# **ECON 7050: Advanced Economic Theory**

### **Fall 2017**

Instructor: Professor Yongmin Chen

Office: Econ 112

Class Time and Location: 11:00-12:15, TTH; ECON 119 Office Hours: 1:15-4:45pm, Monday; 12:45-1:45pm, Tuesday

E-mail: Yongmin.Chen@colorado.edu

http://spot.colorado.edu/~cheny/

<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 advanced 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 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.

<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 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 3

# **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.

# **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.

# Exam 2 Tuesday, Nov. 14

### **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) Intermediaries and Consumer Search

## 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.
- Zhou, J. 2014. "Multiproduct Search and the Joint Search Effect", AER.
- Chen, Y. and T. Zhang, 2017. "Intermediaries and Consumer Search," International Journal of Industrial Organization.

### 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 R. Rosenthal, "On the Use of Ceiling-price Commitments by Monopolists", RAND (1996), 207-220.
- Chen, Y. and C. He, 2011. "Paid Placement: Advertising and Search on the Internet," Economic Journal, 121: F309-F328.
- 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.
- 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 17.

<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 your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the <a href="Disability Services">Disability Services</a> website (<a href="www.colorado.edu/disabilityservices/students">www.colorado.edu/disabilityservices/students</a>). Contact Disability Services at 303-492-8671 or <a href="disability-disability

#### **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 the campus policy regarding religious observances for full details.

#### **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 of Conduct.

#### **Discrimination and Harassment**

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 sexual misconduct, discrimination, harassment or related retaliation against or by any employee or student. CU's Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, intimate partner abuse (dating or domestic violence), stalking or related retaliation. CU Boulder's Discrimination and Harassment Policy prohibits discrimination, harassment or related retaliation based on 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 subject to misconduct under either policy should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127. Information about the OIEC, the above referenced policies, and the campus resources

available to assist individuals regarding sexual misconduct, discrimination, harassment or related retaliation can be found at the OIEC website.

#### **Academic Misconduct**

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council (<a href="https://noncolorado.edu">honor@colorado.edu</a>; 303-735-2273). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at the <a href="https://noncolorado.edu">Honor Code Office website</a>.