Economics 410 Intermediate Microeconomics Fall 2023

Jonathan B. Hill Dept. of Economics University of North Carolina -Chapel Hill

1. Information

Office: Gardner 200F

Lecture: T,TH 9am-10:45am (Chapman Hall 0201)

Office Hours: Mon, Wed. 12pm-1pm, or by appointment on Zoom

jbhill@email.unc.edu www.tarheeel.live/jbhill

Canvas: coming soon (syllabus, assignments, announcements)

TA's (name/email/office hours)

Drew Van Kuiken avan-kuiken@unc.edu TBA

Dae Hoe Kim daehee@email.unc.edu TBA

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Undergrad Learning Assistants (name/email/office hours)

Tanvi Dongre tdongre@unc.edu TBA

Cate Davis davis4@unc.edu TBA

Noah Abernethy <u>nabernethy@unc.edu</u> TBA

Poll Everywhere: PollEv.com/jonathanhill970

Exam Dates:

Midterm #1: Thur. Sept. 28 (in class)

Midterm #2: Thur. Nov. 2 (in class)

Final Exam: Tues. Dec. 12, 8am (same classroom)

2. Instructor Offices Hours

My standard office hours are Mon, Wed. 12pm-1pm. I can also meet on **Zoom** *by appointment*. Send me an email so we can set a time. The zoom ID is:

Zoom: https://unc.zoom.us/j/95852432720

2. Prerequisites

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

3. Introduction

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 (e.g. labor, public, health, I/O)). 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*!

3. Questions for Students

As part of UNC's curricular "Ideas in Action", we pose the following questions:

- a. How do I establish my point of view, take intellectual risks, and begin producing original scholarship or creative works?
- b. How do I narrow my topic, critique current scholarship, and gather evidence in systematic and responsible ways?
- c. How do I evaluate my findings and communicate my conclusions?

4. Personal Electronic Devices

Unless explicitly authorized by me (the professor), you are not permitted to use a laptop, tablet, smart phone/watch, any smart-devise, or cell phone during class. Watching movies and videos, playing games, checking the scores on espn.com, shopping, and chatting with your friends are disruptive behavior that will not be tolerated (I have actually seen all these things while visiting other professor's lectures). *Checking texts is easily spotted (you may think you're hiding it, but you're not) and very disruptive and disrespectful.* No phone/smart-watch use allowed during class, unless approved by me (e.g. for insulin testing, polls).

Exception: Polling: We will use the *Poll Everywhere* polling/check-in during class for answering questions. Phone/Smart-Watch/Tablet etc use outside of polling is not allowed (unless approved by me: e.g. for medical purposes).

6. Resources

6.1 **Required Textbook** *Microeconomics* by David Besanko and Ronald Braeutigam. You do NOT have to purchase the most recent version of this textbook. You can find a pdf version online if you look hard enough (although it took me about...5 seconds; digital copies allow for document searching a la CTRL F).

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.

6.2 Poll Everywhere

We will use the *PollEverywhere app* 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 UNC Directory. If this is not the case, your poll scores will not properly synch! (It's a problem, for example, if your email is onyen@unc.edu in the UNC directory but 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.

Poll Scores: For each poll you will get

0 for no answer

1 for an incorrect answer

3 for the correct answer

The lowest 4 scores are dropped.

The sum total after dropping the lowest 4 scores will be scaled to the range 0-100.

Example: Suppose there are 30 polls. After dropping the lowest 4 scores, there are 26 scorable polls, hence 78 possible points. You have 66 total points after four 0's are dropped. Your adjusted score is $66 \times \frac{100}{78} = 84.62$.

7. Course Structure

7.1 The course grade break-down is as follows:

Component	%	Details	
	Course		
	Grade		
Polling	10%	Lowest 4 polls will be dropped.	
Homework	20%		
Midterm Exam #1	20%	Each midterm will cover a subset of topics.	
Midterm Exam #2	20%		
Final Exam	30%	The final is cumulative.	

7.2 Only under a documented medical/legal emergency can the midterm be skipped: in this case the final exam will be reweighted (from 30% to 50%). *If a student misses* both midterms they must drop the course since there is no chance of passing.

The final exam cannot be skipped under any circumstance. If it is missed with a university approved excuse, then a course grade of "incomplete" will be given.

8. Homework

- 8.1 There are typically 4-6 graded homework assignments. <u>Please do the math: if there are 5, worth 20% of the total grade, then each is worth 4% of the course grade</u>. If you miss one you lose, without exception, 4% of the course grade. Please keep up with due dates, etc.
- 8.2 Students may consult with each other as they work on homework (in fact, you are invited to do so), but all students must turn in their own work. If two or more students have identical answers to some problem(s), both will receive an "F" in the course and be reported to the Dean's office for academic dishonesty.
- 8.3 Homework can only be turned in *early*, or on the *due date at the beginning of lecture*. **Under no circumstances will** *late* **homework assignments be accepted**, including legal/medical emergencies, since answer keys will be posted.
- 8.4 **Homework must be uploaded in Gradescope** (NOT Canvas: it will not graded there).

Homework cannot be emailed (I will not print nor grade the homework), it cannot be placed in my mailbox, nor placed under the door of my office. There are no exceptions. If you foresee a problem please contact me so we can work out a fair option that involves handing the assignment in early.

8.5 If a student cannot be present on the due date of a homework due to a UNC sanctioned event, *nor* can they reasonably turn in the assignment *early* (e.g. the student must be out of town for a week), and can provide proof of such **PRIOR TO THE DUE DATE**, then the remaining assignments will be re-weighted.

I will not retroactively alter homework weights (i.e. after the due date).

9. Examinations- Allowed Material

- 9.1 During *exams* students are allowed **one sheet** (**two sides**) of **standard** paper or smaller (not larger than 8"-by-11") with **handwritten** notes. You cannot bring photocopied material of any sort. If there is any deviation from "1 sheet", "2 sides", "standard paper" or "handwritten" the student will receive an "F" in the course and be reported to the Dean. (<u>Example</u>: 1 sheet, two sides, of A4 paper with photocopied material = F). We hold the right to inspect the "cheat sheet" during the exam (<u>and we do walk around and check them</u>).
- 2. Student may only use a **simple calculator (with exponential and natural log functions)**. Absolutely **no phones/tablets/et al** may be used as a calculator. So, bring a calculator. I hold the right to swap your calculator with mine.

10. Tentative Lecture Schedule and Readings (the week #'s may change)

Week	Topic	Chapter (text book)		
1	Introduction and Math Review	1-2		
1-2	Consumer Theory: Budget Constraint	4.1		
2-3	Consumer Theory: Preferences	3		
3-4	Consumer Theory: Utility Optimization	4.2, 4.3		
5-6	Consumer Demand Theory: Price, Income	5		
	Changes and Substitution and Income Effects			
Midterm Exam #1				
6-7	Firm Theory: Production and Factors	6		
8-9	Firm Theory: Cost Minimization	7		
9-10	Firm Theory: Cost Curves	8		
11-12	Market Organization: Perfect Competition: profit	9		
	maximization and supply			
Midterm Exam #2				
12-13	Market Organization: Competitive Markets:	10		
	Applications: ceilings, taxes, quotas			
13-14	Market Organization: Monopoly and Monopsony	11		
14-15	Surplus and Price Discrimination	12		
Final Examination				

11. Other Matters

11.1 ARS

Students who have worked out an arrangement with ARS should contact me so I can make accommodations. If you need extra time for exams, and have a provable "disability", and have not already done so, please contact ARS (https://ars.unc.edu).

If you take an exam outside of class via ARS it must be scheduled for the same date as the scheduled exam, no exceptions.

It is my goal to create an inclusive environment where anyone can speak out, share ideas, and provide feedback to me and their classmates. In some cases actual issues that arise in econometrics require an effort to maintain diversity and inclusivity (e.g. "gender"" variables, and marital status prior to the landmark case allowing for all to marry), and it is my hope that all students will feel welcome in those, and all other, times.

11.2 CAPS

Students should be aware of UNC's *Counseling and Psychological Services (CAPS)*: please visit https://caps.unc.edu/ if you think their services fit your needs, or you need to find out who you should talk to.

11.3 Title IX

Title IX and the Violence Against Women Act (VAWA) are two of the federal laws that are focused on providing safe, inclusive, and welcoming learning and work environments on campus. Title IX prohibits sex discrimination and sexual harassment. Sexual assault and sexual violence are forms of sexual or gender-based harassment that are prohibited by Title IX. VAWA also requires Universities to address sexual violence, interpersonal violence, and stalking.

Please visit https://eoc.unc.edu/ for further information.

11.4 Honor Code

All students implicitly agree to the Honor Code set forth by UNC. See https://catalog.unc.edu/policies-procedures/honor-code/.