



Economics 445 - Summer Session II 2016  
Industrial Organization

Monday through Friday, 9:45 a.m. to 11:15 a.m. in Gardner Hall 009

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Office: Phillips Annex 102  
Office Hours: Tuesdays and Thursday, 11:30 a.m. - 1:00 p.m.

**Course Description:** Why is it that airplane tickets get more expensive on the day of the flight, but Broadway tickets get less expensive on the day of the show? Why did the Justice department not allow Office Depot and Staples to merge? Would consumers be better off if they could purchase cable channels individually? The goal of this course is to provide an analytical toolkit that will allow us to examine strategic choices by firms and how those choices impact consumers. The field of Industrial Organization is especially interested in markets that are not characterized by perfect competition. In this course, we will learn how some basic mathematical concepts and a few assumptions can help us answer abstract questions about how businesses behave and how government regulation works.

**Text:** *Industrial Organization: Contemporary Theory and Empirical Applications*. The 3<sup>rd</sup> and 4<sup>th</sup> editions should be fine as well. Readings will refer to the 5<sup>th</sup> edition

**Authors:** Pepall, Richards and Norman; **ISBN-13:** 978-1118250303

**Grade Distribution and Dates:**

|               |             |                                       |
|---------------|-------------|---------------------------------------|
| 2 Midterms    | 40% (total) | June 30th and July 14th               |
| Final Exam    | 30%         | 8:00 am to 11:00 am, Monday July 25th |
| 3 Assignments | 20%         | Due June 24th, July 8th and July 21st |
| Participation | 10%         |                                       |

**Course Policies:**

• **Exams**

- Each midterm will be worth 20% of your grade. The final exam is cumulative and is worth 30% of your grade. It is currently scheduled for Monday, July 25th at 8 am.
- There are no makeup exams. If you miss one midterm and your absence is excused, your final exam score will represent 50% of your grade. If you have an illness, are participating in a University-sanctioned activity, or the assignment falls on a major religious holiday that has the potential of affecting your performance, your absence will be excused. Where applicable, you must provide documentation from a coach or doctor. The scenarios above are broad but do not cover all acceptable excused absences. I reserve the right to excuse an absence, in which case your final exam will be reweighted. If you miss an exam for any reason, you should contact me and we can decide on an appropriate course of action going forward. The final exam is mandatory and will be given at the scheduled time. The UNC Undergraduate Bulletin provides specific and narrow exceptions to this rule. If you believe you qualify for one of these exceptions, contact the Economics department chair.

- Exams will be open book and open note. Memorization is not a valuable skill and will not be emphasized in this course. The exams will challenge you to apply the concepts you have learned in class and via the homework assignments.
- For simple scoring or adding up mistakes, return the exam to me with a brief explanation. If there is a more substantial issue, write a typed, single paragraph explaining why you think your answer is correct, and give it to me (along with your exam). You must provide all regrade requests within a week of when the exam is returned.
- UNC facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in difficulties with accessing learning opportunities. All accommodations are coordinated through the Accessibility Resources and Service Office. In the first instance please visit their website <http://accessibility.unc.edu>, Tel:- 919-962-8300 or Email;- [accessibility@unc.edu](mailto:accessibility@unc.edu). A student is welcome to initiate the registration process at any time, however, the process can take time. ARS is particularly busy in the run-up to Finals and during Finals. Students submitting Self-ID forms at that time are unlikely to have accommodations set until the following semester. Please contact ARS as early in the semester as possible. If you are established with ARS, and will require appropriate academic accommodations, please contact me after class, during office hours, or by individual appointment.

- **Homework Assignments**

- There will be three graded homework assignments. Homework assignments 1 and 2 are due on Fridays. For those assignments, late work will be accepted until the start of class on the following Monday for 50% credit. For the third assignment, no late homework will be accepted so the answers can be posted promptly. This will allow you to begin studying for the final (if you want to). You are permitted to work in groups, but everyone must turn in their own answers. Your work should be neat, easy to follow and well presented. If your first or second assignment is messy, then you will be required to type up the remaining assignments.
- Homework problems are designed to prepare you for exams. Because exams make up 70% of your grade, it is important that you take these assignments seriously.

- **Participation**

- Participation is a direct portion of your grade. Participation includes attendance as well as engaging in class discussion. This course offers many real world applications and I will do my best to connect recent articles, news, etc. to what we are learning. You should read and connect the ideas we discuss to stories in the popular press. A few good sources would be the New York Times, the Wall Street Journal and The Economist. I will occasionally post stories on Sakai and you may be called upon to give your thoughts.
- You are not permitted to use electronic devices (computers, tablets, cell phones, etc.) in the classroom. If you need to use your phone (including to text) during class, please step outside the room.

- **Sakai**

- Readings, announcements and other class information will be distributed via Sakai. Please make sure you have access. Course grades will be stored and displayed on Sakai. It is your responsibility to check those grades for accuracy.

- **Honor Code**

- The UNC Honor Code governs your behavior. If you do not yet understand your responsibilities under this code, I urge you to go to <http://studentconduct.unc.edu> to learn more. I am also bound by the honor code and am required to report all cheating to the honor court. I will do my best to discourage cheating by actively proctoring exams, but there is a limit to what I can do. Ultimately, you should recognize that nothing we do in this course is worth jeopardizing your integrity over.

**Tentative Course Outline:**

PRN = Pepall, Richards, and Norman. The number in parentheses is the approximate number of class meetings we will spend on a topic. The class lectures and slides are a guide to what topics are important within in each PRN chapter. You are not responsible for PRN sections we do not discuss in class.

1. Course introduction, objectives, historical perspective (1). Readings: PRN 1.
2. Review of perfect competition and monopoly (2). PRN 2.
3. Production and costs (1). PRN 4.
4. Monopoly product and pricing strategies (3).
  - (a) Price discrimination. PRN 5 - 6.
  - (b) Bundling. PRN 8.

*Midterm 1 approximately here.*

5. Game theory: Assumptions and solution concepts (2). PRN 9.1 - 9.3.
6. Oligopoly markets (3).
  - (a) Cournot competition. PRN 9.4 - 9.6
  - (b) Bertrand competition. PRN 10.1 - 10.2.
  - (c) Spatial markets. PRN 10.3.
  - (d) Describing market structure. PRN 3
7. Oligopoly markets, extensions (2)
  - (a) Stackelberg competition. PRN 11.1
  - (b) Dynamic interaction. PRN 11.2 - 11.3
  - (c) Entry deterrence. PRN 12.
8. Cartels and collusion (2). PRN 14.

*Midterm 2 approximately here.*

9. Horizontal mergers (2). PRN 15.
10. Vertical relationships (3)
  - (a) Mergers. PRN 16.1 - 16.5
  - (b) Price restrictions. PRN 17.
  - (c) Nonprice restrictions. PRN 18