Economics 410-003
Intermediate Microeconomic Theory: Price and Distribution

Instructor: Steve Raymond
Time and Location: MoTuWeThFr 11:30am-1:00pm, Venable Hall G311
Email: steve.raymond@unc.edu
Office Hours: TBD by class consensus

Course Objective: Microeconomic theory is built on the systematic study of how agents make decisions. The course will be divided into 4 main sections: Consumer Theory, Producer Theory, Equilibrium, and Game Theory. Throughout the course, we will uncover the mathematical tools that will allow us to answer questions such as:

- *Consumer Theory:* Given that you have a $100 a week to spend, how much cereal and milk should you buy? How much should you not spend this week so you can save up to buy tickets for a concert in August?
- *Producer Theory:* How many widgets should a firm produce? How many workers will a firm hire?
- *Equilibrium:* In a competitive market, what price will the market "choose" so that both consumers and producers are not incentivized to modify their behavior?
- *Game Theory:* Two agents are trying to decide whether or not to cooperate with each other. When might they decide to not cooperate with each other, even though it's in both of their best interests to do so?

Prerequisites: ECON 101; MATH 231 or STOR 113. Familiarity with basic calculus is required. Students should be comfortable taking derivatives.

Textbook: *Intermediate Microeconomics with Calculus: A Modern Approach (1st Edition),* by Hal R. Varian. This textbook is required.

Other Useful Textbooks (optional)
- *Intermediate Microeconomics – The Science of Choice,* by Jeremy Petranka
- *Introduction to Economic Analysis,* by R. Preston McAfee (free e-book)

Communication: All class assignments and resources will be posted to Sakai (https://sakai.unc.edu). Email is the best way to reach me outside of class (steve.raymond@unc.edu).

Grading: Your final grade will be determined as follows:

Final Exam	25%
Midterms (2)	50% (25% per midterm)
Homework	20%
Class Participation	5%

Grading Scale: Final grades will be assigned according to the following rough scale (out of 100):

A = 90-100, B = 80-89.99, C = 70-79.99, D = 60-69.99, F = below 60

I reserve the right to move these cutoffs downward to appropriately reflect students' understanding of the material given the exam grades.

Homework: There will be one homework per week (~4-5 homeworks in total). Each student should turn in his/her own homework assignment. However, working together with classmates and in groups is strongly encouraged. Late homeworks will not be accepted, but you may choose to drop one of your homework grades. If you choose to do so, 5% of your homework grade will be reassigned to the final exam. In that case, homeworks will count for 15% of your total grade and the final exam will count for 30%.

Exams: There will be 2 midterms and a final. The final exam will be cumulative. The date for the final exam is: *June 17th @ 11:30am-2:30pm in Venable Hall G311*.

The tentative dates for the midterms (in class) are: *May 27th* and *June 5th*.

If you miss one of the midterms, 25% of your final grade will be reassigned to your final exam weight. Note that if you miss one midterm and choose to drop one of your homework grades, your final exam will be worth 55% of your overall grade. If you miss both midterms, you will receive a 0% on your second midterm.

If your grade on the final exam is higher than your lowest midterm, then your final exam grade will replace your lowest midterm grade.

Attendance at the final exam is mandatory. If you cannot attend the final exam you must provide me with an "Exam Excuse" from the Dean's Office in order to qualify for a make-up exam. The make-up for the final exam will be held at a mutually agreed upon time.

Class Attendance: Class attendance is strongly encouraged. Give the fast pace of summer classes, missing two class is roughly equivalent to missing an entire week during the normal academic year.

Honor Code: All students are expected to adhere to the UNC Honor Code. If you do not yet understand your responsibilities under this code, please go to http://honor.unc.edu to learn more.

Outline of Topics

Topic	Chapters in Varian Textbook
1) Math Review	Mathematical Appendix
2) Consumer Theory	
a) Preferences/Utility	3-4
b) Budget Constraints	2
c) Optimal Choice	5
d) Demand	6
e) Income/Substitution Effects	8
f) Intertemporal Choice	10
g) Uncertainty	12
h) Welfare	14
3) Producer Theory	
a) Production Functions	18
b) Profit Maximization / Cost Minimization	19-20
c) Relationship to Consumer Theory	
4) Market Equilibrium / Perfect Competition	
a) Market Equilibrium	16
b) Short-run vs. Long-run	24
c) Exchange and Production General Equilibrium	31-32
5) Monopoly	24
a) Price Discrimination	25
6) Game Theory	29
a) Application to Oligopoly	27
7) (Time Permitting)	
a) Risky Assets	13
b) Asymmetric Information	37