

**Economics 410**  
*Intermediate Theory: Price and Distribution*  
**Spring 2020**

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<b>Instructor:</b>	Michelle Sheran-Andrews
<b>Office:</b>	200D Gardner Hall
<b>Class Meeting:</b>	MWF 12:20–1:10 pm (Section 001) MWF 1:25–2:15 pm (Section 002)
<b>Classroom:</b>	Hamilton Hall 100
<b>Prerequisite:</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> (There is one Sakai site for both sections.)
<b>Credit Hours:</b>	3 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).
- Please post all other course-related questions on Piazza. (See page 5 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!*



## Class Expectations

- a. **Regular attendance is expected and strongly encouraged.** Moreover, students are expected to be actively engaged in class through in-class polls, small group activities and class discussions. 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 or a help session, or schedule a coaching session with a ULA. (See pages 4-5 for more information.) Do keep in mind that while my PowerPoint slides are posted on *Sakai*, much of the material covered in class is not on these slides.
- b. **You should spend a *minimum* of 5 hours per week studying for ECON410 outside of class.** 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 starting on page 12.**
- c. **Seek help immediately if you are doing all the required work and are still having difficulty with the material!** You have an instructional team of one instructor, 6 graduate teaching assistants (TAs), and 8 undergraduate learning assistants (ULAs) all ready to help you! Please **see pages 4-5 for how to get help.**

## Class Conduct

- a. Please do not talk excessively to your neighbors during class except when permitted to discuss a problem. It can distract the students around you. It also really distracts me 😊
- b. **Laptops are *strongly discouraged*.** If you feel that using a laptop is the most effective way for you to take notes, I request that you **sit in one of the two back rows** to avoid distracting your peers.

In deciding whether you’d like to use a laptop, please consider the following.

- i. In general, note-taking by hand (on paper or a tablet) leads to higher retention than typing notes on a computer.  
<http://www.theatlantic.com/technology/archive/2014/05/to-remember-a-lecture-better-take-notes-by-hand/361478/>.
- ii. Multitasking on an electronic device during lectures has been shown to decrease only the grades of the multitaskers, but also the grades of the people seated around not them. <http://www.cbc.ca/news/technology/laptop-use-lowers-student-grades-experiment-shows-1.1401860>

## Class 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 a variety of books on 2-hour reserve in the library.
- b. **Cell Phone:** We will use *Poll Everywhere* for online polling in class. Poll questions will give you an opportunity to work in small groups on in-class problems. For more information, visit <https://poll.unc.edu/>. You can use your cell phone in class to answer in-class poll questions, but please refrain from using your cell phone at all other times.
- c. **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.



- d. **PowerPoint Slides:** PowerPoint slides will be posted on Sakai *before* the material on the slides is covered in class. During class, I will not talk at a pace that allows you time to copy all the material on these slides. Thus, I strongly recommend that you print out (or copy by hand) these slides in advance.
- e. **Help Sheets:** Help Sheets are available for select topics, usually those topics students find most challenging. Each Help Sheet summarizes and synthesizes key concepts. Most Help Sheets also have a list of learning objectives intended to model how to master the Help Sheet's concepts and a video in which I work through an associated practice problem step-by-step.
- f. **Practice Problems:** Practice problems are posted on Sakai. These problems serve as a bridge between lectures and homework assignments. You are *strongly encouraged* to work through these practice problems *before* completing a homework assignment. You will benefit so much more if you do these problems thoroughly and completely *before* looking at the solutions.

## Class Assistance

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.

- a. **Instructor's Office Hours:** I will hold office hours each week in the Econ Aid Center (Gardner 009). My hours will be:
- Mondays 3:00 - 4:00 pm
  - Tuesdays 1:00-2:00 pm
  - Wednesdays 10:00 – 11:00 am

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 do, however, use *My Digital Hand*, 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!


For personal or confidential concerns (i.e. **not** for questions about course material), I offer individual appointments on select Friday mornings and Wednesday afternoons; schedule at <http://calendly.com/sheran>.

- b. **TA and ULA Office Hours:** Graduate Teaching Assistants (TAs) and Undergraduate Learning Assistants (ULAs) will also hold weekly office hours in the Econ Aid Center (Gardner 009). The TA/ULA office hours schedule will be posted on the *Overview* page of our *Sakai* site.
- c. **Recitations Sessions:** I view recitations as an important part of this course. Recitations will incorporate collaborative learning exercises. 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 *Resources* in the *Recitations* folder.
- d. **Help Sessions:** Undergraduate Learning Assistants (ULAs) will offer weekly help sessions on Monday and Tuesday evenings from 7-9pm in Greenlaw 101. The purpose of these sessions is to provide a time and place for you to connect with other ECON 410 students to work on practice problems, homework or simply study the course material. ULAs will be in attendance to facilitate group work and answer any questions.

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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.

e. **Coaching:** Undergraduate Learning Assistants (ULAs) are available for one-on-one “coaching” appointments. You can schedule a 20-minute appointment for help with anything course-related EXCEPT homework problems. **Questions about homework problems will not be answered in coaching sessions.** Examples of how coaching sessions can be of help to you include, 1) Getting the math help you need to set you up for success in the class, 2) Learning how to study effectively for this class, 3) Getting help with the course material, 4) Discussing the learning objectives on the help sheets, 5) Having someone help you set up weekly study goals and hold you accountable to them. *A link for scheduling these appointments will be posted soon!*

 f. **Piazza:** We have a course site on Piazza, a free Q&A platform. Sign up at [piazza.com/unc/spring2020/econ410](https://piazza.com/unc/spring2020/econ410). Please post all course-related questions there, except questions about personal concerns or individual grades. 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!

g. **EconAid Center:** The EconAid Center is located in Gardner 009. This is where 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 be posted on the *Overview* page of our *Sakai* site.

**Have a question or need help with a homework problem?** You are welcomed and encouraged to attend any of our office hours or help sessions! Free tutoring is also available through the Econ Aid Center and UNC’s Learning Assistance Tutoring program. Specific questions on graded assignments will only be answered if you can demonstrate that you have already attempted the homework problem as well as the related practice problems. If you are unsure of how to start or interpret a problem, you will be referred to the recommended practice problems, and these problems will be used to get you started. Any and all questions about practice problems are welcomed!

## Grades

Component		% Course Grade	Description
Homework Assignments		20%	I will drop your lowest homework score. Your homework average will then be calculated as the average of all remaining homework scores.
Midterm Exams		44%	There will be 3 midterm exams. I will drop your lowest exam score. The remaining two exams will each comprise 22% of your course grade.
Final Exam		36%	The final exam is cumulative.

Your course grade will be calculated as follows<sup>2</sup>:

$$\text{Course Grade} = (0.20 \times \text{homework average}) + (0.22 \times \text{second highest exam}) + (0.22 \times \text{highest exam}) + (0.36 \times \text{final exam})$$

Letter grades will be assigned based on the following schedule.

<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>	63 - 66
<b>D</b>	60 - 62
<b>F</b>	< 60

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<sup>22</sup> There will be no changes to how your grade is determined at the end of the semester, so please don't ask.

- a. **Homework Assignments:** There will be 7 graded homework assignments. Each of the first 6 assignments will contain 10 multiple choice questions and 2 long-form questions (consisting of a mix of problems, graphs and essays.) The last homework assignment will consist of 20 multiple choice questions. I will drop your lowest homework score at the end of the semester before calculating your homework average. Your answers to the multiple choice and true/false questions will be submitted and graded through *Sakai*. Long-form answers will be submitted and graded through *Gradescope*. Specific submission instructions will be provided with each homework assignment. You are responsible for ensuring that your homework is properly submitted and clearly legible. Any part that cannot be read will be assigned a zero. Assignments are due by 5pm on the due date. There will be a 5% late penalty applied to all submissions received between 5:00pm and 5:15pm, and a 20% late penalty applied to all submissions received between 5:15pm and 6:00pm. No submissions will be accepted after 6:00pm. At 6:05pm on the day an assignment is due, an answer key will be posted on *Sakai*.
- b. **Late and/or Makeup Homework Policy:** No extensions or makeups will be given for any homework assignment. This is because I post the answer key to a homework assignment's answer key on the day it is due, which I think is important so that you and your classmates can get some feedback on the assignment as soon as possible. I completely understand and empathize with the fact that sometimes health and/or personal/family emergencies can get in the way of completing a homework assignment! For that reason, I drop each student's lowest homework assignment score at the end of the semester, before calculating their homework average. This covers all absences, regardless of reason. If you would like to submit your homework late not for credit but to receive grader feedback, you are welcome to do so; please contact me directly.

Should you miss more than 1 homework due to a significant health and/or personal/family emergency, please contact me directly so we can work out a plan for you. Note that you must either provide me with documentation of this emergency or have a University Approved Absence (<https://odos.unc.edu/student-support/class-absences/request-university-approved-absences>).

- c. **Midterm Examinations:** There will be 3 exams during the regular semester, each consisting of 7 multiple choice questions and 2 long-form questions. I will drop your lowest exam score, so only 2 of the 3 exams during the semester will count towards your course grade.
- d. **Makeup Exam Policy:** I do not offer makeup midterms and instead drop the lowest exam for every student. This is because the long-form exam key is posted and the multiple-choice section is reviewed in recitations soon after the exam is administered. Writing comparable makeup exams is nearly impossible, and I try to avoid inequities in how I assess students as much as possible. 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 (<https://odos.unc.edu/student-support/class-absences/request-university-approved-absences>) 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 (20%) transferred to the final exam. Should you opt for transferring the exam's weight to the final exam, please contact me directly. If you miss more than one exam, I will need documentation for both absences; please contact me directly so we can work out a plan for you.

- e. **Final Exam:** The final exam is a cumulative exam, consisting of 28 multiple choice and 8 true/false questions. Per UNC rules, you can only take the final exam at an alternative time if you present me with a pink slip from an advisor verifying that you have at least 3 exams in a 24-hour period. If you present me with an official exam excuse **before the last day of classes**, 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.
- f. **Regrade Requests:** All regrade requests must be made through *Gradescope* within 1 week of the date the assignment's grade is 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 or by appointment.
- g. **Accessibility Resources & Service (ARS):** Students registered with the ARS office may take their exams at ARS. You do not need to notify me if you choose this option, but you must schedule your exam with ARS at least 4 full business days prior to the exam. Please dschedule the exam at the same time as the regular exam or close to it. 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 the responsibility of students who take exams at ARS to ensure they do not exceed their allotted time limit. Please note that there will be a 10-percentage point penalty for each 5 minutes over the time limit.



## Course Schedule

The professor reserves the right to make changes to the syllabus, including assignment due dates and exam dates. These changes will be announced as early as possible.

DATE	TOPIC AND READING ASSIGNMENT	HOMEWORK	RECITATION
Wednesday, January 8	Introduction		
Friday, January 10	Math review (Mathematical Appendix)		No Recitation
Monday, January 13	Consumer Theory: Preferences and Utility (Chapter 3.1 - 3.3)		Recitation 1
Wednesday, January 15	Consumer Theory: Preferences and Utility (Chapter 3.1 - 3.3)		
Friday, January 17	Consumer Theory: Preferences and Utility (Chapter 3.1 - 3.3)		Recitation 1
Monday, January 20	<b>MLK DAY- no class</b>		No Recitation
Wednesday, January 22	Consumer Theory: Budget constraints (Chapter 4.1)		
Friday, January 24	Consumer Theory: Budget constraints (Chapter 4.1)		Recitation 2
Monday, January 27	Consumer Theory: Constrained Utility Maximization (Chapter 4.2 and Chapter 4 Appendix 1)		Recitation 2
Wednesday, January 29	Consumer Theory: Constrained Utility Maximization (Chapter 4.2 and Chapter 4 Appendix 1)	HW #1 due	
Friday, January 31	Consumer Theory: Constrained Utility Maximization (Chapter 4.2 and Chapter 4 Appendix 1)		Recitation 3
Monday, February 3	Consumer Theory: Demand (Chapter 5.1)		Recitation 3
Wednesday, February 5	Consumer Theory: Demand (Chapter 5.1)	HW #2 due	
Friday, February 7	Consumer Theory: Demand (Chapter 5.1)		Recitation 4
Monday, February 10	Consumer Theory: Elasticity (Chapter 2.2 and 2.3)		Recitation 4
Wednesday, February 12	<b>Exam #1</b>		
Friday, February 14	Consumer Theory: Income and Substitution Effects (Chapter 5.2)		Recitation 5
Monday, February 17	Consumer Theory: Income and Substitution Effects (Chapter 5.2)		Recitation 5
Wednesday, February 19	Consumer Theory: Income and Substitution Effects (Chapter 5.2)	HW #3 due	
Friday, February 21	Consumer Theory: Uncertainty (Chapter 15.1, 15.2 and 15.3)		Recitation 6
Monday, February 24	Consumer Theory: Uncertainty (Chapter 15.1, 15.2 and 15.3)		Recitation 6
Wednesday, February 26	Consumer Theory: Extensions (Chapter 4.3, Chapter 4 Appendix 2, and Chapter 5.5)	HW #4 due	
Friday, February 28	Firm Theory: Production (Chapter 6.1-6.5)		Recitation 7
Monday, March 2	Firm Theory: Production (Chapter 6.1-6.5)		Recitation 7

Wednesday, March 4	<b>Exam #2</b>		
Friday, March 6	Firm Theory: Production (Chapter 6.1-6.5)		Recitation 8
Monday, March 9	<b>SPRING BREAK- no class</b>		
Wednesday, March 11	<b>SPRING BREAK- no class</b>		
Friday, March 13	<b>SPRING BREAK- no class</b>		
Monday, March 16	Firm Theory: Cost minimization (Chapter 7, Chapter 8.1 and Chapter 8.2)		Recitation 8
Wednesday, March 18	Firm Theory: Cost minimization (Chapter 7, Chapter 8.1 and Chapter 8.2)		
Friday, March 20	Firm Theory: Cost minimization (Chapter 7, Chapter 8.1 and Chapter 8.2)		Recitation 9
Monday, March 23	Firm Theory: Cost minimization (Chapter 7, Chapter 8.1 and Chapter 8.2)		Recitation 9
Wednesday, March 25	Firm Theory: Cost minimization (Chapter 7, Chapter 8.1 and Chapter 8.2)	HW #5 due	
Friday, March 27	Firm Theory: Cost minimization (Chapter 7, Chapter 8.1 and Chapter 8.2)		Recitation 10
Monday, March 30	The Organization of Markets: Profit Maximization (Chapter 9.2)		Recitation 10
Wednesday, April 1	The Organization of Markets: Perfect Competition (Chapter 9.1 and 9.3)	HW #6 due	
Friday, April 3	The Organization of Markets: Perfect Competition (Chapter 9.1 and 9.3)		Recitation 11
Monday, April 6	The Organization of Markets: Perfect Competition (Chapter 9.1 and 9.3)		Recitation 11
Wednesday, April 8	<b>Exam #3</b>		
Friday, April 10	<b>HOLIDAY- no class</b>		No Recitation
Monday, April 13	The Organization of Markets: Monopoly (Chapter 11.1 and 11.2)		Recitation 12
Wednesday, April 15	The Organization of Markets: Monopoly (Chapter 11.1 and 11.2)		
Friday, April 17	The Organization of Markets: Monopoly (Chapter 11.1 and 11.2)		Recitation 12
Monday, April 20	The Organization of Markets: Monopoly (Chapter 11.1 and 11.2)		Recitation 13
Wednesday, April 22	The Organization of Markets: Oligopoly (Chapter 13.1 and 13.2)	HW #7 due	
Friday, April 24	The Organization of Markets: Oligopoly (Chapter 13.1 and 13.2)		Recitation 13
Tuesday, April 28	Final Exam Section 01 from 12:00 - 3:00 pm		
Thursday, April 30	Final Exam Section 02 from 12:00 - 3:00 pm		

## *Frequently Asked Questions*

### **"I bubbled in the wrong answers on my Midterm/Final scantron. Can I get partial credit?"**

No. Unfortunately, to ensure fairness and remove subjectivity I have to be strict on scantron grading. The answers on your scantron are the answers on which your grade is based, regardless of what is written on the test itself.

### **"My scantron score was lower than I expected. Could you check to see if the scantron machine graded it incorrectly?"**

Yes. Email me directly, and I will manually grade your scantron. Make sure to include your name, section, and onyen. Please note scantron grading issues are *very* rare. (I have literally never seen one.)

### **"Is there extra credit?"**

No. The reason I do not offer extra credit is that 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 was 0.1 points away from a higher letter grade. Is there anything I can do to raise my grade?"**

No. I completely empathize with this question, as I understand how frustrating it is to be close to the cutoff for a particular letter grade. Unfortunately, however, the answer is no. The reason is twofold. First, I believe selective extra credit leads to an inequality in how I treat different students, which I make every attempt to avoid. Second, with a class of this size, if I move the grade scale down by even 0.1, I am sure to have moved the cutoff up against another student. This once again introduces an element of inequality, as I was willing to move the scale for one student, but not the new student for whom the cutoff now applies.

### **"I don't understand why I did poorly on the exam. I knew the information."**

Based on my experience, when students do not do well on the exam it's often because of one of the following:

- They do not put in the effort that is needed. (Sometimes they *think* they are putting in big effort, but this effort really only occurred in the week before the midterm.) You can fix this one if you are honest with yourself.
- They do not have the active learning and study skills needed. Sometimes this unfortunately takes students an exam or two to recognize. We can work on this together! I am passionate about helping students gain these skills and will offer tips and assistance throughout the semester. As a starting point, please consider the study tips below.

## Study Tips

### *MSA's Top 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. Work through the practice problem(s) mapped to each homework problem *before* attempting the homework problem.
2. Make a serious effort to complete each problem independently before conferring with others.
3. Confer with others and compare your solutions, understand differences and come to a consensus.
4. Write out thorough and detailed solutions to the multiple-choice questions on homework assignments, even though these solutions will not be collected or graded.
5. Actively compare your solutions with the answer key and identify and understand any differences and fill in any missing holes.
6. Actively compare homework problems and practice problem(s), seek to rectify any contradictions between problems, and anticipate variations in problems.
7. 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.
- Review your lecture notes soon after class so you can fill in holes while you still remember the lecture. This will also help you get the concepts into your head and has a much higher payback than most students realize.
- Skim the relevant reading assignment *before* lecture 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.

## *Study Tips from some Former "A" Students*

- Recognize the time commitment 410 requires and be disciplined
- Don't use a computer/phone in class except for poll everywhere.
- Sit in the front if possible.
- Review the slides before lecture.
- Focus in during lecture.
- Do the help sheets and the blooms taxonomy questions, **ESPECIALLY THE EARLY ONES**. They provide the foundation for the rest of the course.
- Do the practice problems before the respective homework and learn from the worked-out solutions.
- Go to the TA sessions for help with homework and use classmates and TAs there as a resource.
- Go to your recitation section, especially the ones where you review your old tests. Use this time to see if what you missed on the test was a gap in learning or a simple mistake.
- Get help from peer tutoring in the econ aid center (this got me through the bloom's tax sections).
- Go to MSA office hours close to when a test comes up after most studying to clear up holes in learning.

The first thing is to do the practice problems right after the day you learn the material in class. That means not waiting until the weekend or right before the midterm to do the practice problems. The second advice I could give is to understand what exactly you're doing. I feel like most people just regurgitate steps over and over and not really understand what the steps mean. It is one thing to be able to do the steps and another to understand why those steps in particular are necessary to solve the problem. In other words, go beyond surface level. This could be achieved by writing down the reason for each step in a problem.

My biggest tip would definitely be to stay on top of the material in class instead of waiting until the midterms to cram the information. I probably spent about 3-5 hours each week going over the new material and doing practice problems. I also thought it was really useful to get started on homework as early as possible, so I could bring my questions to the aid center. This way I would know the logic behind solving each HW question when I started studying about two weeks in advance for each midterm.

Understand the logic behind the derivations of each kind of problem, which helps you to understand how to do each type of problem even if you forget steps. There was 100% enough resources for students to earn an A, it's just about putting in enough time studying to fundamentally understand the logic behind each problem.

- Always try your best to complete the homework by yourself before you compare answers with a friend or study group! Struggling through the material and reteaching yourself critical concepts as you go along the course will help immensely by the time exams roll around!
- Take in-class polls seriously! They are great learning opportunities that test your understanding of important concepts. If you don't get the poll right the first time, then remember to go back and try it out again!
- Go to the EconAid Center!

Focus on the homework and practice problems and make sure you don't just memorize the specific problems but instead try to understand the bigger picture. That way you will understand the overall concept of the problem and you'll be ready to handle different questions that are still related to that concept. Another piece of advice would be to attend the ULA help sessions. The ULAs were extremely helpful when it came to working out and understanding homework problems. It was also very helpful to attend their pre-midterm sessions to get even more practice.

1. Have an **intuitive understanding** of the math - it adds a level of clarity to the economics.
2. Use your resources as soon as you don't 100% understand something (I always went to a **help session every week**).
3. Find a small, smart **study group** to better absorb lecture material and reason out homework/Poll Q's.
4. Don't wait for the exam to revisit the homework assignments, break down the concepts, and see how things work when the question is posed differently (e.g. the inverse or converse of a conditional statement); Seek to **completely understand the homework as you do it** (starting early so you have enough time to digest and seek help is especially useful).
5. Have the concepts locked down and **do all the practice problems you can**, starting with the areas you feel you are the weakest at.

I found that regularly keeping up with the material on a weekly manner helped me the most. This included first looking over the help sheets to learn strategies, then completing all the practice problems for that week, and finally attempting all the homework problems (at least 3 days before the due date). Leaving this extra time to complete the homework not only helped me earn a better grade on them, but also left time to master the material by discussing questions I had with TA's and my peers which helped me find other strategies that I might not have thought of to solve the problem. Before midterms and the final exam I found that redoing many of the problems I struggled with, as well as going over the basics helped too. When redoing them, it was important to look at the big picture of what the question was asking and knowing the steps to solve that particular problem. Finding a solid study group was also very helpful. It gave me the opportunity to learn from others but also to teach others something that they might not understand. Teaching someone else truly helps you master the material inside and out. Lastly, show up for class and pay attention! Don't be afraid to ask questions and listen to other people's questions that you didn't even think to ask.