Course Description

The economic interactions among consumers and firms take place within the framework of the social institutions (markets, governments, families, etc.) that societies have developed to allocate their resources and distribute their goods. Within this framework, consumers and firms do as well as they can subject to the constraints that they face (i.e., constrained optimization). Constrained optimization is the foundation of the theories of choice we'll develop for both the consumer and the firm. The separate choices of all the individual consumers and firms are coordinated by some equilibrating mechanism (i.e., prices and quantities adjusting in competitive markets until supply equals demand). Equilibrium analysis is the foundation of the theories we'll develop to explain how economic agents interact.

An emphasis will be placed on model building (theories). Constrained optimization and/or equilibrium analysis will be the basic assumption(s) in those theories. For example, our theory of the competitive firm will assume that the firm attempts to maximize its profits subject to the constraints imposed upon it by technology and prices.

Don't expect to learn the "truth" about how the economy really works. Such an animal does not exist. Rather, expect to learn the process of model building and how it can be used to help us understand the behavior of economic agents and institutions. Economic theories change and evolve over time. There is no such beast as a true theory -- only theories not (yet) disproven.

Why do we study economics? An understanding of economics gives us the ability to understand the implications of our current institutions, possibly leading to changes in those institutions to increase the welfare of society. We can, for example, use government policy to affect the levels of pollution, national defense and consumer goods in our society. However, whether a particular policy will increase (or decrease) society's welfare is a normative issue. There are usually a lot of opposing opinions. So, besides trying to develop positive theories of economic behavior, we will also consider criteria (efficiency and equity) that societies might use to determine whether the adoption of a given economic policy is a good or bad idea.

Prerequisites

Principles of Economics (Econ 201 and 202) and the mathematical prerequisite (Math 107/108 or Math 130.) The course material requires a knowledge of basic algebra and simple calculus. I do not recommend that you take the course unless you have fulfilled the prerequisites.
Textbook and Workbook


This is a brand new text and I think it will prove to be an excellent text for Econ 407. I also like the workbook. My lectures will follow the text (an experiment for me) with a considerable amount of lecture time devoted to doing problems at the end of each chapter and doing problems from the workbook. Since it's a new book, any feedback you can give me on the book and the workbook will be greatly appreciated.

Workload

I hope to cover approximately one chapter a day. Ideally, read the appropriate chapter before I lecture on it (you have to read 'em anyway) and for each chapter plan on some time to do the chapter review questions and workbook. I'll also hand out a set of review questions before each exam. For each set of review questions that I hand out, you can hand in one question to be graded. These assignments are optional and just for practice; the grade won't count. However, there is a good chance some of these questions will appear on the corresponding exam.

Grading

There will be three course exams. The last course exam will be given during the finals period. The best two of the exam grades will each constitute 50% of your course grade. You can, therefore, choose to not take one of the exams but note that I do not give make-up exams. If you are satisfied with your final grade after the first two exams, you do not have to take the last exam but you do have to keep coming to class. (I'll figure out an "approximate" penalty if you disappear after the second exam.)

"Tentative" Course Outline
(We'll have to see how it goes)

I. Introduction
   A. A Simple micro model: the allocation and pricing of apartments in Boulder
   B. Microeconomics
   C. Theories and models

II. A Simple Model of the Economy with no Production
   A. Basic Consumer Theory
      Chap 2  1. the budget constraint
      Chap 3  2. preferences
      5.1     3. optimal choice
   B. Exchange and efficiency
      Chap 28-28.3 1. trade and efficiency
      Chap 9-9.4 and 2. competitive markets, equilibrium, and efficiency
      Chap 28.3-
III. Adding Production to our Model of the Economy

Chap 18  A. Technology
Chap 19-19.5  B. The Basics of profit maximization for the competitive firm
Chap 29  C. Production: competitive markets, equilibrium and efficiency

IV. Consumer Theory in More Detail

Chap 4-6  A. The individual's demand functions
Chap 9-10  B. The individual's supply functions for factors of production
Chap 16  C. Market Demand

Chap 17  V. Market equilibrium: examples

VI. The Theory of the Firm in more Detail

Chap 19  A. Profit maximization
Chap 20-21  B. Cost minimization
Chap 22  C. The individual firm's supply function(s)
Chap 23  D. Industry supply

Chap 24  VII. Markets: examples

VIII. Monopoly and Ologopoly Behavior

Chap 25  A. Monopoly
Chap 26  B. Ologopoly

IX. Market Failures

Chap 31  A. Externalities
Chap 32  B. Public Goods
C. Monopoly Power

Chap 30  X. Welfare Economics