ECON 7050: Advanced Economic Theory

Fall 2013

Instructor: Professor Yongmin Chen

Office: Econ 112

Class Time and Location: 2:00-2:45 p.m. TR; ECON 117

Office Hours: 3:30-5:30 PM, Tuesday; 9:30-10:30 AM, Thursday

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<u>Course Description:</u> This is the third graduate course in microeconomic theory. It contains several important topics that were not covered in the two previous microeconomic theory courses. It will also discuss additional topics of interest.

<u>Course Materials</u>: The textbook is *Microeconomic Theory*, by Mas-Colell, Whinston, and Green. Other reading materials, including articles, are indicated below or will be added during the semester.

<u>Grading</u>: Grades are based on two exams (40% each) and a modeling exercise (20%). You are encouraged to form study groups to discuss homework and lecture materials. In the modeling exercise, you will be asked to develop a simple model to describe and analyze a microeconomic problem. It is **very important** for you to solve all the problems in the problem sets. You are encouraged to form study groups to discuss problem sets and assigned readings.

<u>Lecture Topics</u>: Below is a tentative plan for the lectures. Changes will be announced in class during the semester and you are responsible for updating the information.

Topic 1 Monopoly and Imperfect Competition

Readings: Ch. 12

Problem Set 1: 12.B.4, 12.B.5, 12.B.9, 12.C.3, 12.C.9. Problem Set 2: 12.C.18, 12 D.2., 12 E.4., 12 E.7, 12G.1.

Topic 2 Adverse Selection, Signaling, and Screening

Readings: Ch. 13

Problem Set 3: 13.B.2, 13.B.4, 13.C.1, 13.C.5.

Topic 3 The Principal-Agent Problem

Readings: Ch. 14

Problem Set 4: 14.B.4, 14.C.3, 14.C.7, 14.C.8.

Starting the Modeling Exercise: Develop a simple model to describe and analyze a microeconomic problem. I will discuss the requirements in class.

Exam 1.

Topic 4 Theory of the Firm

Readings:

- Coase, R., "The Nature of the Firm," Economica (1937), 386-405.
- Williamson, O.E., The Economic Institutions of Capitalism, 1985, New York: Free Press.
- Grossman, S. and O. Hart, "The Costs and Benefits of Ownership", JPE (1986), 691-719.
- Hart, O., "The Market Mechanism as an Incentive Mechanism", BELL (1983), 366-382.
- Binmore, K., A. Rubinstein, and A. Wolinsky, "The Nash Bargaining Solution in Economic Modeling." RAND (1986).

Topic 5 Exclusionary Contracts

- 1. Contracts as a Barrier to Entry
- 2. Naked Exclusion
- 3. Recent Developments

Readings:

- Aghion, Philippe and Patrick Bolton, "Contracts as a Barrier to Entry," AER, 77(3), 1987.
- Rasmusen, Eric, J. Mark Ramseyer, and John Wiley, "Naked Exclusion," AER, 1991.

Additional Readings:

- Chen, Yongmin and David Sappington, "Exclusive Contracts, Innovation, and Welfare," American Economic Journals: Microeconomics, Vol. 3, 194-220, 2011.
- Fumagalli, Chiara and Massimo Motta, "Exclusive Dealing and Entry when Buyers Compete," AER, 96(3), 2006.
- Greenlee, Patrick, David Reitman, and David Sibley, "An Antitrust Analysis of Bundled Loyalty Discounts," International Journal of Industrial Organization, 2008.

- Segal, Ilya and Michael Whinston, "Exclusive Contracts and the Protection of Investments," RAND, 2000.
- Segal, Ilya and Michael Whinston, "Naked Exclusion: Comment," AER, 2000.
- Spier, Kathryn and Michael Whinston, "On the Efficiency of Privately Stipulated Damages for Breach of Contract: Entry Barriers, Reliance and Renegotiation," RAND, 1995.
- Simpson, John and Abraham Wickelgren, "Naked Exclusion, Efficient Breach, and Downstream Competition," AER, 2007.

Topic 6 Differential Pricing

Readings:

- Aguirre, Inaki, Simon Cowan, and John Vickers. 2010. "Monopoly Price Discrimination and Demand Curvature." AER: 1601-15.
- Chen, Y. and M. Schwartz. 2103. "Differential Pricing When Costs Differ: A Welfare Analysis". Working paper.

Topic 7 Economics of Search

- 1. Price Search in Homogeneous Product markets
- (1) Salop and Stiglitz's "Bargains and Ripoffs"
- (2) Varian's model of sales
- (2) Diamond's Paradox
- (3) Stahl's model of sequential search
- 2. Product Search in Differentiated Markets and on the Internet
- (1) Wolinsky's model
- (2) Paid Placement: Advertising and Search on the Internet

Readings:

- Diamond, Peter. 1971. "A Model of Price Adjustment." Journal of Economic Theory, 3, 156-168.
- Salop, S. and J. Stiglitz, "Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion", RES (1977), pp. 493-510.
- Stahl, Dale O. 1989. "Oligopolistic Pricing with Sequential Consumer Search." AER, 700-712.
- Varian, Hal. 1980. "A Model of Sales." American Economic Review, 70, 651-659

- Wolinsky, A. 1986. "True Monopolistic Competition as a Result of Imperfect Competition," QJE, 101: 493-511.
- Chen, Y. and C. He, 2011. "Paid Placement: Advertising and Search on the Internet," Economic Journal, 121: F309-F328.

Additional Readings:

- Armstrong, M. and Y. Chen, "Inattentive Consumers and Product Quality," Journal of the European Economic Association, (2009), pp. 411-422.
- Armstrong, M, Vickers, J, and Zhou, J., "Prominence and Consumer Search", RAND, 2009.
- Athey, S. and G. Ellison, 2011, "Position Auctions with Consumer Search", QJE, 126, 1213-1270.
- Bagwell, K. and G. Ramey, "Coordination Economies, Advertising, and Search Behavior in Retail Markets", AER (1994), 498-517.
- Chen, Y. and T. Zhang, "Equilibrium Price Dispersion with Heterogeneous Searchers," International Journal of Industrial Organization, 2011.
- Reinganum, J., "A simple Model of Equilibrium Price Dispersion", JPE (1979), pp. 851-858.
- Grossman and Shapiro, "Informative Advertising with differentiated products", RES, 1984, 63-81.
- Chen, Y. and R. Rosenthal, "On the Use of Ceiling-price Commitments by Monopolists", RAND (1996), 207-220.
- Baye, Michael and John Morgan. 2001. "Information Gatekeepers on the Internet and the Competitiveness of Homogeneous Product Markets." AER, 91, 454-474.
- Baye, M.R. and J. Morgan. 2004. "Price Dispersion in the Lab and on the Internet: Theory and Evidence." RAND, 35(3), 449-466.
- Burdett, Kenneth and Kenneth L. Judd. 1983. "Equilibrium Price Dispersion." Econometrica, 51, 955-969.
- Janssen, Maarten C. and Jose Luis Moraga-Gonzalez. 2004. "Strategic Pricing, Consumer Search and the Number of Firms." Review of Economics Studies, 71, 1089-1118.

Exam 2

Modeling Exercise.

<u>Reading</u>: Varian, H. "How to Build an Economic Model in Your Spare Time", 1994, updated in 2009.

University Policies

Students with Disabilities

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs can be addressed. Disability Services determines

accommodations based on documented disabilities. Contact: 303-492-8671, Center for Community N200, and http://www.colorado.edu/disabilityservices.

If you have a temporary medical condition or injury, see guidelines at http://www.colorado.edu/disabilityservices/go.cgi?select=temporary.html

Religious Observances

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, Please make your requests to me within the first two weeks of the semester. See full details at http://www.colorado.edu/policies/fac_relig.html

Classroom Behavior

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at http://www.colorado.edu/policies/classbehavior.html and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

Discrimination and Harassment

The University of Colorado at Boulder Discrimination and Harassment Policy and Procedures, the University of Colorado Sexual Harassment Policy and Procedures, and the University of Colorado Conflict of Interest in Cases of Amorous Relationships policy apply to all students, staff, and faculty. Any student, staff, or faculty member who believes s/he has been the subject of sexual harassment or discrimination or harassment based upon race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Student Conduct (OSC) at 303-492-5550. Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at http://www.colorado.edu/odh.

Academic Misconduct

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at http://www.colorado.edu/policies/honor.html and at http://www.colorado.edu/academics/honorcode/