

ECON 7050: Advanced Economic Theory

Fall 2020

Instructor: Professor Yongmin Chen

Office: Econ 108

Class Time (remote/online): TTH: 11:10-12:25

Office Hours (remote/online): Wednesday: 1:00-5:00 PM

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Course Description: This is the third graduate course in microeconomic theory. It contains several important topics that were not covered in the previous courses. It will also discuss additional contemporary topics in microeconomic Theory. The course aims to help students develop the ability and skills needed for building and analyzing economic models (especially for applied research).

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. I will also make available my lecture notes/slides. These lecture notes/slides and other course material that I create are to be used only by students who are enrolled in the course. You may not reproduce, distribute, or display them without my written permission.

Grading: Grades are based on homework and class participation (40%), an Exam (30%), and a Final Project (30%). Homework assignments are all due at or before 11AM on the indicated due date.

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: Market Power and Imperfect Competition

8/25, 8/27, 9/1, 9/3, 9/8

Required Readings: Ch. 12

Hw1a: 12.B.4, 12.B.5, 12.B.9, 12.C.3, 12.C.9; **due on 9/3**

Hw1b: 12.C.18, 12 D.2., 12 E.4., 12 E.7, 12G.1; **due on 9/10**

Topic 2 Pass-through and Differential Pricing

9/10, 9/15

Required Readings:

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

Hw2: Reviews of (1) and (2), **due on 9/15**. Each review is about 2 pages long,
double spaced.

Topic 3 Adverse Selection, Signaling, and Screening

9/17, 9/22, 9/24, 9/29

Required Readings: Ch. 13

Hw3: 13.B.2, 13.B.4, 13.C.1, 13.C.5; **due 10/1**.

Topic 4 The Principal-Agent Problem and Applications

10/1, 10/6, 10/8, 10/13, 10/15

Required Readings: Ch. 14

Hw4: 14.B.4, 14.C.3, 14.C.7, 14.C.8; **due 10/15**.

Exam Tuesday, Oct. 20.

Topic 5 Incomplete Contracts and Organization Design

10/22, 10/29, 11/3

Required Readings:

- Grossman, S. and O. Hart, "The Costs and Benefits of Ownership", JPE (1986),
691-719.

Additional 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.
- 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).
- Wouter Dessein, Andrea Galeotti, and Tano Santos, “Rational Inattention and Organizational Focus” *AER*, 2016
- Chen, Y. “Promises, Trust, and Contracts.” *Journal of Law, Economics, and Organization*, 2000.

Hw5: Review of Grossman and Hart (1986), **due on 10/29.**

Planning for the Final Project: The project can either

- (i) be a literature review on a microeconomics topic/issue, identifying the main research questions, discussing how they have been studied and the known results, and suggesting directions for future research;

Or

- (ii) propose and analyze a simple microeconomic model to provide a new economic insight.

Topic 6 Vertical Control and Exclusionary Contracts

11/5, 11/10, 11/12, 11/17

1. Vertical Control
2. Contracts as a Barrier to Entry
3. Naked Exclusion
4. Recent Developments

Required Readings:

- (1) Chen, Y. “Oligopoly Price Discrimination and Resale Price Maintenance”, *RAND*, 1999.
- (2) Aghion, Philippe and Patrick Bolton, "Contracts as a Barrier to Entry," *AER*, 77(3), 1987.
- (3) Erasmussen, Eric, J. Mark Ramseyer, and John Wiley, "Naked Exclusion," *AER*, 1991.
- (4) Özlem Bedre-Defolie and Gary Biglaiser, “Contracts as a Barrier to Entry in Markets with Nonpivotal Buyers”, *AER*, 107(7): 2041-2071, 2017.

Additional Readings:

- (5) Chen, Yongmin and David Sappington, "Exclusive Contracts, Innovation, and Welfare," American Economic Journals: Microeconomics, Vol. 3, 194-220, 2011.
- (6) Fumagalli, Chiara and Massimo Motta, "Exclusive Dealing and Entry when Buyers Compete," AER, 96(3), 2006.
- (7) Greenlee, Patrick, David Reitman, and David Sibley, "An Antitrust Analysis of Bundled Loyalty Discounts," International Journal of Industrial Organization, 2008.
- (8) Segal, Ilya and Michael Whinston, "Exclusive Contracts and the Protection of Investments," RAND, 2000.
- (9) Segal, Ilya and Michael Whinston, "Naked Exclusion: Comment," AER, 2000.
- (10) Spier, Kathryn and Michael Whinston, "On the Efficiency of Privately Stipulated Damages for Breach of Contract: Entry Barriers, Reliance and Renegotiation," RAND, 1995.
- (11) Simpson, John and Abraham Wickelgren, "Naked Exclusion, Efficient Breach, and Downstream Competition," AER, 2007.

Hw6:

- (i) Reviews of (1) and (2), **due on 11/5;**
- (ii) Reviews of (3) and (4), **due on 11/12.**

Topic 7 Imperfect Information and Consumer Search

11/19, 11/24, 12/1, 12/3

- (1) Salop and Stiglitz's "Bargains and Ripoffs"
- (2) Diamond's Paradox
- (3) Stahl's model of sequential search
- (4) Wolinsky's model

Required 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.

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.
- 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 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", Economic Journal, 2017.
- Reinganum, J., "A simple Model of Equilibrium Price Dispersion", JPE (1979), pp. 851-858.
- 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.
- Zhou, J. 2014. "Multiproduct Search and the Joint Search Effect", AER.

Hw7: Reviews of Stahl (1989) and Wolinsky (1986), **due 12/1**

Final Project Due: Thursday, 12/11.

University Policies

CLASSROOM BEHAVIOR

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. 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 race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

REQUIREMENTS FOR COVID-19

As a matter of public health and safety due to the pandemic, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements, and public health orders in place to reduce the risk of spreading infectious disease. Required safety measures at CU Boulder relevant to the classroom setting include:

- maintain 6-foot distancing when possible,
- wear a face covering in public indoor spaces and outdoors while on campus consistent with state and county health orders,
- clean local work area,
- practice hand hygiene,
- follow public health orders, and
- if sick and you live off campus, do not come onto campus (unless instructed by a CU Healthcare professional), or if you live on-campus, please alert [CU Boulder Medical Services](#).

Students who fail to adhere to these requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to [Student Conduct and Conflict Resolution](#). For more information, see the policies on [COVID-19 Health and Safety](#) and [classroom behavior](#) and the [Student Code of Conduct](#). If you require accommodation because a disability prevents you from fulfilling these safety measures, please see the “Accommodation for Disabilities” statement on this syllabus.

Before returning to campus, all students must complete the [COVID-19 Student Health and Expectations Course](#). Before coming on to campus each day, all students are required to complete a [Daily Health Form](#).

Students who have tested positive for COVID-19, have symptoms of COVID-19, or have had close contact with someone who has tested positive for or had symptoms of COVID-19 must stay home and complete the [Health Questionnaire and Illness Reporting Form](#) remotely.

ACCOMMODATION FOR 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 [Disability Services website](#). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If

you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website.

PREFERRED STUDENT NAMES AND PRONOUNS

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

HONOR CODE

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website](#).

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION

The University of Colorado Boulder (CU Boulder) is committed to fostering an inclusive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, or protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on the [OIEC website](#).

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, dating and domestic violence, stalking, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

RELIGIOUS HOLIDAYS

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.