

University of Colorado  
Department of Economics

Spring 2008

Microeconomic Principles 2010-400, T-Th 3:30-4:45pm, Chem 140

P. Graves

**Content:**

Microeconomic principles 2010 introduces you to the "economic way of thinking." The central fact that underlies economics is the fact of "scarcity." By this it is meant that our wants exceed the goods freely available from nature--hence choices must be made among the many things we want. This leads to the fundamental economic questions, narrowly defined, which face all societies: What to produce? How to produce? and For Whom to produce? But economics is really much broader in scope than this; it is really the study of wise decision-making in all areas of life. To draw a biological analogy: The "ecosystem" of microeconomics is competitive equilibrium, with supply and demand determining prices and quantities exchanged in each of a plethora of individual markets (interacting "forests"). The "trees" that make up each forest are the individual economic agents (households and firms, but other collections of people as well) whose "optimizing" behavior we shall study extensively. All sound decisionmaking involves comparison of benefits with costs--when benefits exceed costs for an action the decisionmaker is made better off by taking that action. While this all may seem rather dry and unclear at this time, economics is hardly the "dismal science" it has been tagged as (by T. Carlyle); rather I have high hopes that you will find it live and exciting.

**Administrative Details**

**Note: Recitation classes will not meet during the first week of class!**

Text: Robert L. Sexton EXPLORING MICROECONOMICS, Dryden, 4th, 2007. (S)

Note that the "package" I have selected includes the Wall Street Journal, at the very best price available--send in your cards and start receiving it immediately!

Course Handout Package (comprehensive, brief, guide to most of the lectures) on website (look for "All the Handouts: Printable"...other links broken)

Office: Economics 223 Hours: Tuesday-Thursday 1:00pm-1:45pm (also right after class and by appointment at many additional hours, if there are schedule conflicts)

Phone: (303) 492-7021 (message machine), but the *strongly preferred* method of contact is:

e-mail: [gravesp@spot.colorado.edu](mailto:gravesp@spot.colorado.edu) (I am usually online 24/7...definitely the "quick response" media)

**NOTE: 1) The final exam date is: May 6th (a Tuesday) 10:30am-1:00pm. The exams are in our usual classroom. This information is repeated at the end of the syllabus...there are no makeups...do not make plans (airline tickets, etc.) that involve leaving early. The Economics Department has recently instituted more stringent grading requirements that I must follow. The grade of IW has been completely eliminated, while the grade of IF will only be given in situations in which a student is unable to complete a course for reasons completely beyond their control. Such situations must be discussed with me immediately, or an F will be assigned for the course grade. If you have three or more finals in one day, it is the *last* final that is to be changed according to University policy, so there should be no need for make-ups this semester;**

**2) Students with disabilities who qualify for academic accommodations must provide a letter from Disability Services (DS) and discuss specific needs with me, preferably during the first two weeks of class. DS determines accommodations based on documented disabilities (303-492-8671, Willard 322, [www.colorado.edu/sacs/disabilityservices](http://www.colorado.edu/sacs/disabilityservices)). Campus policies (including those involving the new student honor code, plagiarism, classroom behavior policies, and the like) can be viewed at: <http://www.colorado.edu/policies/index.html>. Direct any questions you have about these policies to me.**

**3) Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, it is unlikely that this will be a problem, since I do not take attendance in any event. Should we be voting for a test date that conflicts with religious**

observances, point this out to me and that date will be eliminated from consideration. See full details at [http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html)

4) Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which they and their students express opinions. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at: <http://www.colorado.edu/policies/classbehavior.html> and at [http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\\_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code)

5) All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>

Grading:

I have an unusual and complicated (but extremely fair!) grading system. There will be two midterms and a comprehensive final. On each multiple-choice exam enough points are added to everyone's bring the median score up to 75. NOTE: it is *points* that are added not questions, where a question is typically worth 4 points on a midterm of 25 questions. So, for example, if the median for a particular exam is 68 (the average person misses 8 four-point questions), 7 points will be added to each person's exam (the equivalent of 1.75 questions). Hence, doing well on a difficult exam, say getting a 96 (missing one question) when the median was 68 (missing 8 questions) enables you to get over 100 points, in this example receiving a 103. Should the median for an exam be above 75, I do *not* subtract (such an outcome indicates either that you are part of an unusually smart or studious class or--more likely?--that I made the test too easy, hence it is my problem). After these adjustment points are added, I will calculate your course test grades as the largest number arising from the following alternative calculated scores:

"Score 1":  $.3(1st\ Mid\ Grade) + .3(2nd\ Mid\ Grade) + .4(Final\ Grade)$

"Score 2":  $.4(2nd\ Mid\ Grade) + .6(Final\ Grade)$

"Score 3":  $.4(1st\ Mid\ Grade) + .6(Final\ Grade)$

Hence, if you "mess up" (or miss) either of the midterm exams (but not both), that test will automatically be dropped; the comprehensive final is weighted more heavily in this case. **There will be no early exams or make-up exams**, since they are difficult to make comparable and this system does not penalize you for missing one exam in any event. Should you miss an exam, come to my office (or acquire from your TA) to get a copy of it and take it under "test conditions," later comparing your answers with those posted on the web (you will know in this way how you would have done, aiding in your study for the final). I will post the answers to midterm exams promptly after giving them; you will be able to pick up your test booklet in recitation to know how well you did. *Bring a #2 pencil with you to exams!*

The University of Colorado does not allow me to award even the best of you with an "A+," hence there is (unfortunately) little incentive to *really* learn the material of any course, in particular this one. To overcome this difficulty--since I believe in creating an incentive to excel--I let anyone with an adjusted 98 or higher average on the two midterms out of the final! [Note: even if you personally do not get out of the final, you should cheer for those that do, since the median will be lower on the final, causing more points to get added to everyone's score

on this important test!]. I do require that those getting out of the final continue coming to class for the remainder of the semester. NOTE: the first midterm is nearly half-way through the course and second midterm comes very late in the course (week before the last week of classes); this is to be sure that those getting out of the final are tested over most of the material. The approximate test dates are indicated in the brief course topic description below.

I view attendance at both my lectures and the recitation sections as highly desirable, but do not believe in penalizing those who feel otherwise. Yet those who attend and perform well in recitation always want to feel that they are rewarded for doing so. The way I handle this is to make the TA portion of the grade determine the grades of those on the "margin." The TAs will be, by any system they view as fair and appropriate, assigning one of three grades to your recitation performance in roughly equal proportions: +, 0, or -. If you are on the margin (see below) the + moves you up, the minus moves you down, and the 0 does neither. That is, you can have an 89 (normally a B+) and get either an A-, a B, or stay at a B+; similarly, you could have a 91 (normally an A-) and get either an A, a B+, or stay at an A-. As you can see, there may be substantial advantages to attending recitation and striving in it--however, if you are think you know better how to allocate your time than I do (a reasonable proposition, incidentally), you can be a risk-taker and "blow off" recitation entirely. If you get a 93 you get the A; an 87 gets you a B; that is, you are not harmed, if you are **not** "on the margin," by deciding not to go to recitation. Similarly, if you are not on the margin, a high recitation grade does not help you. Only if you are on the margin does the recitation grade impact you. Thus, we come to the final course grade calculation:

Highest Average "Score"

100-92 = A (and >98 average on the 2 midterms, exempt from final)

90-92 = A if + in recitation, A- if neutral, B+ if -

88-90 = A- if + in recitation, B+ if neutral, B if -

82-88 = B (not "on the margin" so the recitation grade does not enter)

80-82 = B if + in recitation, B- if neutral, C+ if -

ETC. (basically adjusted 90-100 is A, 80-90 is B, 70-80 is C, 60-70 is D, and below 60 is F, subject to the recitation grade which may or may not have an impact as explained above)

**(NOTE: THE PRECEDING COMPLETELY DETERMINES YOUR GRADE--THERE IS NO "EXTRA CREDIT," ETC.)**

Brief Course Outline and Reading Assignments (not a substitute for class notes--see the web for guidance and read your book--it is really quite a fun book!).

A CHECKLIST OF HOW TO DO WELL IN THIS (or any) COURSE:

1) How much time do you invest in this course? [The average student who does not naturally take to economics but still gets a grade of B or better spends nine hours *outside* of the classroom].

2) Do you come to class? [This is more valuable than is the case for some courses...anecdotes make the material more understandable].

3) Do you come prepared? [Stay current. If you are studying Chapter 3 when the lecture is on Chapter 6, it will harm your performance. While not needing perfection, do the best you can to have read the material being covered in lecture].

4) When do you study for this class? [Break up your study time, to keep it fresh. Don't study when you are tired].

5) How do you study? [Study by doing. Work problems, like in physics, chemistry, or engineering. Go back and forth between problems, examples, and text].

6) Do you work for understanding? [When you get a problem right, sometimes by trial and error, go back over the problem and see why the method you employed worked].

7) Can you explain it to others? [If you can explain it to others, perhaps in a study group, you will *really* know it].

8) Have you worked on your self-confidence? [Before you look up the answer to a question, assign a "confidence factor" to your work...on a scale of 1-10 how confident are you that you are right? Be honest with yourself. The more often you prove yourself right, the less test anxiety you will have].

9) Do you cram for tests? [Don't. It will not work in economics, and perhaps not in any analytical field. Study regularly, with greater review being the only difference in your study habits prior to a test. Cramming for tests leads to fatigue, test anxiety, and stupid mistakes. Get plenty of sleep. Treat being in school as having a full-time job...put in your time regularly and you won't need or want to cram].

A rough guide to topics we will cover (see the website "printable" handout for detailed lecture guides and for specific readings tied to lecture notes):

## I. ECONOMIC WAY OF THINKING--HOW DOES THE WORLD "WORK?"

What is "economics?" How people make decisions made necessary by the fact of scarcity--Principles:

- \*people face tradeoffs,
- \*opportunity costs are only relevant cost concept,
- \*rational people think "at the margin," and
- \*people respond to incentives.

How people interact--Principles:

- \*trade generally makes everyone better off (trade creates wealth, and is voluntary),
- \*markets have desirable properties,
- \*government can sometimes--though more rarely than most people realize--improve on market outcomes.

How the economy as a whole works--Principles:

- \*income and output are identical,
- \*too much money causes inflation,
- \*unforeseen policies can affect the economy in the short run.

Science, "realism," and models. Logical pitfalls (fallacy of composition, post hoc ergo propter hoc, wishful thinking and secondary effects or law of unintended consequences). Scarcity implies choice which, in turn, implies opportunity costs. The "market" as one means of solving problems stemming from scarcity (spontaneous order versus hierarchy). The central economic questions we will examine are What, How, For Whom, (and When)? Consumer and firm goals and the spontaneous coordination provided by the competitive market. Property rights and incentives. Positive and normative economics (benefits and costs and their distribution). Efficiency (Pareto, Kaldar) and equity. Why economists disagree (theory, estimates, and values). The gains from trade and *comparative* advantage. Introductory illustrations: Determinants of the number of children to have, minimum wages, progressive income taxation, international trade. Graphs: production possibility frontier and circular flow. Philosophical issues (What is "value?").

## II. DEMAND AND SUPPLY--THE BASICS

Demand, Supply, and Market Equilibrium (maximizing and coordinating). The "shifts" versus "movements along" confusion clarified. From individual to market demand. Price controls. Elasticity. Government policy applications (farm policy, rent controls, minimum wages, tax incidence, prohibition of goods). One reason why some don't like supply and demand. Intertemporal resource allocation and the price system: interest, compounding, discounting and the role of entrepreneurs and speculators.

## III. DEMAND AND SUPPLY--EFFICIENCY AND WELFARE

Consumer surplus, producer surplus, and the gains from voluntary trade. Demand curve as willingness-to-pay. Supply curve as marginal cost, hence willingness-to-sell. Consumer surplus and the paradox of value. A rationale for income transfers? Application: Incidence and welfare cost of taxation. Application: International trade. Theory of comparative advantage. S&D analysis of trade and tariffs. Developing countries. Exchange rates and the international financial system (probably will not get to much on this).

#### IV. CONSUMER CHOICE AND DEMAND

Note: we will do this material a bit differently from the book. Preference assumptions. Utility and the law of diminishing marginal utility. Rule of rational life. Can consumers do this (animal experiments)?

#### V. PUBLIC ECONOMICS

Externalities, public goods (including income distribution), common resources, Public choice theory: Will government do better? *New theoretical material here (on public goods provision and optimal governmental institutions...not in any book, yet!)* The market "wins"--but remember that giving the most of what people want (apart from the public goods problem raised) does not elevate those preferences... Public policy: car regulations, education, housing, cigarettes. Optimal tax systems.

**(first midterm--after this material--the date will be voted on in class, with an eye to "optimizing" the date selected)**

#### VI. PRODUCER CHOICE AND SUPPLY

**Introduction:** Business organization. The production function, marginal products, and the law of diminishing marginal product. Time periods. Costs: Fixed, Variable, Total, Average, and Marginal.

**A.** The firm in perfect competition and supply. The abstract model assumptions. Three cases: profits, losses, shut-down. Market supply. Time periods, again. Efficiency versus equity again.

**B.** The monopoly firm: definition and bases. When marginal revenue is not equal to price. Equity and efficiency implications fo monopoly and public policy (regulation). Price discrimination.

**C.** Other market structures--oligopoly and monopolistic competition (we will go light on this--see class notes)

**(second midterm--rather late in course--will also be voted on, but usually in the 2nd week prior to the end of the semester)**

#### VII. INPUT MARKETS, INCOME DISTRIBUTION, SOCIAL ISSUES

Marginal productivity theory. Compensating differentials. Discrimination. Human capital. Land, natural resources, and "economic rent." Capital, interest, and profits. Inequality and poverty. Environmental and international trade issues.

**(Final exam: Tuesday May 6th, 10:30am-1:00pm, in our regular classroom)**