AREC/ECON 706: Microeconomic Analysis II
Fall 2017
Tuesday and Thursday, 12:30–1:45

Instructor: Dr. Stephan Kroll
Office: B313 Clark Bldg.
Phone: (970) 491-0887
Fax: (970) 491-2067
E-mail: Stephan.Kroll@colostate.edu
Office Hours: Wednesday 1-2 or by appointment.
Class Website: https://sites.google.com/site/706fall2017
Classroom: Eddy 11
Prerequisites: Econ 501 and 606; sufficient math background to understand and construct formal proofs.
Texts:

> R. Gibbons: Game Theory for Applied Economists, 1992 (Required)
> G.A. Jehle and P.J. Reny: Advanced Microeconomic Theory, 3rd ed., 2011 (Required)
> A. Mas-Colell, M.D. Whinston, and J.R. Green: Microeconomic Theory, 1995 (Recommended)
> Other papers and book chapters will be posted on the Class Website.

Course Objective:

The course is concerned with advanced topics in neoclassical microeconomic theory including game theory, adverse selection, principal-agent problems, social choice theory, social welfare functions, auctions, incentives, and mechanism design. Presentation will be theory-based backed by example when possible. Theory in microeconomics necessarily incorporates mathematical proofs, and it is assumed that you possess (or will quickly accumulate) basic understanding of this methodology from your previous classes and personal study. A goal of the class is to finish preparing you for the graduate comprehensive qualifying exam in microeconomics, dissertation work, and reading and understanding mathematical proof-based microeconomics in economic literature. Problem sets and exams are meant to be difficult, to extend beyond what is done in lectures, and to help you to continue to develop skills as independent scholars of economics.

You are encouraged to form study groups for the purposes of problem sets, though exams will be completed individually. Please note that not all the material that you will need to be successful on problem sets, exams, and the comprehensive exam will be presented formally in class. Allocate your time accordingly and make sure that you are completing readings in addition to simply working on what you will turn in for credit.

Please be courteous and respectful to others in the classroom and refrain from texting or other uses of your electronic devices that are not related to class.

Grading:

Midterm Exam (30%)
Final Exam (30%)
Problem Sets (40%)

Final grades will be based on the following grade scale based on final percentage:

95-100 A+   80-84.9 B+   <70 C range or lower
90-94.9 A   75-79.9 B
85-89.9 A-   70-74.9 B-

(tentative) Course Outline:

	Tuesday	Thursday		Gibbons	Jehle/Reny
Week 1 (8/22 and 8/24)	1	2	Game Theory: Static/Complete	1	7
Week 2 (8/29 and 8/31)	3	4			
Week 3 (9/5 and 9/7)	5	6	Dynamic/Complete	2	7
Week 4 (9/12 and 9/14)	7	8	Dynamic/Complete. Market Power Revisited: Cournot v. Bertrand v. Stackelberg v. Monopoly	Papers, parts of Gibbons and J/R 4	
Week 5 (9/19 and 9/21)	9	10	Oligopoly with capacity constraints	Papers	
Week 6 (9/26 and 9/27)	11	12	Static/Incomplete	3	7
Week 7 (10/3 and 10/5)	13	14	Dynamic/Incomplete	4	7
Week 8 (10/10 and 10/12)	15	16	Game Theory: Ten Treasures and Ten Intuitive Contradictions	Paper	
Week 9 (10/17 and 10/19)	17	18 (Midterm Exam)	Catch-up and Exam		
Week 10 (10/24 and 10/26)	19	20	Externalities and Public Goods	Papers	
Week 11 (10/31 and 11/2)	21	22	Auctions, Incentives and Mechanism Design	Parts of Gibbons, first chapters in Krishna, additional papers	9
Week 12 (11/7 and 11/9)	23	24			
Week 13 (11/14 and 11/16)	25	26			
TG Break (11/21 and 11/23)	--	--			
Week 14 (11/28 and 11/30)	27	28	Adverse Selection and Principal Agent	Papers	8
Week 15 (12/5 and 12/7)	29	30	Social Choice Theory and Welfare Functions		6
Finals Week	Wednesday, Dec. 13, 6:20-8:20pm	Final Exam (cumulative; in the regular classroom)			