

**ECO 6384**  
**Microeconomic Theory I.**  
**Fall, 2022**

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**Office Hours:** Monday and Wednesday, 10.30 AM - 12 noon & by appointment.

**Lectures:** Tuesday & Thursday, 11 AM - 12.20 PM, U Lee 301-S.

**Teaching Assistant:** M. Tahmeed Hossain, E-mail: tahmeedh@mail.smu.edu

**Introduction:**

This is the first of two-courses in core microeconomic theory for first year Ph.D. students in economics. The aim of the course is to train students in the art of theoretical reasoning, and to expose them to fundamental techniques and concepts in modern microeconomic theory. In particular, this course will focus on topics related to choice and individual optimization by consumers and firms, decision making under uncertainty, basic game theory, market structures, and elements of partial and general equilibrium analysis.

**Learning Objectives:**

Train students in advanced microeconomic models and concepts necessary for doctoral research.

Equip students with the ability to use microeconomic theory and reasoning to analyze concrete economic problems.

Enable them to read scientific papers in their areas of interest.

**Textbook:** *Microeconomic Theory* by Andreu Mas-Colell, Michael D. Whinston and Jerry R.Green, Oxford University Press, 1995. ISBN: 0-195-07340-1.

**Home Assignments:** Home assignments will be given out from time to time. It is expected that students will work on these assignments on their own and turn them in class on the due date.

**Examinations:** There will be one Midterm Exam and one Final Exam; both exams will take place in the classroom and will be written, "closed book" exams. The exam schedule will be as follows:

Midterm Exam: Thursday, October 6, 11 AM -12.15 PM

Final Exam: Saturday, December 10, 11.30 AM - 2.30 PM

**Evaluation:** Final grade will be assigned on the basis of performance in home assignments (20%), the first midterm exam (40%) and the final exam (40%). No "incomplete" grade will be assigned except for cases of medical emergency during the final exam.

**Tentative List of Topics:**

1. Preferences, Utility and Consumer Choice, Demand Functions and Comparative Statics, Weak Axiom of Revealed Preferences, Classical Demand Theory: Preferences and Utility, Utility Maximization, Expenditure Minimization, Welfare Evaluation of Economic Changes.

Material: Chapter 1(1.A), Chapter 2, Chapter 3 (3.A – 3.G, 3.I)

2. Production Theory: Technology & Production Sets, Profit Maximization and Cost Minimization.

Material: Chapter 5 (5.A – 5.D)

3. Choice under Uncertainty: Expected Utility Theory; Money Lotteries and Risk Aversion; Measures of Risk Aversion; First and Second Order Stochastic Dominance

Material: Chapter 6 (6.A - 6.D, 6.F).

4. Introduction to Game Theory: Extensive & Normal Forms, Nash Equilibrium, Sequential Rationality and Subgame Perfection

Materials: Chapter 7, Chapter 8 (8.A - 8.D), Chapter 9 (9.A - 9.C).

5. Competitive Markets & Partial Equilibrium: Pareto optimality; Partial Equilibrium Analysis; Welfare analysis; Efficiency of competitive markets; deadweight loss; Free entry and long run equilibrium.

Material: Chapter 10.

6. Market Power: Monopoly & welfare loss; Price Discrimination in monopoly, Two-part tariff; Static oligopoly: Bertrand, Cournot, capacity constraints & product differentiation; Entry; Repeated interaction and collusion, Infinitely Repeated Games and Folk Theorem.

Material: Chapter 12 (12.A - 12.E), Appendix A.

7. General Equilibrium, Fundamental Welfare Theorems, Conditions for Pareto Optimality, Welfare maximization, Private Ownership Economy: Equilibrium & Existence.

Material: Chapters 15 (15.A – 15.C) , 16, 17 (17.A- 17.C)

## Title IX and Disability Accommodations

### Disability Accommodations

Students who need academic accommodations for a disability must first register with Disability Accommodations & Success Strategies (DASS). Students can call 214-768-1470 or visit [smu.edu/DASS](http://smu.edu/DASS) to begin the process. Once they are registered and approved, students then submit a DASS Accommodation Letter through the electronic portal, DASS Link, and then communicate directly with each of their instructors to make appropriate arrangements. Please note that accommodations are not retroactive, but rather require advance notice in order to implement.

### Sexual Harassment

All forms of sexual harassment, including sexual assault, dating violence, domestic violence and stalking, are violations of SMU's Title IX Sexual Harassment Policy and may also violate Texas law. Students who wish to file a complaint or to receive more information about the grievance process may contact Samantha Thomas, SMU's Title IX Coordinator, at [accessequity@smu.edu](mailto:accessequity@smu.edu) or 214-768-3601. Please note that faculty and staff are mandatory reporters. If students notify faculty or staff of sexual harassment, they must report it to the Title IX Coordinator. For more information about sexual harassment, including resources available to assist students, please visit [smu.edu/sexualmisconduct](http://smu.edu/sexualmisconduct).

### Pregnant and Parenting Students

Under Title IX, students who are pregnant or parenting may request academic adjustments by contacting the Office of Student Advocacy and Support by calling 214-768-4564. Students seeking assistance must schedule an appointment with their professors as early as possible, present a letter from the Office of the Dean of Students, and make appropriate arrangements. Please note that academic adjustments are not retroactive and, when feasible, require advance notice to implement.

### SMU Requirements

#### 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. Check

<https://www.smu.edu/StudentAffairs/ChaplainandReligiousLife/ReligiousHolidays>  
for a list of holidays.

#### Medical-Related Absences

To ensure academic continuity and avoid any course penalties, students should follow procedures described by their instructors in order to be provided with appropriate modifications to assignments, deadlines, and exams.

#### 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 that were missed as a result of their participation. It is the responsibil-

ity of the student to make arrangements for make-up work with the instructor prior to any missed scheduled examinations or other missed assignments. (See current Catalog "<https://catalog.smu.edu/>" under heading of "Academic Records/Excused Absences.")

#### Academic Dishonesty

Students are expected to embrace and uphold the SMU Honor Code

(<https://www.smu.edu/StudentAffairs/officeofthedeanofstudents/StudentHandbook>).

Violations of the Honor Code will be acted upon in accordance with the policies and procedures outlined in the Mustang Student Handbook

(<https://www.smu.edu/StudentAffairs/officeofthedeanofstudents/StudentHandbook>)

#### Student Support

##### Student Academic Success Programs

Students needing assistance with writing assignments for SMU courses may schedule an appointment with the Writing Center through Canvas. Students who would like support for subject-specific tutoring or success strategies should contact SASP, Loyd All Sports Center, Suite 202; 214-768-3648; [smu.edu/sasp](http://smu.edu/sasp).

##### Caring Community Connections Program

CCC is a resource for anyone in the SMU community to refer students of concern to the Office of the Dean of Students. The online referral form can be found at [smu.edu/deanofstudentsccc](http://smu.edu/deanofstudentsccc). After a referral form is submitted, students will be contacted to discuss the concern, strategize options, and be connected to appropriate resources. Anyone who is unclear about what steps to take if they have concerns about students should contact the Office of the Dean of Students at 214-768-4564.

##### Mental Health Resources: On-Call and Ongoing Counseling Services

Throughout the academic year, students may encounter different stressors or go through life experiences which impact their mental health and academic performance. Students who are in distress or have concerns about their mental health can schedule a same-day or next-day appointment to speak with a counselor by calling Counseling Services

(<https://www.smu.edu/StudentAffairs/DrBobSmithHealthCenter/Counseling-Services>).

Counselors are available at any time, day or night for students in crisis at this number: 214-768-2277 (then select option 2) They will be connected with a counselor immediately. Students seeking ongoing counseling should call the same number (214-768-2277, then select option 1) during normal business hours to schedule an initial appointment.

##### Campus Carry Law

In accordance with Texas Senate Bill 11, also known as the 'campus carry' law, and following consultation with entire University community, SMU chooses to remain a weapons-free campus. Specifically, SMU prohibits possession of weapons (either openly or in a concealed manner) on campus. For more information, please see [smu.edu/campuscarrylaw](http://smu.edu/campuscarrylaw).