**Brigham Young University Department of Economics**

**Economics 476 Industrial Organization**

Winter 2023

James H. Cardon, cardon@byu.edu

Office: 2118 WVB

Phone: 801-422-5735 (voice mail)

Office Hours: Monday and Tuesday 9-10 or by appointment. I can meet in person or online. Send me an email if you need to set up a time to talk.

Text: *Industrial Organization*, by Oz Shy. The book is very brief but clear. I will also assign several papers to read. These will be applied papers and will require some familiarity with basic statistics.

Prerequisites

Economics 380 and 382 and Calculus. We will be using game theory extensively.

Grading

There will be one midterm, two shorter exams (“quizzes”), 9 problems sets and a final exam. Points will be assigned as follows:

Quizzes (2) 15 % each

Midterm 30 %

Problem Sets 10 %

Final 30 %

Problem Sets

I will distribute weekly problem sets and assign four papers to read.

Quiz 1: Wednesday, January 25, **Testing Center**

Midterm Exam: March 2-4 (Thursday-Saturday), **Testing Center**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N.B.: Late fee starts Friday at 7pm, checkout closes at 3pm on Saturday. |  |  |  |  |

Quiz 2: Wednesday, March 29, **IN CLASS.**

**Final Exam: Wednesday April 26, 3-6, IN CLASS**

**Homework Policy:**

1. You may work in groups, but each student must turn in a separate paper.

2. All problem sets must be written neatly. Please show all work and box your answers to facilitate grading.

3. Problem sets are due by 11:59 on the due date. Learning Suite is preferred, but I will accept hard copies if you prefer.

4. I will drop your lowest problem set score.

Useful websites for industry data. These may require you to be logged in to your campus account.

* + <http://sites.lib.byu.edu/business/>
  + <http://clients1.ibisworld.com/>

Rough Course Outline

Chapter Topic ­­­­ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­­­­­­­­­­­­­­­

5 Monopoly

Shy *Readings: 5.1, 5.2, 5.6.1, 5.6.2.*

2, 6 Normal form games and applications

Shy *Readings: 2.1, 6.1, 6.3, 6.4, 6.7*

2, 7 Extensive form games and applications

*Shy Readings: 2.2, 6.2*

-- Bargaining and Auctions

6 Collusion and Antitrust

*Shy* Readings: 6.5

*Paper: Ashenfelter and Graddy*

7 Markets for Differentiated Goods

*Shy Readings: 7.1, 7.2, 7.3.1-7.3.2, 7.4*

*Paper: Graddy*

8 Mergers

*Shy* *Readings: 8.1, 8.2, 8.6*

*Paper: Staples Case*

8 Entry and Strategic Entry Deterrence; Predatory Pricing

*Shy Readings: 8.3, 8.4*

*Paper: Lamoreaux*

9 R&D

*Shy* *Readings: 9.1, 9.4, 9.7*

11 Advertising

*Shy* *Readings: 11.1, 11.2*

Papers:

Orley Ashenfelter, Kathryn Graddy, Anatomy of the Rise and Fall of a Price-Fixing Conspiracy: Auctions at Sotheby's and Christie's, Journal of Competition Law & Economics, Volume 1, Issue 1, March 2005, Pages 3–20, <https://doi.org/10.1093/joclec/nhi003>

Graddy, Kathryn. "Markets: the Fulton fish market." *Journal of Economic Perspectives* 20.2 (2006): 207-220.

<https://www.aeaweb.org/articles?id=10.1257/jep.20.2.207>

Aileen Thompson. “Merger Analysis at the Federal Trade Commission: Two Recent Retail Cases.”

<https://www.ftc.gov/sites/default/files/attachments/educational-materials/thompsmerg.pdf>

Lamoreaux, Naomi R. "The problem of bigness: from standard oil to Google." *Journal of Economic Perspectives* 33.3 (2019): 94-117. <https://www.aeaweb.org/articles?id=10.1257/jep.33.3.94>

*What is Industrial Organization?* IO covers the organization of firms and markets, and the effects on welfare. The emphasis is on competition among a few firms, so that strategic interaction becomes important. You can get a good idea of the topics by glancing through Shy.

**Economics Department Learning Outcomes:**

[**https://learningoutcomes.byu.edu/Courses/program-courses/736021/Economics+BS+/1384**](https://learningoutcomes.byu.edu/Courses/program-courses/736021/Economics+BS+/1384)

**Various Policy Notices**

**Honor Code**

In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

**Preventing & Responding to Sexual Misconduct**

In accordance with Title IX of the Education Amendments of 1972, Brigham Young University prohibits unlawful sex discrimination against any participant in its education programs or activities. The university also prohibits sexual harassment-including sexual violence-committed by or against students, university employees, and visitors to campus. As outlined in university policy, sexual harassment, dating violence, domestic violence, sexual assault, and stalking are considered forms of "Sexual Misconduct" prohibited by the university.  
  
University policy requires all university employees in a teaching, managerial, or supervisory role to report all incidents of Sexual Misconduct that come to their attention in any way, including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Incidents of Sexual Misconduct should be reported to the Title IX Coordinator at [t9coordinator@byu.edu](mailto:t9coordinator@byu.edu) or (801) 422-8692. Reports may also be submitted through EthicsPoint at <https://titleix.byu.edu/report> or 1-888-238-1062 (24-hours a day).  
  
BYU offers confidential resources for those affected by Sexual Misconduct, including the university's Victim Advocate, as well as a number of non-confidential resources and services that may be helpful. Additional information about Title IX, the university's Sexual Misconduct Policy, reporting requirements, and resources can be found at [http://titleix.byu.edu](http://titleix.byu.edu/) or by contacting the university's Title IX Coordinator.

**Student Disability**

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 422-5895, D-285 ASB.

**+The Statement on Belonging**

We are united by our common primary identity as children of God (Acts 17:29; Psalm 82:6) and our commitment to the truths of the restored gospel of Jesus Christ (BYU Mission Statement). We strive to create a community of belonging composed of students, faculty, and staff whose hearts are knit together in love (Mosiah 18:21) where:

* All relationships reflect devout love of God and a loving, genuine concern for the welfare of our neighbor (BYU Mission Statement);
* We value and embrace the variety of individual characteristics, life experiences and circumstances, perspectives, talents, and gifts of each member of the community and the richness and strength they bring to our community (1 Corinthians 12:12–27);
* Our interactions create and support an environment of belonging (Ephesians 2:19); and
* The full realization of each student’s divine potential is our central focus (BYU Mission Statement).

**Excerpt from Elder Holland’s talk to faculty** (8/23/2021)

At a university there will always be healthy debate regarding a whole syllabus full of issues. But until “we all come [to] the unity of the faith, and . . . [have grown to] the measure of the stature of the fulness of Christ,” our next best achievement will be to stay in harmony with the Lord’s anointed, those whom He has designated to declare Church doctrine and to guide Brigham Young University as its trustees.

<https://newsroom.churchofjesuschrist.org/article/elder-jeffrey-r-holland-2021-byu-university-conference>