

ECON 410 Intermediate Theory: Price and Distribution  
Summer Session I 2015  
M-F 9:45-11:15 Venable Room G311

**Instructor:** Kristina N Vaughan

**Email:** knvaugha@live.unc.edu

**Office Hours:** TBD by class consensus, Phillips Annex 204

**Prerequisites:** ECON 101. You should be comfortable with the microeconomics section. MATH 231 or STOR 113. You should be comfortable with the first half of the introductory class and comfortable taking derivatives.

**Textbook:** Intermediate Microeconomics with Calculus (9th Edition), by Hal R Varian.

**Supplementary Resources:** I will post relevant material on Sakai. In addition to this, feel free to consult the following additional resources: Microeconomics by Besanko and Braeutigam, Microeconomics: Theory and Application with Calculus by Pierloff, Intermediate Microeconomics-The Science of Choice by Petranka.

**Course Website:** <http://sakai.unc.edu>

Here you will find links to course materials, grades, announcements and other supplementary materials.

**Course Objectives:** Microeconomic Theory examines how agents make decisions and how the different decisions of agents interact. The course will be divided into four main sections: Consumer Theory, Producer Theory, Equilibrium and Game Theory.

1. Consumer Theory-How individuals make choices given their income and the prices of goods and services. Consumer theory helps us to understand how individuals' tastes

and incomes influence the demand curve.

2. Producer Theory-The behaviour of firms in hiring and combining productive inputs to supply commodities at appropriate prices. Issues considered include the feasibility of the productive process as it relates to technology constraints and the characteristics of the market where the output is being sold.

3. Equilibrium: How do the choices of consumers and producers interact to determine market prices and market quantity? How does this differ based on the structure of the market-perfectly competitive versus monopoly?

4. Game Theory-How do agents anticipate and respond to the behaviours of other agents and how do they act optimally based on this?

**Grading:** Your final grade will be determined by:

1. Participation and Attendance 5 %
2. Homework 15 %
3. Midterm 1 25%
4. Midterm 2 25%
5. Final 30%

**Grading Scale:** Final grades will be assigned on the following scale:

A 93-100%	C 73-76%
A- 90-92%	C- 70-72%
B+ 87-89%	D+ 67-69%
B 83-86%	D 60-66%
B- 80-82%	F <60%
C+ 77-79%	

**Note that I reserve the right to move these cut-offs downwardly to appropriately reflect student's understanding of the material given performance on the exams.**

**Homework:** There will be 4 homework assignments throughout the session (approximately one per week). While students are encouraged to work together, each student must turn in their own copy of the assignment. **Homeworks are to be handed in at the start of class. Late homeworks will not be accepted.**

**Exams:** There will be two Midterms and a Final:

**Midterm 1:** May 28

**Midterm 2:** June 11

**Final Exam:** June 18

While the Midterms are not cumulative, techniques and concepts from the first Midterm will be relevant to that of the second Midterm. The Final is cumulative. If you miss one of the midterms, the final will be re-weighted appropriately. If you miss both midterms you will be assigned a score of 0 for the second midterm. Attendance for 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 or Student Health. Upon receipt of this documentation, a make-up final will be arranged at a mutually convenient date.

**Class Attendance and Participation:** Class attendance is strongly encouraged. Given the fast pace of summer classes, missing 2 classes is equivalent to missing an entire week of the normal academic year. Occasionally I will give ungraded quizzes to test your understanding of the material. This is both for your and my benefit as it helps you figure out what concepts may be unclear to you and helps me tailor my teaching appropriately. **Due to their distracting nature and to facilitate participation, cell-phones, laptops, and tablets will not be allowed in the classroom.**

**Honor Code:** All students are expected to abide by the UNC Honor Code. If you are not familiar with the code you should consult <http://honor.unc.edu> to learn more.

## **Course Outline:**

### **Math Review**

Calculus (Mathematical Appendix)

Constrained and Unconstrained Optimization (Mathematical Appendix)

### **Consumer Theory**

Preferences (Ch. 3)

Utility Functions (Ch. 4)

Budget Sets (Ch. 2)

Consumer Choice (Ch. 5)

Demand (Ch. 6)

Income and Substitution Effects (Ch. 8)

Uncertainty (Ch. 12)

Consumer Surplus (Ch. 14)

### **Producer Theory**

Production Functions (Ch. 19)

Profit Maximization (Ch. 20)

Cost Minimization (Ch. 21)

### **Equilibrium**

Perfect Competition (Ch. 23)

Market Equilibrium (Ch. 16)

Short Run vs Long Run (Ch. 24)

Monopoly (Ch. 25)

General Equilibrium (Ch. 32)

### **Game Theory**

Basics (Ch. 29)

Oligopoly (Ch. 28)

### **\*Advanced Topics (Time Permitting)**

Based on class interest, potential topics include:

Risky Assets (Ch. 13)

Asymmetric Information (Ch. 38)

Intertemporal Choice (Ch. 10)

Auctions (Ch. 18)

Monopoly Behaviour (Ch. 26)

More Game Theory (Ch. 30)

GE with Production (Ch. 33)

Externalities (Ch. 33)

Public Goods (Ch. 37)

Information Technology (Ch. 36)

**Disclaimer: I will try and follow the outline as closely as possible, however if there are adjustments to be made to the syllabus, I will post them in advance on Sakai**