



Dartmouth College
Department of Economics
Spring 2008

Econ 21: Microeconomics

Meeting: Meets in the 10A slot, Tuesday and Thursday, 10:00–11:50 a.m., in Rockefeller Room
1. X-hour on Wednesday, 3:00–3:50 p.m.

Professor: Christopher Snyder. Office hours: Wednesday 10:00–11:45 a.m. and 1:45–3:00 p.m.; Silsby 312A; telephone 646–0642; email Christopher.M.Snyder@dartmouth.edu; webpage <http://www.dartmouth.edu/csnyder>.

Readings: The required text is Walter Nicholson and Christopher Snyder, 2008, *Microeconomic Theory: Basic Principles and Extensions*, 10th edition, published by Thomson South-Western (now Cengage Learning), available for purchase in the bookstore. Other articles and handouts will be distributed in class and available as links on Blackboard.

Overview and Philosophy The course will offer a broad survey of the basic concepts of microeconomic theory, including

- derivation of market demand from consumer preferences
- derivation of firm supply from technological constraints
- game theory
- competitive equilibrium and welfare implications
- models of imperfect competition
- externalities and public goods
- uncertainty and information
- adverse selection and moral hazard.

We will employ the neoclassical paradigm, assuming that the behavior of economic agents is guided by the principle of maximizing an objective subject to resource constraints.

The goal of the course is to develop an understanding of the mathematical structure of microeconomics. Concepts will be presented using graphical and algebraic analysis. We will rely extensively on calculus, a major mathematical tool of modern economics. As part of their training in the course, students should develop a facility with the use of calculus in economics.

Given the breadth of the topics covered and the rigor of the mathematical analysis, many students will find this to be a challenging course. The professor will do his utmost to help students master the material, but students will be expected to contribute their best, sustained, and consistent effort in attending classes, studying notes, reading the text, solving problems, and consulting with the professor in office hours.

Prerequisites Principles of microeconomics (Econ 1: The Price System) and differential and integral calculus (Math 3: Introduction to Calculus).

Course Requirements

- *Participation and attendance:* Students are expected to attend all classes and scheduled X-hours. To preserve precious class time, we will start promptly at the beginning of the period. Please show up on time to avoid disruptions. Students are expected to be prepared by looking at the assigned readings and completing the problem sets in advance of the relevant class and to participate enthusiastically in discussions. I will keep a log of attendance. Students who have perfect attendance receive a token reward (an extra credit point). Attendance and participation otherwise do not count in calculating the raw course score, but will be a factor in determining where grade cutoffs are established and will be considered if and when students later ask for letters of recommendation.
- *Problem sets:* About eight problem sets will be assigned. Student solutions will not be collected and graded. Instead, I will distribute detailed answers to the problem sets (which can be reviewed in class and in office hours if there are further questions). Occasionally I will assign hard problems that will not be subject material for exams but will offer a challenge even for the best students.
- *Exams:* There will be two in-class midterms and a final exam. The midterms are not comprehensive but only cover the module leading up to each exam. The final exam is comprehensive, including questions that cover material from the remaining classes after the last midterm, questions covering earlier material, and questions providing a synthesis of the course material. The final exam is scheduled by the registrar to be on Saturday, May

31, at 3:00 p.m. Let me know right away if you have a conflict for this time and we can begin making alternative arrangements.

- *Term Paper:* A term paper of about five pages will be due near the end of the term. The topic is moral hazard. You will be asked to study the material on moral hazard on your own, reading the relevant section in Chapter 18 of the text and solving relevant problems. You will apply what you have learned to model and analyze the impact of an academic policy at Dartmouth on student effort. Papers will be graded on topic interest, analytical rigor, and quality of writing style and grammar. The grade will also be based on the problem solutions students will attach. Late papers will be penalized with an automatic grade reduction.
- *Miscellaneous Extra Credit:* Throughout the term, opportunities may arise to earn up to at most two total points of extra credit by solving challenge problems, attending outside economics seminars, participating in classroom experiments, and so forth. The idea is to provide a token reward for these enrichment exercises.

Grading

Midterm 1	25%
Midterm 2	25%
Term paper	15%
Final exam	35%
Perfect attendance	+1% extra credit
Miscellaneous extra credit	up to +2% extra credit

Academic Integrity Students are expected to abide by the honor code. The following are details on academic integrity as it relates to this class. Exams will be closed-book; collaboration on examinations is prohibited. Students may obtain help from others on problem sets and are indeed encouraged to work together on them in study groups. Students can discuss ideas about the paper and associated problems on moral hazard with each other, can have another student proofread his or her paper, but otherwise must work on the paper and problems associated with the term paper independently.

X-Hour We will use the x-hour from time to time to make up for a class that has to be cancelled due to weather or the professor's professional activities, to conduct a review session, to conduct a classroom experiment, to give an exam, or to catch up on material. Please keep the time free in

your schedule. Some x-hours have already been marked down on the schedule below, including two for the midterms.

Blackboard Handouts and problem sets will be distributed in class. Where possible, they will also be made available afterwards on Blackboard.

Study Groups Study groups are being organized for the class through Dartmouth's Tutor Clearinghouse. Further information will be distributed on the first day of class. Students are encouraged to form study groups with fellow classmates to work on problem sets if they do not participate in the formal program.

Disabilities Students with learning, physical, or psychiatric disabilities enrolled in this course that may need disability-related classroom accommodations are encouraged to make an office appointment to see me before the end of the second week of the term. All discussions will remain confidential, although the Student Disability Services office may be consulted to discuss appropriate implementation of any accommodation requested.

Econ 21 Schedule

	Tues.	Wed. X-hour	Thurs.
Week 1	Mar. 25 Introduction, Math Review NS 2 PS 1 assigned	Mar. 26	Mar. 27 Consumer Theory NS 3, 4 PS 1 due
Week 2	Apr. 1 Consumer Theory NS 4 PS 2 assigned	Apr. 2 Consumer Theory NS 5-6	Apr. 3
Week 3	Apr. 8 Consumer Theory PS 2 due	Apr. 9	Apr. 10 Production, Cost Functions NS 9-10 PS 3 assigned
Week 4	Apr. 15 Profit Maximization, Perfect Comp. NS 11 PS 3 due	Apr. 16 <p style="text-align: center;">Midterm 1</p>	Apr. 17 Perfect Competition NS 12 PS 4 assigned
Week 5	Apr. 22 General Equilibrium, Welfare NS 13	Apr. 23	Apr. 24 Monopoly NS 14 PS 4 due
Week 6	Apr. 29 Monopoly PS 5 assigned	Apr. 30	May 1 Uncertainty NS 7 PS 5 due
Week 7	May 6 Uncertainty PS 6 assigned	May 7	May 8 Game Theory NS 8 PS 6 due
Week 8	May 13 Game Theory PS 7 assigned	May 14 <p style="text-align: center;">Midterm 2</p>	May 15 Game Theory, Oligopoly NS 15
Week 9	May 20 Input Demand PS 7 due, NS 16	May 21	May 22 Adverse Selection NS 18 PS 8 assigned
Week 10	May 27 Externalities NS 19 PS 8 due	Final Exam: Sat. May 31, 3:00 p.m.	

Key:
 Class
 No Class
 Possible Class