# Economics 410 Intermediate Microeconomics Fall 2021

**Instructor:** Dr. Michelle Sheran-Andrews

**Office:** 200D Gardner Hall

**Class Meetings:** Section 01 MWF 1:25–2:15 pm

**Section 02** MWF 2:30–3:20 pm

Classroom: Genome Sciences G100

**Prerequisites:** ECON 101 and one of MATH 152, 231, STOR 112, or 113

Website: http://sakai.unc.edu

**Credit Hours:** 4 credits

#### **Contact Information**

- Emails with private or sensitive information (including grades) should be sent to me directly at <a href="mailto:sheran@unc.edu">sheran@unc.edu</a>.
- Questions about recitations should be directed to your TA. The TAs' email addresses are posted on *Sakai* under *Contact Information*.
- Please post all other course-related questions on Piazza. See pages 4 and 7 of this syllabus for information on Piazza.

# **Class Description**

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. A major goal of this course is to teach you to "think" in a manner beyond fact recall. Active thinking and problem solving are essential. *Microeconomic theory is a tool learned best by use!* 

<sup>\*</sup>The professor reserves the right to make changes to this syllabus, including assignment and exam dates. These changes will be announced as early as possible.

#### **Grades**

Your course grade will be calculated as the weighted average of the 5 components presented below. Letter grades will be assigned based on the following schedule.

A	93 and above
<b>A-</b>	90 - 92
B+	87 - 89
В	83 – 86
В-	80 - 82
C+	77 – 79
C	73 – 76
C-	70 - 72
D+	67 – 69
D	60 – 66
F	< 60

#### a. Guided Video Questions: 4%

There will be 32 Guided Video Question (GVQ) sets. Each will be graded on a pass/fail basis. To pass, your answers must be in your own words, reflect a good faith effort, and be submitted to Gradescope by noon the day of the relevant class. Your GVQ score will be calculated based on the proportion you pass, up to 27. This means I will automatically drop 5 when calculating your score as follows:

$$GVQ\ Score = \left(\frac{\#\ passed}{27}\right) * 100$$

GVQs must be done individually. You may not work with others on this course component.

#### b. Class Participation: 6%

There will be 34 total classes during which we will learn by solving and discussing poll questions. Some polls will be for participation credit only; you will earn 100% if you answer the poll and 0% if you do not. Other polls will be graded. Possible scores on any graded poll include: 100% (you answered the poll correctly), 70% (you answered the poll incorrectly), or 0% (you did not answer the poll). You will receive a class participation score for each class, calculated as the average of the class's individual poll scores. I will drop your lowest 5 class participation scores at the end of the semester before calculating your average.

#### c. Homework Assignments: 20%

There will be 11 homework assignments, each consisting of 10 multiple choice questions and 2 short answer questions. You must submit your multiple choice answers to Sakai and your short answers to Gradescope by 11:59 pm on the assigned due date. (Specific instructions will be provided on the cover page of each assignment.) An answer key to each homework assignment will then be available on Sakai at 12:15am. I will drop your 2 lowest homework scores at the end of the semester before calculating your average.

You are encouraged to work with other students on homework assignments, but sharing answers via group chat, using previous homework, and looking up answers online are all violations of the Honor Code. Additionally, you are expected to attempt each problem at least once before seeking help.

#### d. Midterms: 40%

There will be in-class 3 midterms, each consisting of 7 multiple choice questions and 2 short answer questions. I will drop your lowest midterm score, so only 2 of 3 midterms will count towards your course grade.

#### e. Final Exam: 30%

The final exam is a cumulative exam, consisting of approximately 20 multiple choice and 3 short answer questions. Per UNC rules, you can only take the final exam at an alternative time if you present me an official exam excuse (<a href="https://advising.unc.edu/announcement/final-exam-excuse-request/">https://advising.unc.edu/announcement/final-exam-excuse-request/</a>) before the last day of classes. If you do have an official exam excuse, you can take the final exam with the other section. Each section will receive a different final exam, and you will be eligible only for the curve (if there is one) applied to the section with which you took the final exam. If you miss the final exam and do not have an excuse from the Dean, you will receive a score of 0 on your final.

#### Resources

- a. **Textbook:** The recommended textbook is *Microeconomics* by David Besanko and Ronald Braeutigam. **You do NOT have to purchase the most recent version of this textbook.** If you would like to rent or purchase a different textbook, most any "Intermediate Microeconomics" textbook will have similar content, and older editions will likely be just as useful as newer additions. In addition, there are various books on reserve through the library.
- b. **Poll Everywhere:** We will use *Poll Everywhere* for online polling in class. You can log in at either polleverywhere.com or by using the Poll Everywhere mobile app. With either method, you must enter your official UNC-CH email address, select the Single Sign-On link, and then enter your Onyen and Password. **Important:** The email address you have listed under your profile in Poll Everywhere must **exactly** match the email address you have listed in the <u>UNC Directory</u>. If this is not the case, your poll scores will not properly synch to Sakai! (It's a problem, for example, if your email is <u>onyen@unc.edu</u> in the UNC directory but <u>onyen@email.unc.edu</u> in Poll Everywhere.) If your emails do not match exactly, please change your email address in Poll Everywhere to what is listed in the <u>UNC Directory</u>. If you need assistance, please visit <a href="https://poll.unc.edu/">https://poll.unc.edu/</a> or contact ITS Help.
- c. **Gradescope:** We will use *Gradescope* for the submission and grading of (most) assignments. I will register you for the class Gradescope site using your official UNC email address. For instructions on submitting assignments to Gradescope, watch this <u>video</u>.
- d. **Piazza:** We will have a course site on Piazza, a free Q&A platform. I will register you for this site using your official UNC email. Please post all course-related questions there, except for questions about personal concerns or individual grades.
- e. **Calculator:** Only a very basic, non-programmable calculator is permitted during exams. If your calculator does not look like the two examples pictured below, it must be approved by me before an exam. *The calculator must obviously appear to be basic and non-programmable*. **NO EXCEPTIONS** will be permitted.



# **Expectations and Policies**

- a. Class attendance: Regular class attendance is expected. You should prepare for class in advance by watching the assigned prerecorded videos and answering/submitting the associated Guided Video Questions. During class you are expected to actively engage in class discussions, in small groups, and through in-class polls. If you miss a class, it is your responsibility to get the notes from a classmate. If you have any questions after reviewing these notes, you are encouraged to attend office hours. You are permitted to miss up to 5 classes without penalty, including University Approved Absences. Exceptions to this will only be made in the case of a severe and ongoing issue, where you must miss a week or more of classes. In these cases, please submit a request for a University Approved Absence at University Approved Absence Office (unc.edu) and then communicate with me either before or during the week you return to class so that we can work out a plan for you together.
- b. **Recitations Sessions:** I view recitations as an important part of this course. Recitation attendance is highly encouraged, and any material covered during recitation may appear on exams. You may attend a recitation other than (or in addition to) the one for which you are registered, space permitting. A full recitation schedule will be posted on *Sakai* under *Contact Information*.
- c. **Masks:** You are required to wear a mask covering your mouth and nose at all times during in-person instruction and office hours. This requirement is to protect our educational community your classmates and me as we learn together. If you choose not to wear a mask, or wear it improperly, you will be asked to leave immediately, and I will submit a report to the Office of Student Conduct. At that point you will be disenrolled from this course for the protection of our educational community. Students who have an authorized accommodation from Accessibility Resources and Service have an exception. For additional information, see Carolina Together.
- d. **Workload:** As this is a 4-credit class, you should plan to dedicate between 12 and 16 hours per week on it including class/recitation time. It is highly unlikely that studying "a lot" the week before the exam will make up for not studying enough in the weeks preceding the exam. Most ECON410 students realize that this just doesn't work in economics or with the way in which I teach and test. Please read and consider adopting the study tips presented below on page 11.
- e. Late and/or Makeup Homework: All due dates are firm, and no extensions or makeups will be given. I completely understand and empathize with the fact that sometimes health and/or personal/family emergencies take priority. Furthermore, sometimes your internet crashes, your computer gets a virus, you get the homework done early but then forget to submit it... It is for all these reasons and more that I have built in at least two drops for each component of the class (except the final exam). These drops are meant to cover these "life events," and so I do not additionally accept late assignments or provide makeups. Making

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<sup>&</sup>lt;sup>1</sup> Students registered for a recitation are guaranteed a seat in the recitation. A student not registered can only attend if a physical seat is available after registered students are seated.

exceptions to this policy for students on a case-by-case basis, especially with 500 students, leads to inequities in how students are assessed, and this is something I work hard to avoid. I know of no better way to treat students fairly and equally than by applying the same standards and policies to all. With that being said, I do make exceptions **in the case of a severe and ongoing issue** where you must miss a week or more of classes. In these cases, please submit a request for a University Approved absence at <u>University Approved Absence Office (unc.edu)</u> and then communicate with me either before or during the week you return to class so that we can work out a plan for you together.

- f. Makeup Exams: I do not offer makeup midterms and instead drop the lowest exam for every student. If you would like to take an exam late not for credit but for practice and to receive grader feedback, you are welcome to do so; please contact me directly. If you miss an exam and either have a University Approved Absence (<a href="https://odos.unc.edu/student-support/class-absences/request-university-approved-absences">https://odos.unc.edu/student-support/class-absences/request-university-approved-absences</a>) or documentation of a significant health and/or personal/family emergency, then you can choose to either use your one exam drop on that missed exam or have that exam's weight transferred to the final exam. (The final exam would then be worth 50 points.) Please email me directly at <a href="mailto:sheran@unc.edu">sheran@unc.edu</a> should you wish to pursue this reweighting option.
- g. **Regrade Requests:** All regrade requests must be made through *Gradescope* within 1 week of the date the assignment's grade is posted. Regrade requests for the final exam are due within 24 hours of the grade being posted. There will be no exceptions to this rule except in extraordinary circumstances. Regrade requests will be addressed by the TA who graded the assignment. If you are unsatisfied with how your regrade request is resolved, please then contact me directly either via email at <a href="mailto:sheran@unc.edu">sheran@unc.edu</a>.
- h. **Extra Credit:** I do not offer extra credit. This is because if everyone knows about it, it's not really extra credit. It's just another assignment. If some people don't know about it (for instance, if a specific student asks for extra credit at the end of the semester), then I'm treating my students differently, which I make every attempt to avoid.
- i. **Honor Code:** All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. If you are unsure about which actions violate that honor code, please ask me or consult <a href="honor.unc.edu">honor.unc.edu</a>.

## **Services and Student Support**

I want you to succeed in ECON 410! There are lots of ways for you to get help throughout the semester. Please take advantage of these opportunities. You have an instructional team of one instructor, 8 graduate teaching assistants (TAs), and 11 undergraduate learning assistants (ULAs) all ready to help you!

- a. Instructor's Office Hours: I will hold office hours each week. My hours will be:
  - Mondays 10:00-11:30am in the Econ Aid Center (Gardner 009)
  - Tuesdays 1:15-2:30pm remote via Zoom (<a href="https://unc.zoom.us/j/91758690138?pwd=VWhYcFJBc3p5ZnVlaCtlb2UrQUl0dz09">https://unc.zoom.us/j/91758690138?pwd=VWhYcFJBc3p5ZnVlaCtlb2UrQUl0dz09</a>; password=410)
  - Thursdays 11:45am-1:00pm remote via Zoom (<a href="https://unc.zoom.us/j/91758690138?pwd=VWhYcFJBc3p5ZnVlaCtlb2UrQUl0dz09">https://unc.zoom.us/j/91758690138?pwd=VWhYcFJBc3p5ZnVlaCtlb2UrQUl0dz09</a>; password=410)

I love working with students during office hours! I don't schedule specific appointments because I want to be available to as many of you as possible. I am also happy to set up an occasional appointment should the above posted times not work with your schedule; email me at <a href="mailto:sheran@unc.edu">sheran@unc.edu</a> to schedule.

- b. **ULAs' Office Hours:** Undergraduate Learning Assistants (ULAs) will hold weekly office hours. The ULA office hours schedule will be posted on *Sakai* under *Contact Information*.
- c. **Piazza:** Piazza is a great way to get your course related questions answered promptly and efficiently! You may post questions about the *content* covered on a homework assignment, but do not post direct answers or solutions to graded assignments. You can expect a response to your post from someone on the instructional team within 24 hours from Monday-Thursday and within 48 hours from Friday-Sunday and on holidays. You are also encouraged to answer each other's questions!
- d. **EconAid Center:** The EconAid Center is located in Gardner 009. This is where some office hours will be held, where students can work on their economics assignments individually or in groups, and where there will be **free peer tutoring** during the week. The EconAid Center is open from 8am to 8pm every weekday. A link to the EconAid's free peer tutoring schedule will posted on *Sakai* under *Contact Information*.
- e. **The Learning Center:** Visit UNC's Learning Center at <a href="http://learningcenter.unc.edu">http://learningcenter.unc.edu</a> to learn more about academic coaching, STEM support, ADHD/LD services, workshops and study camps, and tips and tools. **Free peer tutoring** is also provided; for more information see <a href="https://learningcenter.unc.edu/services/peer-tutoring/">https://learningcenter.unc.edu/services/peer-tutoring/</a>.

f. Accessibility Resources & Service (ARS): The University of North Carolina at 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 barriers to fully accessing University courses, programs and activities. Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: https://ars.unc.edu or email ars@unc.edu.

Are you registered with ARS? If so, I'm happy to work with you! Please send me an email with your accommodations through the ARS portal. Unless you request otherwise, I'll assume you'll be taking your exams at ARS. Be sure to schedule your exam with ARS at least 4 full business days prior to the exam, and please schedule your exam at the same time as your section. I will upload each exam to the ARS portal and request that exams are returned to me in a sealed envelope within 1 hour of the time of completion. (Note that I will also receive a scanned version of your exam from ARS.) It is your responsibility to ensure you do not exceed your allotted time limit. There will be a 10-percentage point penalty for each 5 minutes over the time limit. If you have any questions or would like to discuss your accommodations, please email me at sheran@unc.edu.

- g. Counseling and Psychological Services (CAPS): 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. Go to their website: <a href="https://caps.unc.edu/">https://caps.unc.edu/</a> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.
- h. **Title IX Resources**: Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison <u>Adrienne.allison@unc.edu</u>), Report and Response Coordinators in the Equal Opportunity and Compliance Office (<u>reportandresponse@unc.edu</u>), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (<u>gvsc@unc.edu</u>; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.

# Schedule

Date	Lesson	Recitations
Wednesday, August 18	Introduction & Math Review	
Friday, August 20	Math Review & Consumer Theory: Budget Constraints	1 (Introduction and Math Review)
Monday, August 23	Consumer Theory: Budget Constraints	1 (Introduction and Math Review)
Wednesday, August 25	Consumer Theory: Preferences and Utility	
Friday, August 27	Consumer Theory: Preferences and Utility	2 (Preferences)
Monday, August 30	Consumer Theory: Preferences and Utility	2 (Preferences)
Wednesday, September 1	Consumer Theory: Constrained Utility Maximization	
Friday, September 3	Consumer Theory: Constrained Utility Maximization	No Recitations- Labor Day
Monday, September 6	No Class- Labor Day	No Recitations- Labor Day
Wednesday, September 8	Consumer Theory: Constrained Utility Maximization	
Friday, September 10	Consumer Theory: Demand	3 (Corner Solutions and Midterm Prep)
Monday, September 13	Catch up & Review	3 (Corner Solutions and Midterm Prep)
Wednesday, September 15	Midterm 1	
Friday, September 17	Consumer Theory: Demand	4 (Midterm MC Results Review)
Monday, September 20	Consumer Theory: Demand	4 (Midterm MC Results Review)
Wednesday, September 22	Consumer Theory: Elasticity	
Friday, September 24	Consumer Theory: Income and Substitution Effects	5 (Income and Substitution Effects)
Monday, September 27	Consumer Theory: Income and Substitution Effects	5 (Income and Substitution Effects)
Wednesday, September 29	Consumer Theory: Income and Substitution Effects	
Friday, October 1	Consumer Theory: Uncertainty	6 (Uncertainty)
Monday, October 4	Consumer Theory: Uncertainty	6 (Uncertainty)
Wednesday, October 6	Consumer Theory: Extensions	
Friday, October 8	Consumer Theory: Extensions	7 (Extensions and Midterm Prep)
Monday, October 11	Catch up & Review	7 (Extensions and Midterm Prep)
Wednesday, October 13	Midterm 2	
Friday, October 15	Firm Theory: Production	8 (Midterm MC Results Review)
Monday, October 18	Firm Theory: Production	8 (Midterm MC Results Review)
Wednesday, October 20	Firm Theory: Production	
Friday, October 22	No Class- Fall Break	No Recitations- Fall Break
Monday, October 25	Firm Theory: Cost Minimization	No Recitations- Fall Break
Wednesday, October 27	Firm Theory: Input Demand	
Friday, October 29	Firm Theory: Input Demand	9 (Corner Solutions)
Monday, November 1	Firm Theory: Long Run Cost	9 (Corner Solutions)
Wednesday, November 3	Firm Theory: Long Run Cost	
Friday, November 5	Firm Theory: Profit Maximization	10 (LRTC & Midterm Prep)
Monday, November 8	Catch up & Review	10 (LRTC & Midterm Prep)
Wednesday, November 10	Midterm 3	

Friday, November 12	The Organization of Markets: Perfect Competition	11 (Midterm MC Results Review)		
Monday, November 15	The Organization of Markets: Perfect Competition	11 (Midterm MC Results Review)		
Wednesday, November 17	The Organization of Markets: Monopoly			
Friday, November 19	The Organization of Markets: Monopoly	12 (Monopoly)		
Monday, November 22	The Organization of Markets: Monopoly	12 (Monopoly)		
Wednesday, November 24	No Class- Thanksgiving Break			
Friday, November 26	No Class- Thanksgiving Break	No Recitations- Thanksgiving Break		
Monday, November 29	The Organization of Markets: Oligopoly	No Recitations- Thanksgiving Break		
Wednesday, December 1	Catch up & Review			
Section 02 Final Exam: Friday, December 3 from 4:00-7:00pm				
Section 01 Final Exam: Saturday, December 4 from 12:00-3:00pm				

Homework Assignment	<b>Date Assigned</b>	Date Due
1	Monday, August 23	Friday, August 27
2	Monday, August 30	Friday, September 3
3	Wednesday, September 8	Monday, September 13
4	Wednesday, September 22	Monday, September 27
5	Wednesday, September 29	Monday, October 4
6	Wednesday, October 6	Monday, October 11
7	Wednesday, October 20	Monday, October 25
8	Friday, October 29	Wednesday, November 3
9	Wednesday, November 3	Monday, November 8
10	Monday, November 15	Friday, November 19
11	Monday, November 22	Monday, November 29

## **Study Tips**



# How do you succeed in ECON 410? Here's my best advice: Strive to understand the homework and practice problems inside and out.

- 1. Make a serious effort to complete each problem independently before conferring with others.
- 2. Confer with others and compare your solutions, understand differences, and come to a consensus.
- 3. Write out thorough and detailed solutions to the multiple choice questions on homework assignments, even though these solutions will not be collected or graded.
- 4. Actively compare your solutions with the answer key and identify and understand any differences and fill in any missing holes.
- 5. Actively compare and contrast similar problems from homework assignments and practice problems. Seek to rectify any contradictions between problems and anticipate variations in problems.
- 6. Rework problems until you can teach them to someone else, and then do just that (even if "someone else" is a plant or invisible friend).

#### Want more advice? Here you go!

- Learning happens gradually. For example, spending 20 hours over 4 weeks is much more beneficial than 20 hours in a single week. Schedule study time each week that is designated for this class.
- There can be a big difference between understanding something in your head and communicating it in words. A highly effective way to assess your understanding of the material is to pretend you are teaching it to someone else!
- Don't just know *what* to do when solving a problem; understand *why*.
- Practice drawing graphs yourself until you can draw them without looking at your notes or book. Be able to explain what you are drawing.
- Skim the relevant reading assignment *before* class so you will be familiar with the general idea of what is coming. After class, go back and selectively read the chapter for deeper understanding. Take notes from your textbook within your class notes.
- Get adequate sleep the night before the exam. Your brain works best when well rested.