01:220:320:05 Intermediate Microeconomic Analysis
Syllabus Spring 2014

Rutgers University

Instructor Information   **Zhutong Gu**
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Course Information   **Intermediate Microeconomic Analysis**
Hours: 4:30 pm–5:50 pm, TTH
Room: Murray Hall 212, College Ave. Campus
Office hours: 2:00 pm–3:30 pm, Tue & Thur or by appointment
Final exam: 4:00 pm–7:00 pm, May 9, 2014. (If you can't make the exam, please don't register this course)
Website: `https://sakai.rutgers.edu`

Course Requirements

Learning objectives: In this course, you will learn and apply techniques such as constrained optimization, equilibrium analysis, game theory, etc, which are the most fundamental tools and frequently used in modern economic analysis. Foundations of consumer theory, producer theory and their interactions in marketplaces of perfect competition and imperfect competition will be explored in detail and elucidated. Public policy and economics of welfare are also touched through both positive and normative analysis. This course is one of the most important courses among all undergraduate economics curriculum. In addition, it serves the basis for other upper level courses such as industrial organization, economics of labor market and international trade and also provides microfoundations for modern macroeconomic analysis.

Prerequisites:

- Calculus (640:135 or equivalent)

- Introduction to Microeconomics (220:120 or equivalent)

Textbook: Walter Nicholson and Christopher M. Snyder, *Microeconomic Theory: Basic Principles and Extensions*, 11$^{\text{th}}$ Edition, South-Western College Pub
ISBN-10: 1111525536
ISBN-13: 9781111525538
Note: The textbook is required, since all problem set questions will be selected from it. Copies of the 10$^{\text{th}}$ edition are also acceptable but homework problems are assigned based on the 11$^{\text{th}}$ edition. Copies of both editions have been placed on reserve at Alexander Library.

Evaluation: Course evaluation will be based on assignments (up to 7 problem sets), two midterm exams, final exams and class participation, according to the following composition,

- Homework assignments: 10%

- Class participation: 10%

- Midterm exams: 40% (20% for each)

- Final exam: 40%

Note: No extra credit will be granted. This is a core course of economics major and students must receive C or better to fulfill major requirements.

Grading: Letter grades will be used for submission of final grades according to the following corresponding table. There is no upper or lower limit on total number of each grade.

Letter Grades	Average Percentage Scores Range
A.	90% or higher
B+	85%–89%
B.	75%–84%
C+	65%–74%
C.	60%–64%
D.	50%–59%
F.	49% or lower

Note:

- Makeup exams are only provided only under absences for medical reasons or emergencies with notes signed by physicians or from the Dean's office. The student or anyone else acting on behalf the student must notify the instructor within **24 hours** after the missed exam.

- Regarding expected absence of regular classes because of physical conditions, family emergencies and so on, applications should be submitted through the University absence reporting website `https://sims.rutgers.edu/ssra`. You should not expect to miss any exam except under the circumstances of emergencies.

Academic Integrity: Any attempt to cheat on an exam or course assignment will be prosecuted. You may review the Universitys Academic Integrity policy at the following website `http://academicintegrity.rutgers.edu/`.

Tentative Course Schedule:

Week 1 Economic Models and maximization calculus (Chp. 1 and p.21-p.35), preference and utility (Chp. 3)

Week 2 Utility maximization and choice, Envelop theorem and constrained maximization (Chp. 4 and p.35-p.48)

Week 3 Substitution and income effect, demand relationships among goods (Chp. 5 & 6)

Week 4 Production functions (Chp. 9) and some preparations (p.48-p.63)

Week 5 Cost minimization (Chp. 10) and profit maximization (Chp. 11)

Week 6 Review session and exam 1

Week 7 Partial equilibrium competitive market (Chp. 12)

Week 8 General equilibrium and welfare (Chp. 13)

Week 9 Monopoly (Chp. 14)

Week 10 Game theory (Chp. 8) and imperfect competition (Chp. 15)

Week 11 Review session and exam 2

Week 12 Input market (Chp. 16 & 17) and dynamic optimization (p. 63-p.67)

Week 13 Decision making under uncertainty and basic statistics (Chp.18 and p.67-p.76)

Week 14 Asymmetric information (Chp. 18) and externalities (Chp. 19)

Week 15 Final exam

Note: The above schedule is subject to change by the instructor due to time constraints.

Some Suggestions:

1. Attend classes: I suggest students come to attend each class. There will be a certain amount of overlaps between textbooks and lectures notes and I will emphasize and recap the parts that I think are most important and these are most likely to show up in the exams. Sometimes, I will discuss the problem sets and give you hints on some questions.

2. Do problem sets: I strongly suggest you do all the problem sets on your own before reading the solutions. Since it will always be helpful if you try to think about and write down your own answers and compare these with the correct solutions. To give you a hint, all the exams are problem set based and you will encounter the identical problems that you have solved before. Remember practice makes perfect.

3. Come to office hours: If you have trouble in understanding course materials or working out problem sets, please feel free to come to my office or make an appointment. It is never too late to figure out all the potential puzzles before the final exam.

4. Read textbooks: Textbooks and course materials are complementing each other. In the limited class time, we are not able to cover everything useful, so this makes textbooks a good companion with which you can solidify understandings of lecture notes. It always helps if you read textbooks carefully before and after each lecture, because doing so will let your quickly find out where you don't understand and what your questions are during the lecture time.

Learning Objectives for Economics Majors

Economic Literacy Students who complete the major in economics should understand and be able to articulate, both orally and in writing, the core economic principles, concepts and theories that form the foundation for modern economic analysis and economic research.

Economic Numeracy Students who complete the economics major should be familiar with the tools, techniques and methods of empirical economics. They should be able to analyze data using computer applications and should be familiar with regression methods and other statistical techniques. They should be able to read and assess general interest articles on economic topics. In addition, they should be able to understand and evaluate key findings in published economic research from a wide range of sources including academic economists, public policy think tanks, and government agencies.

Economic Citizenship Upon completion of the major students should be able to apply their understanding of core concepts and quantitative tools to analyze and research real world problems and evaluate alternative economic policy proposals on microeconomic and macroeconomic issues.

Economic Scholarship Qualified majors should have an opportunity through such avenues as advanced coursework, faculty interactions, national and local competitions and honors courses and programs to utilize up-to-date methodological tools and become fully engaged in economic research and issues on the frontiers of economics.