

**Economics 410**  
***Intermediate Microeconomics***  
**Spring 2023**

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<b>Instructor:</b>	Dr. Michelle Sheran-Andrews
<b>Office:</b>	200D Gardner Hall
<b>Class Meetings:</b>	<b>Section 01</b> TR 9:30-10:45 am <b>Section 02</b> TR 11:00 am–12:15 pm
<b>Classroom:</b>	1015 Global Center
<b>Prerequisites:</b>	ECON 101 and one of MATH 152, 231, STOR 112, or 113
<b>Website:</b>	<a href="http://sakai.unc.edu">http://sakai.unc.edu</a>
<b>Credit Hours:</b>	4 credits

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**Contact Information**

- Emails with private or sensitive information (including grades) should be sent to me directly at [sheran@unc.edu](mailto:sheran@unc.edu).
- 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 Campuswire. See pages 2 and 7 of this syllabus for information on Campuswire.

**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 also aims to build your critical thinking and quantitative skills and teach you how to work with economic models and think in terms of optimization.

The course is divided into the following three topics:

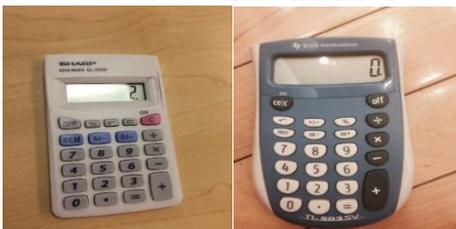
- *Consumer theory*: How households make decisions in the face of scarcity and how these decisions vary in response to changes in the economic environment.
- *Firm theory*: How firms make decisions in the face of scarcity and how these decisions vary in response to changes in the economic environment.
- *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!*

This course also aims to meet the [IDEAs in Action Student Learning Outcomes](#) for the *Ways of Knowing* focus capacity. These are outcomes are: 1. Recognize and use one or more approach(es) to developing and validating knowledge of the unfamiliar world; 2. Evaluate ways that temporal, spatial, scientific, and philosophical categories structure knowledge; 3. Interrogate assumptions that underlie our own perceptions of the world; 4. Employ strategies to mitigate or adjust for preconceptions and biases; and 5. Apply critical insights to understand patterns of experience and belief.

## 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. If you are not able to afford a textbook, please email me because I have a few to lend out!
- b. **Poll Everywhere:** We will use *Poll Everywhere* for online polling in class. You can log in at either [polleverywhere.com](http://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 [UNC Directory](#). 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 [onyen@unc.edu](mailto:onyen@unc.edu) in the UNC directory but [onyen@email.unc.edu](mailto:onyen@email.unc.edu) in Poll Everywhere.) If your emails do not match exactly, please change your email address in Poll Everywhere to what is listed in the [UNC Directory](#). If you need assistance, please visit <https://poll.unc.edu/> or contact [ITS Help](#).
- c. **Gradescope:** We will use *Gradescope* for the submission and grading of 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 [video](#).
- d. **Campuswire:** We have a course site on Campuswire, a free online platform. To sign up, visit <https://campuswire.com/p/G9BCE3ADD> and use the code 8550. Please post all course-related questions there, except for questions about personal concerns or individual grades.
- e. **Calculator:** Only a very basic, four-function 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. **NO EXCEPTIONS** will be permitted.



## Grades

Component	% Course Grade Track 1	% Course Grade Track 2	Description
In-class Polls	5%	0%	I will drop your 5 lowest poll scores at the end of the semester. Your poll average will then be calculated as the average of all remaining poll scores. Note: This means 5 days-worth of polls will be dropped, not 5 individual polls.
Recitations	2%	0%	I will drop your 2 lowest recitation scores at the end of the semester. Your recitation average will then be calculated as the average of all remaining recitation scores.
Homework Assignments	20%	20%	I will drop your 2 lowest homework scores at the end of the semester. Your homework average will then be calculated as the average of all remaining homework scores.
Higher Midterm	25%	27%	There will be 2 midterm exams. The higher of the two midterms will receive a larger weight than the lower midterm when calculating your course grade.
Lower Midterm	15%	17%	
Final Exam	33%	36%	The final exam is cumulative.

I will calculate your course grade using the following formulas for both Track 1 and Track 2 and then award you the higher of the two averages.

**Course Grade Track 1** = (0.05 x in-class poll average) + (0.02 x recitation average) + (0.20 x homework average) + (0.25 x higher midterm exam) + (0.15 x lower midterm exam) + (0.33 x final exam)

**Course Grade Track 2** = (0.20 x homework average) + (0.27 x higher midterm exam) + (0.17 x lower midterm exam) + (0.36 x final exam)

Letter grades will be assigned based on a scale determined at the end of the semester. Most likely, this grading scale will be:

<b>A</b>	93 and above
<b>A-</b>	90 – 92
<b>B+</b>	87 – 89
<b>B</b>	83 – 86
<b>B-</b>	80 – 82
<b>C+</b>	77 – 79
<b>C</b>	70 – 76
<b>C-</b>	67 – 69
<b>D+</b>	64 – 66
<b>D</b>	55 – 63
<b>F</b>	< 55

**a. In-class Polls:**

We will learn in class by solving and discussing poll questions. Some polls will be for participation credit only; you will earn 100 points if you answer the poll and 0 points if you do not. Other polls will be graded based on accuracy; you will earn 100 points if you answer the poll correctly, 70 points if you answer incorrectly, and 0 points if you do not answer the poll at all. The poll score you earn for a class will be calculated as the average of all individual poll scores. Polls must be answered in class only. **Answering polls outside of class is an Honor Code violation.**

**b. Recitations:**

There will be 11 recitations. Each will be graded on a pass/fail basis. To pass, you must submit your answers to the assigned recitation problems at the start of recitation. (You don't have to get them all right to receive credit, but you should attempt each question and your work should reflect a good faith effort.) To pass you must also attend and actively participate during recitation.

**c. Homework Assignments:**

There will be 10 homework assignments, each due by 11:59 pm on the assigned due date. Specific submission instructions will be provided on the cover page of each assignment. 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:**

There will be 2 in-class midterms. Each will consist of both multiple-choice and long-form questions. Midterms will be administered during class and will be closed-book, closed-notes.

**e. Final Exam:**

The final is a cumulative exam and will consist of both multiple choice and long-form questions. Per UNC rules, you can only take the final exam at an alternative time if you present me an official exam excuse (<https://advising.unc.edu/announcement/final-exam-excuse-request/>). 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 only be eligible for the curve (if there is one) applied to the section with which you took the final exam.

## Expectations and Policies

**Class Attendance:** Regular class attendance is **STRONGLY** encouraged. You should prepare for class in advance by watching the assigned prerecorded videos and answering the associated Guided Video Questions. During class you are expected to actively engage in class discussions, in small groups, and through in-class polls. In the event of an absence, you do **not** have to notify me. I will do my best to record each class (technical difficulties sometimes arise), but a synchronous remote option will not be provided. Class recordings will be posted Sakai under *Class Recordings*.



Are you experiencing a hardship that causes you to miss more than a week's worth of classes and want support? Fill out a [410 Cares](#) request through our Sakai site!

- a. **Recitation Attendance:** 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.<sup>1</sup>

A full recitation schedule will be posted on *Sakai* under *Recitations*. Note that there will be no recitations on the following days: 1/9, 1/13, 1/16, 2/10, 2/13, 4/7, 4/10, and 4/28.

- b. **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. You will find a recommended weekly study approach on the *Effective Study Practices* page of our Sakai site. This page also provides links to various videos on the science of learning to educate you on how to study effectively.
- c. **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 12 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 via email at [sheran@unc.edu](mailto:sheran@unc.edu).

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<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.



- d. **Late and/or Makeup Policy:** All due dates are firm, and no extensions or makeups will be given. I completely understand and sincerely empathize with the fact that sometimes health and/or personal/family emergencies take priority. Furthermore, sometimes your internet crashes, your computer gets a virus, Poll Everywhere glitches, you get the homework done early but then forget to submit it... It is for all these reasons and more that I build in drops. These drops are meant to cover all “life events,” and so I do not additionally accept late assignments or provide makeups. Making exceptions to this policy for students on a case-by-case basis, especially with 400 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.



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 obtain a University Approved absence at [University Approved Absence Office \(unc.edu\)](https://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.

- I do not offer makeup midterms.** If you would like to take a midterm late not for credit but for practice and to receive grader feedback, you are welcome to do so; please contact me directly to schedule. If you miss an exam, notify me in advance of the exam, and have a University Approved Absence (<https://odos.unc.edu/student-support/class-absences/request-university-approved-absences>), then I will reweight your exams by counting your one midterm as the “lower midterm” or the “higher midterm,” *whichever benefits you more*, and shifting the rest of the midterm weight to the final exam. Specifically, for Track 1 either the other midterm will count for 15% of your grade and the final for 58%, or the other midterm will count for 25% of your grade and the final for 48%. For Track 2, either the other midterm will count for 17% of your grade and the final 63%, or the other midterm will count for 27% of your grade and the final 53%.
- e. **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.
- f. **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. In addition, it is an honor code violation to answer Polls outside of class. If you are unsure about which actions violate that honor code, please ask me or consult [honor.unc.edu](https://honor.unc.edu).
- j. **Changes to syllabus:** I reserve the right to make changes to this syllabus, including assignment and exam dates. These changes will be announced as early as possible.

## 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, 5 graduate teaching assistants (TAs), and 13 undergraduate learning assistants (ULAs) all ready to help you!

### a. **Office Hours:**

I love working with students during office hours! You can find my office hours on Sakai under *Office Hours*. I don't schedule specific appointments during my Tuesday and Wednesday office hours because I want to be available to as many of you as possible. I do, however, use *My Digital Hand*, a program that organizes students into a queue upon their arrival in the EconAid Center. Sign up at <https://mydigitalhand.org/signup> and choose the EconAid Center under Select Courses. Directions for this are posted on *Sakai* at the top of the *Resources* folder. I do offer individual appointments on Mondays. You can schedule with me via [Calendly](#). Finally, I am also happy to set up an occasional appointment should the posted times not work with your schedule; email me at [sheran@unc.edu](mailto:sheran@unc.edu) to schedule.



Sign up!

The TAs and some ULAs will also hold office hours. The full office hours schedule will be posted on Sakai under *Office Hours*.

b. **Help Sessions:** Undergraduate Learning Assistants (ULAs) will offer weekly help sessions on Monday and Tuesday evenings from 7-9pm in Greenlaw 101. Students may drop in during help sessions for any assistance with course content, including homework.

c. **Campuswire:** Campuswire 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 strongly encouraged to answer each other's questions! To sign up, visit <https://campuswire.com/p/G9BCE3ADD> and use the code 8550.

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 (starting the 2<sup>nd</sup> or 3<sup>rd</sup> week of the semester). The EconAid Center is open from 8am to 8pm every weekday. A link to the EconAid's free peer tutoring schedule will be posted on *Sakai* under *Office Hours*. We use *My Digital Hand* in the EconAid Center, a program that organizes students into a queue upon their arrival. Sign up at <https://mydigitalhand.org/signup> and choose the EconAid Center under Select Courses.



Sign up!

e. **The Learning Center:** Visit UNC's Learning Center at <http://learningcenter.unc.edu> 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 <https://learningcenter.unc.edu/services/peer-tutoring/>.

- 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](mailto: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. For those with extended time on exams, please schedule your exam at the ARS testing center. The start time should be the same as the regular start time for your section. I **STRONGLY** recommend scheduling all your exams at the very beginning of the semester, as space at the testing center is limited. At a minimum, be sure to schedule at least 5 full business days prior to the exam. Please schedule your exam at the same time as your section. Please note that when taking exams at 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](mailto: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: <https://caps.unc.edu/> 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 – [Adrienne.allison@unc.edu](mailto:Adrienne.allison@unc.edu)), Report and Response Coordinators in the Equal Opportunity and Compliance Office ([reportandresponse@unc.edu](mailto:reportandresponse@unc.edu)), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators ([gvsc@unc.edu](mailto:gvsc@unc.edu); confidential) to discuss your specific needs. Additional resources are available at [safe.unc.edu](http://safe.unc.edu).

## Schedule

There will be **no recitations** on the following days: 1/9, 1/13, 1/16, 2/10, 2/13, 4/7, 4/10, and 4/28.

DATE	LESSON	HOMEWORK
Tuesday, Jan. 10	Introduction and Math Review	Homework #1 assigned due 1/18
Thursday, Jan. 12	Consumer Theory: Budget constraints	
Tuesday, Jan. 17	Consumer Theory: Preferences and Utility	
Thursday, Jan. 19	Consumer Theory: Preferences and Utility	Homework #2 assigned due 1/25
Tuesday, Jan. 24	Consumer Theory: Constrained Utility Maximization	
Thursday, Jan. 26	Consumer Theory: Constrained Utility Maximization	Homework #3 assigned due 2/1
Tuesday, Jan. 31	Consumer Theory: Demand	
Thursday, Feb. 2	Consumer Theory: Demand	Homework #4 assigned due 2/8
Tuesday, Feb. 7	Consumer Theory: Income and Substitution Effects	
Thursday, Feb. 9	Consumer Theory: Income and Substitution Effects	Homework #5 assigned due 2/17
Tuesday, Feb. 14	<b>WELL-BEING DAY</b>	
Thursday, Feb. 16	Catch up and review	
Tuesday, Feb. 21	<b>MIDTERM 1</b>	
Thursday, Feb. 23	Consumer Theory: Uncertainty	
Tuesday, Feb. 28	Consumer Theory: Uncertainty	
Thursday, Mar. 2	Firm Theory: Production	Homework #6 assigned due 3/8
Tuesday, Mar. 7	Firm Theory: Production	
Thursday, Mar. 9	Firm Theory: Cost Minimization	Homework #7 assigned due 3/24
Tuesday, Mar. 14	<b>SPRING BREAK</b>	
Thursday, Mar. 16	<b>SPRING BREAK</b>	
Tuesday, Mar. 21	Firm Theory: Input Demand	
Thursday, Mar. 23	Firm Theory: Long Run Cost	Homework #8 assigned due 3/29
Tuesday, Mar. 28	Firm Theory: Profit Maximization and The Organization of Markets: Perfect Competition	
Thursday, Mar. 30	The Organization of Markets: Perfect Competition	Homework #9 assigned due 4/12
Tuesday, Apr. 4	<b>MIDTERM 2</b>	
Thursday, Apr. 6	<b>WELL-BEING DAY</b>	
Tuesday, Apr. 11	The Organization of Markets: Monopoly	
Thursday, Apr. 13	The Organization of Markets: Monopoly	
Tuesday, Apr. 18	The Organization of Markets: Monopoly	Homework #10 assigned due 11/26
Thursday, Apr. 20	The Organization of Markets: Game Theory	
Tuesday, Apr. 25	The Organization of Markets: Oligopoly	
Thursday, Apr. 27	Wrap up and Review	
Friday, May 5	<b>Section 002 Final Exam (Exam Time: 12:00PM-3:00PM)</b>	
Tuesday, May 9	<b>Section 001 Final Exam (Exam Time: 8:00AM-11:00AM)</b>	

## Study Tips

### *MSA's Top Study Tips*

**How do you succeed in ECON 410? Here's my best advice: *Strive to understand the in-class, recitation, 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 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 class, recitation, 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.
- Watch the assigned prerecorded videos before class.
- Skim the relevant reading assignment *before* class. After class, go back and selectively read the chapter for deeper understanding. Take notes from your textbook within your class notes.
- Get adequate sleep. Your brain works best when well rested.