ECO 6385
Microeconomic Theory II.
Spring, 2010.

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Objective: This is the second course in the core microeconomic theory sequence for students in the first year of the Ph.D. program in economics. The aim of the course is to train students in the art of theoretical reasoning and to expose them to fundamental techniques and concepts in modern microeconomic theory. In particular, this course will focus on topics related to interactive behavior and economic institutions such as game theory, partial equilibrium analysis, market competition and information economics.

Pre-requisite: ECO 6384.

Textbook: *Microeconomic Theory* by Andreu Mas-Colell, Michael D. Whinston and Jerry R.Green, Oxford University Press, 1995.
    ISBN: 0-195-07340-1.

Home Assignments: Home assignments will be given out from time to time. It is expected that students will work on these assignments on their own and turn them in before the due date. Solutions will be discussed in class.

Examinations: There will be one midterm and one final exam. Both exams are "in-class" and "closed book".

Evaluation: Final grade will be assigned on the basis of performance in home assignments (20%), midterm exam (40%) and final exam (40%). No incomplete grades will be assigned except for cases of medical emergency during the final exam.

Tentative List of Topics:

I. Choice Under Uncertainty: Expected Utility Theory; Money Lotteries and Risk Aversion; Measures of Risk Aversion; First and Second Order Stochastic Dominance.

Material: Chapter 6 (6.A - 6.D).

II. Game Theory: Extensive and Normal form representations; Strategies; Mixed Strategies; Dominant and Dominated strategies; Nash Equilibrium; Incomplete Information Games: Bayesian-Nash equilibrium; Application to Auctions; Dynamic Games: Sequential Rationality, Backward Induction and Subgame Perfection; Application: Bilateral Bargaining; Beliefs and Sequential Rationality: Perfect Bayesian equilibrium; Sequential Equilibrium.

Material: Chapter 7, Chapter 8 (8.A, 8.B, 8.D, 8.E), Chapter 9 (9.A - 9.C).

III. Competitive Markets: Competitive Equilibrium & Pareto optimality; Partial Equilibrium Analysis; Welfare analysis; Efficiency of competitive markets; deadweight loss of taxation; Free entry and long run equilibria.

Material: Chapter 10.

IV. Market Power: Monopoly & welfare loss; Price Discrimination in monopoly, Two-part tariff; Static oligopoly: Bertrand, Cournot, capacity constraints & product differentiation; Entry; Repeated interaction and collusion, Infinitely Repeated Games and Folk Theorem.

Material: Chapter 12 (12.A - 12.E), Appendix A.

V. Adverse Selection, Signaling and Screening: Asymmetric information and adverse selection, market failure; Signaling: separating and pooling equilibria; Refinement of beliefs (Intuitive Criterion); Screening mechanisms.

Material: Chapter 13

VI. The Principal-Agent Problem: Moral hazard and risk sharing, Hidden Information and screening; Revelation principle.

Material: Chapter 14 (14.A - 14.C).

VII. Public Goods and Externalities. [If time permits]

Material: Chapter 11.

Disability Accommodations: Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214-768-4557) to verify the disability and establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4.)

Religious Observance: Religiously observant students wishing to be absent on holidays that require missing class should notify their professors in writing at the beginning of the semester, and should discuss with them, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)

Excused Absences for University Extracurricular Activities: Students participating in an officially sanctioned, scheduled University extracurricular activity will be given the opportunity to make up class assignments or other graded assignments missed as a result of their participation. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up the work. Disability Accommodations: Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for Students with Disabilities (214-768-4557) to verify the disability and establish eligibility for accommodations. They should then schedule an appointment with the professor to make appropriate arrangements. (See University Policy No. 2.4.)