# ECON 410 Intermediate Microeconomic Theory

University of North Carolina at Chapel Hill

Summer I 2021

Class Time:	MTWRF 11:30am - 1:00pm
Recitation Time:	TR 1:30pm - 2:45 pm
Classroom:	Fetzer Hall 106
Zoom Link:	https://unc.zoom.us/j/99573180249 (passcode: 410)
Credit:	4.0 credit hours
Prerequisites:	ECON 101, and one of MATH 152, 231, STOR 112, or 113
Instructor:	Megan McCoy
Email:	memccoy@email.unc.edu
Office Hours:	MW 1:30-2:30pm, TR 3:15-4:15pm, F 9:30-10:30am
Office:	Gardner 411 (Location of office hours will be posted on Sakai)
Office Hours Link:	https://unc.zoom.us/j/93307463050

# Course Goals

The purpose of this course is to explore the foundations of Microeconomic theory, focusing on the behaviors of consumers, producers, and the interaction of these agents in the marketplace. The organization of markets and its implications for firm behavior and market equilibrium are also examined. This course is divided into the following three topics:

- Consumer theory: How households make decisions in the face of scarcity and how these decisions vary in response to changes in the economic environment.
- Firm theory: How firms make decisions in the face of scarcity and how these decisions vary in response to changes in the economic environment.
- The organization of markets: How perfectly competitive, monopolistic, monopolistically competitive, and oligopolistic markets are organized and the outcomes of these markets.

The principles covered in this course are building blocks. These building blocks can and will be used in elective courses to analyze many specialized topics. This material cannot be learned passively; active thinking and problem solving are essential. A major goal of this course is to teach you to "think" in a manner beyond fact recall so that you can explain the definition, the math, the graphs, and the intuition for every concept taught in the course.

## **Course Materials**

Suggested Text: Microeconomics, by David Besanko and Ronald Braeutigam, Wiley

The textbook is meant to be a reference, and suggested readings are provided to help you better understand lecture content. Problems will not be assigned from the book, so you may use any of the older editions.

# **Course Policies**

## **Class Format**

This course will be taught as Mode 2: In Person and Remote Learners, Synchronously. According to <u>UNC's Keep Teaching site</u>, this class is designed for students who are either in person (on-campus) or remote learners. Officially, this distinction means that students attend classes and exams on specific dates/times throughout the semester. On-campus learners meet at a specific physical campus location. Remote learners attend virtually.

Most importantly, course design optimizes learning for both in-person and remote learners simultaneously. For this course, that means that students may choose to attend lectures and recitations in-person or virtually so long as they adhere to the <u>UNC COVID Community</u> <u>Standards</u> and <u>Testing Requirements</u>. This course will be taught synchronously and attendance will be graded (see Attendance below). There will be in-person and remote learning on Mondays through Thursdays. However, Fridays will be remote only with half of the lecture time dedicated to a quiz (see Quizzes below) and the other half of the lecture time will be devoted to a lesson.

# **Class Expectations**

To be successful in this class, students will need to devote approximately five (5) hours every day to ECON 410, including lecture and recitation time. Students should come to class prepared by having: read the suggested textbook chapters for the day, printed or downloaded the slides for that class posted on Sakai, and review the slides. Students should spend time after class reviewing class notes, working through help sheets and on assignments, and studying for quizzes. If you have any questions regarding concepts or assignments, students are encouraged to attend office hours to gain clarification from the instructor.

Regardless of the modality of attendance, it is suggested that students *hand write* their notes. Not only will this allow for remote students to dedicate their screen to the Zoom classroom, but studies have found that taking notes <u>by hand leads to higher retention</u> than typing on a computer. If a student is attending in person and must have their computer screen up, they are expected to sit near the back or sides of the classroom so as to not distract students -- multitasking on electronic devices has been shown to <u>decrease grades</u>, for both the multitasker and the people seated around them.

In addition to attending every class, students should check their UNC emails and Sakai at least once a day for class updates and any relevant communications. In return, I will return all student emails by the time the next class starts.

Students who are attending class remotely are expected to have their microphones muted when not responding to or asking a question. If a student has a question, they are encouraged to either use the hand raise feature in Zoom or to type the question in the chat. The Zoom chat is

to be used for class purposes only; as talking during class is distracting while in person, having side conversations in the Zoom chat is equally (if not more) distracting. Students who cause distractions during class time, either in person or remote, will be removed from the class for the day and lose their Concept Check credit for that class.

Cell phones and other devices not being used for class and/or note-taking should be silenced and put away during the class. Students are expected to not have tabs/browsers open that do not relate to the lecture.

### Attendance

Students are expected to attend every lecture and every recitation, and **attendance** *will be graded* **through Concept Checks**. Students will be allowed to miss three (3) classes, either lecture or recitation, before experiencing a grade penalty (see Concept Checks for details). Students who miss more than three (3) classes are expected to reach out to the instructor to discuss how the student plans on successfully completing the class given the equivalent of a week of missed classes.

It is the student's responsibility to obtain any material missed due to an absence. For the benefit of reviewing material and studying, recordings of the lecture will be made available. Students who miss a class are expected to refer to the course calendar, Sakai, and fellow classmates to determine missed material before reaching out to the instructor.

# Grading

Students will be awarded grades through a variety of assessments, including concept checks, problem sets, quizzes and a final exam. The grading scheme is as follows:

10 %	<b>Concept Checks</b>
30 %	Problem Sets
30 %	Quizzes
30 %	Final Exam

#### Concept Checks (10%)

To track attendance and ensure students are understanding concepts, each lecture and recitation will have a daily concept check. The concept checks will take less than five minutes of class time and will be administered at any point during the lecture. Concept checks will be in a variety of formats, including but not limited to polls in Poll Everywhere, surveys in Google Forms, and participation in Google JamBoards. Concept checks will be graded on the following scale: 0 (not present); 1 (present but inaccurate or incomplete response); 2 (present with accurate and complete response). **There will** *not* **be make-up concept checks.** If a student misses lecture or recitation for an University Approved Absence, they will be omitted from the

concept check; if a student does not participate and does not have a University Approved Absence, they will receive a zero. The lowest three (3) scores will be dropped.

#### Problem Sets (30%)

There will be seventeen (17) problem sets this semester to assess the student's knowledge of the material and progress through the course. Problem sets will give students the opportunity to practice implementing the mathematics and graphs behind concepts and explore real world applications of the material. Problem sets will be posted on Sakai and Gradescope; students are expected to turn in their assignments on Gradescope **by 11:00am on the day they are due**. Answer keys will be posted at 11:20am, so **late work will not be accepted**. The lowest two (2) problem set grades will be dropped.

#### Quizzes (30%)

Instead of midterm exams, there will be four (4) quizzes throughout the semester **on May 28**, **June 4**, **June 11**, **and June 18**. Quizzes are intended to assess students' knowledge of the previous week's material and prepare students for the final examination. Each quiz will occur during a Friday lecture (starting on the second Friday of the semester) and will take 35 minutes of the class period. Lessons and problem sets covered on each quiz will be posted on Sakai in advance of the quiz. The quiz will be administered remotely on Sakai, proctored using Zoom, and responses will be turned into Gradescope.

The lowest one (1) quiz score will be dropped. **There will be** *no* **make-ups for missed quizzes.** The only exception is if a student has a <u>University Approved Absence</u>; in this case, the student may request a make-up quiz at a time convenient to both student and instructor.

#### Final Exam (30%)

The final exam is scheduled for **Wednesday**, **June 23 11:30am-2:30pm**. *All students are expected to take the final exam at this time*. If a student provides the instructor with documentation of a <u>University Approved Absence</u>, we can schedule a time for the student to complete a make up of the final. If a student does not provide documentation of a University Approved Absence and does not take the final exam, their grade for the course will be an AB.

The exam will be administered remotely. All students are expected to follow the guidelines of the UNC Honor Code. The exam will be open-book and open-notes. You may not search for answers on the internet. You may not consult with anyone on the exam.

#### **Regrade Requests**

Students are able to request regrades for Homework Assignments only. If a student feels they have received an incorrect grade on a Homework Assignment, **they can request a regrade** *within 48 hours of the posted grade*. A regrade request must be completed through Gradescope. All regrades are final.

If a student believes there was an error on a quiz, they are expected to meet with the instructor either during office hours or by making an appointment. If one student experienced an error with a quiz, there is a chance that more students have experienced the same error, and the quiz question must be evaluated by the instructor.

#### Late Work

Given the fast pace of summer sessions and to ensure that answer keys can be provided in a timely manner, deadlines are not flexible and extensions will not be granted. *Late work will not be accepted for any reason.* 

#### Grading Schema

The letter grade you will earn for the course will be based on the following grading scale. No extra credit is given to adjust the grades at the end of the semester. *The instructor will not respond to requests to round a final grade.* 

А	93 % or above	B-	80 - 82.99 %	D+	67 - 69.99 %
A-	90 - 92.99 %	C+	77 - 79.99 %	D	60 - 66.99 %
B+	87 - 89.99 %	С	73 - 76.99 %	F	59.99% or below
В	83 - 86.99 %	C-	70 - 72.99 %		

# Academic Integrity

You are expected to behave in accordance with the University of North Carolina Honor Code (honor.unc.edu). I will not tolerate behaviors that violate the honor code, or general academic integrity, such as plagiarism, forgery, unauthorized collaboration, and the use of unauthorized materials. I take academic integrity very seriously, and will not hesitate to report any instance where I feel academic integrity has been compromised, either intentionally or unintentionally. As a rule of thumb, do not try to take credit for work where you did not put in the effort. Not only does this exploit the hard work of others, it does not help you learn in any way.

# **Additional Resources**

## EconAid Center

The EconAid Center is available virtually during summer term - hours and access will be posted on Sakai once finalized by the departments. The EconAid Center offers free peer tutoring for the core courses - I hope you will make use of this invaluable resource!

# Accessibility Resources and Service Office

UNC-Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in difficulties with accessing learning opportunities. All accommodations are coordinated through the Accessibility Resources and Service Office. Please contact ARS as early in the semester as possible. Website: <u>ars.unc.edu</u>; Telephone: (919) 963-8300; Email: ars@unc.edu

# The Learning Center

The UNC Learning Center offers individual consultations, peer tutoring, academic coaching, test prep programming, study skills workshops, and peer study groups. If you think you might benefit from their services, please visit them in SASB North or visit their website to set up an appointment: <u>learningcenter.unc.edu</u>

## Medical and Counseling Services

If you are having any mental, physical, or other personal problems that are interfering with your ability to focus on your coursework, please contact the UNC Campus Health Services (CHS) or Counseling and Psychological Services (CAPS) right away. CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. CAPS is located on the third floor of the CHS building and open for walk-in evaluation. CHS website: campushealth.unc.edu; Telephone: (919) 966-2281; CAPS website: caps.unc.edu

# Course Calendar

On the next page is the schedule for the semester. The readings are chapters from the 6th Edition of the textbook; it is the student's responsibility to find the corresponding chapters in older editions. It is suggested that the listed readings are complete before the start of the class.

The instructor reserved the right to make any changes to the calendar as necessary; any changes will be communicated to the students as soon as possible.

Day	Lesson	Recitation	Graded Assessment	
Wednesday, May 19	Introduction & Math Review (Mathematical Appendix)			
Thursday, May 20	Consumer Theory: Budget Constraints (4.1)	Shapes of Budget Constraints	Problem Set 1	
Friday May 21	Consumer Theory: Preferences & Utility (3.1-3.3)		In-Class Practice Quiz	
Monday, May 24	Consumer Theory: Preferences & Utility (3.1-3.3)		Problem Set 2	
Tuesday, May 25	Consumer Theory: Utility Maximization (4.2, 4.5)	Shapes of Indifference Curves	Problem Set 3	
Wednesday, May 26	Consumer Theory: Utility Maximization (4.2, 4.5)		Problem Set 4	
Thursday, May 27	Consumer Theory: Demand & Elasticity (5.1, 2.2-2.3)	Utility Maximization Corner Solutions	Problem Set 5	
Friday, May 28	Consumer Theory: Demand & Elasticity (5.1, 2.2-2.3)		In-Class Quiz 1	
Monday, May 31	No Class - Memorial Day			
Tuesday, June 1	Consumer Theory: Income & Substitution Effects (5.2)	Graphing IE, SE, and TE	Problem Set 6	
Wednesday, June 2	Consumer Theory: Income & Substitution Effects (5.2)		Problem Set 7	
Thursday, June 3	Consumer Theory: Uncertainty (15.1-15.3)	Extensions in Consumer Theory (4.3, Chapter 4 Appendix, 5.5)	Problem Set 8	
Friday, June 4	Consumer Theory: Uncertainty (15.1-15.3)		In-Class Quiz 2	

Monday, June 7	Firm Theory: Production Functions (6.1-6.5)		Problem Set 9		
Tuesday, June 8	Firm Theory: Production Functions (6.1-6.5)	Fixed Proportion & Perfect Substitutes Production	Problem Set 10		
Wednesday, June 9	Firm Theory: Cost Minimization (7.2)		Problem Set 11		
Thursday, June 10	Firm Theory: Input Demand (7.3) Fixed Proportion & Perfect Substitutes Cost Minimization		Problem Set 12		
Friday, June 11	Firm Theory: Long Run Cost (7.3-7.4)		In-Class Quiz 3		
Monday, June 14	Firm Theory: Profit Maximization (9.2)		Problem Set 13		
Tuesday, June 15	Market Structure: Perfect Competition (9.1, 9.3-9.4)	Fixed Proportion & Perfect Substitutes Long Run	Problem Set 14		
Wednesday, June 16	Market Structure: Monopoly (11.1-11.2, 11.5-11.6)		Problem Set 15		
Thursday, June 17	Market Structure: Monopoly(11.1-11.2, 11.5-11.6)	Firm Behavior in Perfect Competition v. Monopoly	Problem Set 16		
Friday, June 18	Market Structure: Oligopoly (13.1-13.2, 14.1)		In-Class Quiz 4		
Monday, June 21	Catch up / Review		Problem Set 17		
Tuesday, June 22	No Class: Reading Day				
Wednesday, June 23	Final Exam 11:30am - 2:30 pm				

\* Problem Sets are due at 11:00 am EDT on the day they are listed. Fridays will be remote only. The in-class quiz will take half of the lecture period.