Economics 410-003

Intermediate Theory: Price and Distribution

Summer Session I (2016)

Instructor: Calebe Figueiredo

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Time and Place: Monday-Friday, 11:30am-1:00pm, Gardner Hall 007. 5/11/2016 - 6/16/2016.

Office Hours: TBD. Phillips Annex 204.

Prerequisites: ECON 101. MATH 231 or STOR 113. You should be familiar with the material

covered in Introductory Microeconomics and be comfortable taking derivatives.

Textbook: Microeconomics: Theory and Applications with Calculus (3^{rd} Edition), Jeffrey

Perloff

Other Resources: Other books you might find useful, *Microeconomics*, Besanko and Braeutigam. *Intermediate Microeconomics with Calculus*, by Hal R. Varian. *Intermediate Microeconomics-The Science of Choice*, Petranka.

Course Objectives: The principal goal of this course is to teach you to analyze how agents make decision. A secondary goal is to help you to develop critical thinking skills that are broadly applicable to other fields of study and professional settings. The four main sections we will cover are consumer theory, producer theory, equilibrium and game theory.

- 1. Consumer Theory: How do consumers choose between the vast array of goods in the market? How do budget constraints factor into these decisions?
- 2. Producer Theory: How much output should a firm produce? What is the least expensive way to do so?
- 3. Equilibrium: How are prices determined? How do prices and quantities differ when the market is perfectly competitive versus monopolistic?
- 4. Game Theory: How do outcomes change when agents behave strategically?

Grading: Your final grade will be determined by

1. Participation: 5%

2. 2 Midterms: 50% (25% each)

3. Final Exam: 35%

4. Homeworks: 10%

Grading Scale: Final grades will be assigned on the following scale (out of 100).

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A 93-100% C 73-76%
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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%

Grades with decimal points will be round to the next integer. For example, 86.2 will be round to 87 and the student will be assigned a B+. In addition, I reserve the right to move these cutoffs downward to appropriately reflect student's understanding of the material given performance on the exams.

Homework: There will be (tentatively) 4 homeworks assigned throughout the session (approximately 1 per week). Each student must turn in his/her own homework; however, group work is allowed and highly recommended. Homework is due in class and late homeworks will receive partial credit. If the student presents a reasonable justification for not being able to turn in his/her homework in time I will give full credit.

Exams: There will be 2 midterms and a final. The final exam will be cumulative. The date for the final is **June** 15^{th} **11:30am in our classroom**.

The dates for the midterms (in class) are May 20^{th} and June 3^{rd} .

If you miss one of the midterms, its weight will be reassigned to the final.

Attendance at the final exam is mandatory. If you cannot attend the final exam, please let the instructor know as soon as possible in order to be able to take a make-up final. The make-up will be held at a mutually agreed upon time.

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 during the normal academic year.

Your participation grade will be determined by attendance and attentiveness in class. Absences due to illness, UNC-related activities and family emergencies will not affect your grade. Naturally, if you have another compelling reason for missing class please let the instructor know.

My goal is to maintain an atmosphere conducive to learning for all students. As such, neither cell phones nor computers will be allowed in class.

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.

¹Illness, UNC-related trip, family emergencies, etc.

Course Outline

Review:

- Calculus (Calculus Appendix E-1)
- Constrained and Unconstrained Optimization (Calculus Appendix E-1)
- Demand and Supply basic concepts (Ch. 2)

Consumer Theory:

- Constrained choice (Ch. 3)
- Demand (Ch. 4)
- Consumer Welfare (Ch. 5)

Producer Theory:

- Firms and Production (Ch. 6)
- Costs (Ch. 7)
- Competitive Firms and Markets (Ch. 8)
- Properties and Applications of the Competitive Model (Ch. 9)

Equilibrium:

• General Equilibrium and Economic Welfare (Ch. 10)

Game Theory:

- Basic Concepts (Ch. 13)
- Oligopoly and Monopolistic Competition (Ch. 14)

Advanced Topics (Time Permitting):

- Price Discrimination (Ch. 12)
- Externalities (Ch. 17)