ECONOMICS 3070
Spring 1996
INTERMEDIATE MICROECONOMIC THEORY
PROFESSOR J. KRUSE

Office: Econ 11
Office Hours: 10:00-11:00 T Th
Phone: 492-8736

Time: 11:00-12:15 T Th
Prerequisite: Math 107, 108 or equivalent
Place: Econ 119
Required text: Intermediate Microeconomics, A Modern Approach
Third Edition, by Hal R. Varian

The goal of this course is to prepare you with the needed foundation in microeconomic theory to understand the underlying assumptions, strengths and weaknesses of the theories used in your upper division applied courses. In presenting this material to you the instructor recognizes that differences in cultural background may lead to different learning styles. Consequently the material and intuition will be presented in a variety of ways to give all students an opportunity learn this important foundation material.

Grading Policy: Each student’s course grade for Economics 3070 will be determined using the following basis:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm 1</td>
<td>100</td>
</tr>
<tr>
<td>Midterm 2</td>
<td>100</td>
</tr>
<tr>
<td>Final (Comprehensive)</td>
<td>100</td>
</tr>
<tr>
<td>Class activity</td>
<td>50</td>
</tr>
</tbody>
</table>

Minimum Percentage for each letter grade: The following table lists the minimum percentage score necessary to achieve each letter grade. I will not raise the minimum, but do reserve the right to lower the minimum requirements.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum total points (derived from the sum of three exam scores and the class activity score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>322 (92%)</td>
</tr>
<tr>
<td>A-</td>
<td>315 (90%)</td>
</tr>
<tr>
<td>B+</td>
<td>308 (88%)</td>
</tr>
<tr>
<td>B</td>
<td>280 (80%)</td>
</tr>
<tr>
<td>B-</td>
<td>273 (78%)</td>
</tr>
<tr>
<td>C+</td>
<td>266 (76%)</td>
</tr>
<tr>
<td>C</td>
<td>245 (70%)</td>
</tr>
<tr>
<td>C-</td>
<td>238 (68%)</td>
</tr>
<tr>
<td>D</td>
<td>210 (60%)</td>
</tr>
</tbody>
</table>
Class activity includes announced quizzes and homework assignments, unannounced in-class markets. There will be at least eight of these. You are allowed to drop the two lowest scores. Attached are two coupons that allow you to turn in an assignment or take a quiz late for whatever reason including illness, natural disasters or unnatural disasters. Any late assignments turned in without a coupon will not be graded. All assignments are due at the beginning of class. Coupons are not transferable.

Make-up Exams: Each student is expected to take all of the exams and quizzes at the designated time and place. Students who miss any exam without a university accepted excuse will receive a grade of zero for the missed exam. MAKE UP EXAMS WILL NOT BE GIVEN. The final exam will assume all point values of exams that were missed with a university accepted excuse. A make-up exam will be given to those students who miss the final exam and do have a university-accepted excuse. Students who miss an exam must provide a signed written statement explaining the reason why they missed the exam within one week of the exam. Otherwise, a zero will be awarded.

Important dates:
2-20 EXAM I
4-9 EXAM II
5-14 8:30 a.m. to 10:30 a.m. FINAL EXAM (comprehensive)
Course Outline for Econ 3070

I. Introduction - The Competitive Equilibrium Model

A. Demand, Supply and Competitive Equilibrium
   1. The Meaning of Equilibrium (1.1-1.6, 1.11, Math Appendix A.1-A.8)
   2. Arbitrage
   3. Solving Linear Demand and Supply Functions for Competitive Equilibrium (16.1-16.5)

B. Taxes, Subsidies and Competitive Equilibrium (16.6)
   1. Introducing a Tax to the Competitive Equilibrium Model - Graphically

C. Elasticity Measures (15.5-15.8)
   1. ARC Formula and Point Formula
   2. Income Elasticity
   3. Own Price Elasticity
   4. Cross Price Elasticity

II. Consumer Choice Theory

A. Introduction to the Consumer Choice Problem
   1. The Subjective Side: Consumer Tastes
   2. The Objective Side: Prices and Income
   3. The Idea of the Consumption Space
      a. Two good Case
      b. N good Case

B. The Budget Set (Ch 2)
   1. Defining the Affordable Set
   2. Geometry of the Budget Line
      a. Intercepts
      b. Slope
   3. Effect of Income and Price Changes
   4. Taxes, Subsidies and Rationing

1Book sections listed in parentheses are for Varian
C. Preferences and the Utility Function
   1. Preference Theory-The Five Basic Assumptions (Axioms) (Ch 3)
   2. Indifference Curves and the Five Axioms
      a. Marginal Rate of Substitution
      b. Perfect Substitutes, Perfects Complements
   3. Representation of Preferences with a Utility Function (Ch 4)
      a. Marginal Utility
      b. Relationship Between MRS and the Marginal Utilities
      c. Utility functions that represent perfect complements, perfect substitutes, quasilinear preferences, Cobb-Douglas preferences.

D. Optimal Choice (Ch 5)
   1. Identifying the Optimal Choice Using the Budget Line and Indifference Curves
   2. Comparative Statics on Optimal Choice (Ch 6)
      a. Income Expansion Path and Engel Curve
      b. Price Offer Curve and Demand Curve
      c. Normal and Inferior Goods
   3. Slutsky Decomposition of a Price Change (Ch 8)
      a. Substitution Effect & Income Effect
      b. Normal, Inferior and Giffen Goods
      c. Hicksian Decomposition v. Slutsky
      d. Algebraic Slutsky Decomposition

E. Consumption from an Endowment (Ch 9)
   1. Budget Line
   2. Net Demands
   3. Price Offer Curve
   4. Applications:
      a. Labor-Leisure Model (9.8)
      b. Intertemporal Choice (Ch 10)
         i. present value and discounting

F. Expected Utility (Ch 12)
   1. Probabilities and Expected Value
   2. Risk and Expected Utility
   3. Application: Lottery Tickets and Insurance

III. Theory of the Firm and Market Structure

A. The Production Function (Ch 17)
   1. Assumptions
   2. SR v LR
   3. Marginal Product
   4. Isoquants
   5. Returns to Scale
B. Profit Maximization (Ch 18)
   1. Short Run
   2. Long Run
   3. Factor Demand Curves

C. Cost Minimization and the Cost Function (Ch 19)
   1. Short Run
   2. Long Run
   3. The Total and Average Cost Curves (Ch 20)

D. Competitive Profit Maximization and Supply (Ch 21)
   1. Firm Supply
   2. Industry Supply (Ch 22)
   3. Economic Rents

E. Monopoly (Ch 23)
   1. Market Power
   2. Profit Maximization of the Monopolist

F. Oligopoly (Ch 25)
   1. Cournot Model (25.6)
   2. Bertrand Model (25.9)
   3. Collusion (25.10)

IV. General Equilibrium and Welfare Economics

A. Introduction to General Equilibrium without Production (Ch 27)
   1. Two persons with endowments
   2. Edgeworth Box
   3. Walrasian Equilibrium

B. Welfare Implications of Competitive Equilibrium
   1. Gains from Trade - Consumer and Producer Surplus (Ch 14, 21.7)
   2. Geometric Representation and Calculation of CS and PS for linear demand and supply
   3. Connection between Maximizing Gains from Trade and Pareto Efficiency (16.9)
   4. Welfare Effects of a Tax (16.6-16.8)
   5. Welfare Effects of Monopoly v. Competition (23.5, 16.9)
   6. Externalities and Public Goods (Ch 30 and 31)