AREC 580:
Applied Microeconomic Theory
Fall 2012
8-9:15 am TR, C363 Clark Building

Professor: Andrew Seidl
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Office hours: 9:30-11:30 am TR and by appointment

Prerequisite: ECON 306 or equivalent, Graduate standing, Grounding in differential calculus.

Course Description: Introduction to the development and use of mathematical models in modern microeconomics, including choices and demand, production and supply, and market structures and failures. Students evaluation will be based upon (two) homework problem sets (15% of final grade each) and (two) examinations (30% midterm; 40% final).

Course Objectives:
Upon successful completion of this course, students will be able to...
- apply basic optimization techniques to solve simple consumption and production problems;
- use both graphical and mathematical analysis to describe the basic tenets of choice theory and demand analysis;
- use both graphical and mathematical analysis to describe the basic tenets of production, short and long-run costs, supply, and profit maximization;
- use consumer and producer theory to illustrate the emergent outcomes of different market structures and their relative efficiency and welfare consequences in a partial equilibrium framework.


Anticipated Schedule of Course Material
20 August, 2012: Week 1
- Ch 1 & 2: Economic Models and Mathematics for Microeconomics

27 August, 2012: Week 2
- Ch 2: Mathematics for Microeconomics

3 September, 2012: Week 3
- Ch 3: Preferences and Utility
10 September, 2012: Week 4
  • Ch 4: Utility Maximization and Choice  
    (Problem Set #1: Due COB Thursday)

17 September, 2012: Week 5
  • Ch 5: Income and Substitution Effects

24 September, 2012: Week 6
  • Ch 6: Demand

1 October, 2012: Week 7
  • Review, synthesis and Midterm examination

8 October, 2012: Week 8
  • Ch 9 & 10: Production Functions and Cost

15 October, 2012: Week 9
  • Ch 11: Profit Maximization
  • Ch 12: Partial Equilibrium in a Competitive Market

22 October, 2012: Week 10
  • Ch 13: General Equilibrium and Welfare

29 October, 2012: Week 11
  • Ch 14: Monopoly  
    (Problem Set #2: Due COB Thursday)

5 November, 2012: Week 12
  • Ch 19: Externalities and Public Goods

12 Nov-7 December: Weeks 13-15
  • Correcting market failure, measures of welfare change, policy instruments, policy  
    evaluation, and other selected topics.  
  • Synthesis, review

12 December 2012 (Wednesday): Final Examination
  • 9:40-11:40 am