This is an advanced undergraduate course in industrial organization. We will study the behavior of firms and the structure of markets. The first goal is to apply microeconomics theory to understand when and how firms exercise market power, and the impact of market power on market efficiency and consumer welfare. The second goal is to apply these insights to analyze antitrust cases.


There will be weekly problem sets. Problem sets must be submitted in class on their due dates. Late problem sets will not be accepted. You may work in groups on problem sets, and turn in your answers as a group, as long as the group has no more than three people. If you miss class you can send your answers by email to the TA. The best way to learn the material is by doing the problems.

In addition, there will be one midterm exam and a final. The midterm will be an in-class exam, on Monday, October 28. The final is scheduled for Thursday, December 12 at noon. The approximate weighting scheme for the final grade will be:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Sets</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>45%</td>
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</tbody>
</table>

Any student who misses the midterm or final without a good reason will receive no credit for the exam. Medical reasons require written confirmation from the Student Health service or your doctor. Non-medical reasons require a written excuse from the WCAS Office of Studies. A makeup for the midterms will be permitted only if there is a good reason for missing the exam. Suspicion of academic dishonesty will be immediately referred to the Dean’s office.

Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notice from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.
The Teaching Assistant for the course is Tai Lam, tai.lam@u.northwestern.edu. Tai will hold a discussion section each week, on Fridays at 12:30, in which he will discuss the problem sets, review class material and cover some supplemental material. His office hours will be Tuesdays and Thursdays 3:00-4:00 in KGH 3496.

Course Outline

Class discussion will cover the following topics. The chapters and sections referred to are those in Cabral and Kwoka and White (KW), unless noted otherwise.

1. Introduction and Review
   Overview: Cabral, Chapter 1
   Firms, production and cost functions: Cabral, Chapter 3
   Perfect competition: Cabral, Chapter 4
   Monopoly: Cabral, Chapter 5

2. Market Definition and Durable Goods

3. Price Discrimination
   Cabral, Chapter 6

4. Oligopoly Competition with Homogeneous Products
   Cabral, Chapter 8

6. Collusion and Pricing in Repeated Games
   Cabral, Chapter 9

7. Product Differentiation
   Cabral, Chapter 14

8. Entry and Market Structure
   Cabral, Chapters 10 and 12
9. Horizontal Mergers
   Cabral, Chapter 11
   KW Case 9: “Prices, Market Definition and the Effects of Merger: Staples, Office Depot and Office Max”

10. Vertical Price Restraints and Vertical Mergers
    Cabral, Chapter 13
    KW Case 20: “Cartel Ringmaster or Competition Creator? The Ebooks Case against Apple (2013)”

11. Advertising
    Cabral, Section 14.3

12. Research and Development and Innovation
    Cabral, Chapter 15
    KW Case 15: “Pharmaceutical Patents and Pay-for-Delay: Actavis (2013)”

13. Networks
    Cabral, Chapter 16