ECON 7050: Advanced Economic Theory

Fall 2015

Instructor: Professor Yongmin Chen
Office: Econ 112
Class Time and Location: 12:30-1:45, TTH; ECON 119
Office Hours: 10:00-11:30 and 3:30-5:00, Tuesday
E-mail: Yongmin.Chen@colorado.edu
http://spot.colorado.edu/~cheny/

Course Description: 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 advanced topics of interest.

Course Materials: 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.

Grading: Grades are based on Exam 1 (35%), Exam 2 (40%) and a modeling exercise (25%). 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 work on and solve all the problems in the problem sets. You are encouraged to form study groups to discuss problem sets and assigned readings.

Lecture Topics: Below is a tentative plan for the lectures. Changes will be announced in class during the semester and you are responsible for updating course 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   **Pass-through and Differential Pricing**
           Readings:

- Weyl, E. Glen and Michal Fabinger. "Pass-Through as an Economic Tool" JPE, 121 (2013): 528-583.
- Chen, Y. and M. Schwartz. "Differential Pricing when Costs Differ: A Welfare Analysis", RAND, 2015

Topic 3   Adverse Selection, Signaling, and Screening
        Readings: Ch. 13
        Problem Set 3: 13.B.2, 13.B.4, 13.C.1, 13.C.5.

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

Exam 1.   Tuesday, October 6

Topic 4   The Principal-Agent Problem
        Readings: Ch. 14
        Problem Set 4: 14.B.4, 14.C.3, 14.C.7, 14.C.8.

Topic 5   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 6   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.

<u>Additional Readings</u>:
- 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.

Exam 2   Thursday, Nov. 19

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

<u>Readings</u>:
- 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.
- Zhou, J. "Multiproduct Search and the Joint Search Effect", AER, 2014.

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.
- Chen, Y. and T. Zhang, "Entry and Welfare in Search Markets", working paper, 2014.
- 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.

Modeling Exercise: Due Sunday, December 13.

Reading: 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 your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Injuries guidelines under the Quick Links at the Disability Services website and discuss your needs with your professor.

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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. For more information, see the policies on classroom behavior and the student code.

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The University of Colorado Boulder (CU-Boulder) is committed to maintaining a positive learning, working, and living environment. CU-Boulder will not tolerate acts of discrimination or harassment based upon Protected Classes or related retaliation against or by any employee or student. For purposes of this CU-Boulder policy, "Protected Classes" refers to race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Individuals who believe they have been discriminated against should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or the Office of Student Conduct and Conflict Resolution (OSC) at 303-492-5550. Information about the OIEC, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be found at the OIEC website. The full policy on discrimination and harassment contains additional information.

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