ECON4313-001 Industrial Organization

University of Oklahoma, Spring 2021 M/W, 5:45-7pm, Cate Center CCD1 101

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TA Office Hours (Zoom) Tuesday, 4:30-5:30pm and by appointment

Course Description

Industrial organization studies the functioning of markets, focusing on imperfectly competitive markets. We will study the causes and consequences of firms' strategic behavior in such markets, as well as the role of public policies. Our main analytical tools will be microeconomics and game theory. We will complement our theoretical work with empirical evidence from academic research and the popular press, and analyze how the industrial organization theories work in action.

The <u>topics</u> we will study include: pricing strategies (price discrimination, big data and algorithmic pricing, bundling and tie-in sales); competition in static and dynamic settings; collusion and cartels; horizontal mergers; vertical relationships and recent developments involving tech giants (FAAG). Within each topic we will consider the impact of firms' actions on consumer welfare. We will also consider the role of public policies, particularly the US antitrust laws which try to create a balance between the benefits of coordination and consolidation and the detriments of market power. We will discuss various actual antitrust cases relating to the topics we cover, with a few classes devoted to selected cases.

Prerequisite: ECON1113, ECON1123 with a grade of C or better.

Assessment

Your grade will be based on participation (10%), anti-trust cases (15%), an exam (30%) and a research project presentation (45%). Letter grades will be assigned following the schedule (A: 90 and above; B: $80 \sim 90$; C: $70 \sim 80$; D: $60 \sim 70$; F: < 60).

¹Participation is a good citizenship grade – if you are considerate of you classmates in class and are well prepared before interacting with me then you will get the full 10%.

Quiz and exam will be given during class time. There is no final exam. More details about case discussion and project presentation will be laid out later. Problem sets will be assigned on a regular basis. They will not be collected but I strongly recommend that you work on the problem sets. Similar skills are required to answer the exams as to answer the problems sets.

Textbooks

<u>Recommended:</u> (1) Industrial Organization: Contemporary Theory and Practice by Lynne Pepall, Dan Richards, and George Norman, 4th Edition, Blackwell Publishing.

(2) Antitrust Revolution by John E. Kwoka, Jr. and Lawrence White, 7th Edition, Oxford University Press.

Readings

The course outline at the end of the syllabus lists the sections in the textbook which we will cover. The textbook provides important background information and motivation for the topics we will cover, and includes numerous real world examples and applications. It is beneficial for you to read the assigned chapter **before** coming to class to get an overview of what's contained in the chapter.

Additional readings will be listed throughout the semester. In particular, for each chapter, I have assembled a set of *Wall Street Journal* articles as well as questions usually based on 1-2 of these articles. It is important that you learn and practice how to apply the tools and knowledge that you learned in class to these real world problems and applications. Similar skills are required in the tests.

Important Dates

Wednesday, March 24: Exam

Friday, April 16: Last day for Automatic Grade of W for Dropped Course(s)

April 26 and 28: Research project presentation

Canvas

I will use Canvas, in conjunction with e-mails, to distribute lecture outlines, readings, problem sets, etc. I will also post grades on Canvas. Please verify that you can log on to Canvas and access the information for this class.

Class Attendance

You are expected to attend every class and are responsible for all material and announcements. The exams will be based largely on class discussions, so it is in your best interest to attend. As an added incentive, I will periodically take attendance and assign up to 2 bonus points. It is your responsibility to inform me in a timely manner of any extended absence that is necessary for medical or other reasons. Please arrive to class on time. Entering after a lecture has begun is distracting to your classmates and to me, and you should avoid it as a courtesy. If you arrive late, please enter the room quietly and sit near the door. In order to avoid unnecessary distractions, all cellular telephones are required to be turned off while in the classroom. This includes the time immediately before and after the class ends.

Tentative Outline

PRN=Pepall, Richards and Norman. You are not responsible for sections of PRN which we do not discuss in class. Approximate number of lectures to cover each chapter is listed in parenthesis.

- 1. Introduction. PRN 1 (1).
- 2. Review of perfect competition and monopoly. PRN 2.1, 2.3.1 (2).
- 3. Market structure and market power. PRN 3.1-3.2 (2).

Case #1: The Aetna-Humana Proposed Merger (2017)

- 4. Monopoly product and pricing strategies (5).
 - (i) Price discrimination: Incentive, type and feasibility. PRN 5.1.
 - (ii) Third-degree price discrimination. PRN 5.2, 5.3 and 5.5.
 - (iii) First-degree price discrimination. PRN 6.1, 6.3.
 - (iv) Second-degree price discrimination. PRN 6.2, 6.3.

Quiz approximately here.

- (v) Recent developments.
- (vi) Bundling and tie-in sales. PRN 8.1, 8.2 and 8.4.

Case #2: LePage's v. 3M (2003)

- 5. Game theory: Basic concepts. PRN 9.1-9.3 (1).
- 6. Oligopoly markets (2).
 - (i) Cournot competition. PRN 9.4-9.5, 10.4.
 - (ii) Bertrand competition. PRN 10.1, 10.2, 10.4.

- 7. Dynamic games and competition (2).
 - (i) The Stackelberg competition. PRN 11.1.
 - (ii) Sequential price competition. PRN 11.2.
 - (iii) Credibility of threats and subgame perfect Nash equilibrium. PRN 11.3.

Exam approximately here.

- 8. Price-fixing, repeated games, and collusion. PRN 14.1, 14.2 and 15.2 (2).
 - Case #3: Antitrust and Higher Education: MIT Financial Aid (1993)
- 9. Horizontal mergers. PRN 16.1, 16.4.1 and 16.5 (1).
- 10. Vertical relationships. PRN 17.1-17.2. (2).

Case #4: The Ebooks Case against Apple (2013)

Case #5: Antitrust Cases against Google, Facebook and Others (prospective)

- 11. Tech giants (2)
 - (i) Tech platforms and strategies
 - (ii) Antitrust considerations