?v=OOR2Q7-9cY8>

## **Tentative Topics Outline:**

### **Test 1**

#### Part I. The Demand and Supply Analysis

1. Preliminaries (Chapter 1, pp. 3-19)
2. The Basics of Supply and Demand (Chapter 2, pp. 21-48, 58-60)

#### Part II. The Theory of Consumer: Consumer Behavior and Demand

3. Consumer Behavior (Chapter 3, pp. 67-100)
4. Individual and Market Demand (Chapter 4, pp. 109-137)

### **Test 2**

#### Part III. The Producer Theory: Production and Competitive Markets

5. Production (Chapter 6, pp. 187-212)
6. The Cost of Production (Chapter 7, pp. 215-248)
7. Profit Maximization and Competitive Supply (Chapter 8, pp. 267-302)
8. The Analysis of Competitive Markets (Chapter 9, pp. 305-328)

### **Test 3**

#### Part IV. Market Structure and Competitive Strategies

9. Market Power: Monopoly and Monopsony (Chapter 10, pp. 347-386)
10. Pricing with Market Power (Chapter 11, pp. 391-402)
11. Monopolistic Competitive and Oligopoly (Chapter 12, pp. 443-474)
12. Markets for Factor Inputs (Chapter 14, pp. 521-547)
13. Investment, Time, and Capital Markets (Chapter 15, pp. 551-570)

If time permits, we may cover materials selected from the following chapters.

Chapter 5: Uncertainty and Consumer Behavior

Chapter 13: Game Theory and Competitive Strategy (Chapter 13, pp. 479-497)

Chapter 16: General Equilibrium and Economic Efficiency

Chapter 17: Markets with Asymmetric Information

Chapter 18: Externalities and Public Goods