Microeconomics: Theory and Applications
B30.3335.01
3 credits. Ph.D. core course. Fall 2006
Wednesdays, 9 a.m. - noon, KMC 8-191.
Prof. Roy Radner

This course satisfies the core requirement in microeconomic theory for Stern doctoral students, and is especially designed for those whose programs do not include advanced courses in economic theory. It emphasizes concepts and techniques of microeconomic analysis that are likely to be useful in the students’ doctoral dissertation research. We examine a number of current research issues in accounting, information systems, management and marketing (and possibly other areas, depending on the students enrolled), and in each case we explore the relevant microeconomic theory.

Textbook: R. Preston McAfee (2005), Introduction to Economic Analysis, http://intro.mcafee.cc, cited in the syllabus as RPM, with section numbers. This is an “open access” publication, which can be downloaded from the indicated website without charge. Copies of this book will be distributed at the first meeting of the class. In past years I have used Varian (2003). References to this textbook are also given in the syllabus, as “Supplementary Readings” (Suppl.), and are cited as HRV. For a more advanced treatment, see (MasColell et al, 1995. For a more complete introduction to game theory, see (Dutta, 1999).

Notes:
1. The research articles listed in the outline are illustrative; some may not be assigned for thorough study, and are designated “Suppl.” Most of the readings will be distributed in a coursepack at the beginning of the semester. Other references may be added and distributed during the semester.
2. The textbook will be supplemented by notes to be distributed (denoted by RR).
3. The course grade will be based on homework exercises (35%), a midterm examination (25%), and a final examination (40%).

Outline

1. Market Demand and Elasticity. Tyagi, 1999; RPM, 1, 2.1.1, 2.4.1, 6.5.1-3. Suppl: HRV, Ch . 1, Ch. 15, Ch. 24 ((pp. 419-425).

2. Pricing and Surplus. Bakos and Brynjolfsson, 1999; RR, Notes on Welfare. Suppl; HRV, Ch. 14 (225-254);
3. **Competitive Equilibrium.** RPM, 2.1.2, 2.2-5; RR, Notes on Welfare. Suppl: Bakos and Brynjolfsson, 2000; HRV, Ch. 16.


5. **Game Theory.** Dewan *et al*., 1995; RR, Notes on Noncooperative Game Theory, Sec. 2; RPM, 7.1. Suppl: RR, Notes on Cournot Equilibrium; Radner, 2001; HRV, Ch. 28.


7. **Agency and Compensation.** Basu *et al*, 1985; Pfeffer, 1998; RR, Notes on Noncooperative Equilibrium, Sec. 3; Radner, 1987, Sections 4, 6 – 8; RPM, 7.5 through 7.5.2. Suppl: Pearce *et al*, 1985; Lal and Srinivasan, 1993; HRV, Ch. 36.

8. **Choice under Uncertainty and the Value of Information.** Connolly and Thorn, 1987; Marschak and Radner, 1972, Chs. 1,2. Suppl: HRV, Ch. 12; Radner and Stiglitz, 1983.

9. **Games with Incomplete Information.** Radner. 1987, Sec. 5; RR, Notes on Noncooperative Equilibrium, Sec. 4; Radner, 1987, Sec. 5; RPM, 6.6.

10. **Neoclassical Consumer Choice.** RPM, 5.1; RR, Notes on Welfare, Sec. 3. Suppl: HRV, Chs. 2-6;


12. **Motivation, Perception, and Rationality.** Stevens and Fiske, 1995; Prelec and Loewenstein, 1998; McFadden, 1999; Radner, 2000; Radner and Sundararajan, 2005.

**References**


