

# 01:220:441:01 Industrial Organization

## Syllabus Spring 2017

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Department of Economics

### **Instructor Information**

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### **Course Information**

**Course name:** Industrial Organization

**Class time:** 6:10 PM–7:30 PM, T/TH

**Regular classroom:** Frelinghuysen Hall-A5, College Ave. Campus

**Office hours:** 2:00 pm–3:00 pm, T/TH or by appointment

**Final exam:** 8:00 pm–10:00 pm, May 4, 2017

**Website:** <https://sakai.rutgers.edu>

### **Course Requirements**

**Introduction:** This course offers an up-to-date and rigorous presentation of modern industrial organization that blends theory with real-world applications and derives implications for firm strategy and competition policy. This course also acquaints students with the most important models for understanding strategies chosen by firms with market power and shows how such firms adapt to different market environments. Topics in this course cover theories of firm and market behavior and evidence on relationships between structure, conduct, and performance. It also includes pricing, profitability, innovation, advertising and network product, etc.

**Learning outcomes:** Students who successfully complete this course should be comfortable with most important game theory models to analyze imperfect competition and provide policy guidances. They should be able to use a statistical/econometric computer software to estimate demand functions and production functions.

**Prerequisites:** intermediate microeconomic analysis (01:220:320), econometrics (01:220:322).

## Course Materials

**Textbook:** Paul Belleflamme and Martin Peitz, *Industrial Organization: Markets and Strategies*, 2<sup>nd</sup> Edition, Cambridge University Press.

ISBN: 9781107687899

### Textbook

- *Empirical Industrial Organization Models, Methods and Applications*, by Victor Aguirregabiria, unpublished.
- *Quantitative Techniques for Competition and Antitrust Analysis* by Peter Davis and Eliana Garces, Princeton University Press.

**Software:** We will use *Stata* for empirical homework. *Stata* is the most popular statistical software among the community of empirical economists. Fortunately, you can access it in any Rutgers computer lab or through Rutgers APP. Further instructions will be provided.

**Sakai:** All announcements, additional assignments, slides and other supplements are distributed through Sakai.

## Evaluation

**Grade composition:** Course evaluation will be based on class participation, weekly assignments, midterm exam and final exam.

- Homework assignments: 20%
- Class participation: 10%
- Two midterm exams: 40% (20% each)
- Final exam: 30% (cumulative)

**Grading criteria:** Letter grades will be used for submission of final grades according to the following corresponding table. Final grades will not be curved.

Letter Grades	Average Percentage Scores Range
A.	85% or higher
B+	80%–84%
B.	75%–79%
C+	65%–74%
C.	60%–64%
D.	50%–59%
F.	49% or lower

## Administrative Requirements

**Homework Submission Instruction:** All homework shall be submitted through sakai. For each submission, only a single PDF file will be accepted, so please combine all pieces into one file. You can resubmit the homework any time before the due date. The typed homework is preferred. However, you can also scan or photocopy the handwritten ones.

### Exam policy:

- All exams are close-book, notes and all electronic devices except for a calculator.
- No extra credit will be granted.
- Makeup exams are provided only under absences for medical reasons or emergencies with notes signed by physicians or from the Dean's office. The student or anyone else acting on behalf the student must notify the instructor within **24 hours** after the missed exam.
- There is **No Makeup Exam** for the final exam. You have to make sure that you can take it before registering this course.

### Class participation:

- Regarding expected absence of regular classes because of physical conditions, family emergencies and so on, applications should be submitted through the University absence reporting website <https://sims.rutgers.edu/ssra>. You should not expect to miss any exam except under the circumstances of emergencies.
- Usually I will not check attendance. However, if the number of attendees is OBVIOUSLY less than some threshold, I will check attendance. 2 points will be deducted for every single absence.

**Academic Integrity:** Any attempt to cheat on an exam or course assignment will be prosecuted. You may review the Universitys Academic Integrity policy at the following

website <http://academicintegrity.rutgers.edu/>.

## **Tentative Course Schedule:**

- 1** IO and game theory
- 2** Market power (static and dynamic imperfect competition)
- 3** Midterm 1
- 4** Product differentiation and pricing
- 5** Competition policy
- 6** Midterm 2
- 7** R&D and innovation
- 8** Network goods
- 9** Final exam

## Learning Objectives for Economics Majors

**Economic Literacy** Students who complete the major in economics should understand and be able to articulate, both orally and in writing, the core economic principles, concepts and theories that form the foundation for modern economic analysis and economic research.

**Economic Numeracy** Students who complete the economics major should be familiar with the tools, techniques and methods of empirical economics. They should be able to analyze data using computer applications and should be familiar with regression methods and other statistical techniques. They should be able to read and assess general interest articles on economic topics. In addition, they should be able to understand and evaluate key findings in published economic research from a wide range of sources including academic economists, public policy think tanks, and government agencies.

**Economic Citizenship** Upon completion of the major students should be able to apply their understanding of core concepts and quantitative tools to analyze and research real world problems and evaluate alternative economic policy proposals on microeconomic and macroeconomic issues.

**Economic Scholarship** Qualified majors should have an opportunity through such avenues as advanced coursework, faculty interactions, national and local competitions and honors courses and programs to utilize up-to-date methodological tools and become fully engaged in economic research and issues on the frontiers of economics.

**Student-Wellness Services:**

Just In Case Web App, for a mental health crisis for you are a friend: <http://codu.co/cee05e>

Counseling, ADAP & Psychiatric Services (CAPS), for non-emergency psychological health issues:

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 [www.rhscaps.rutgers.edu/](http://www.rhscaps.rutgers.edu/)

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Scarlet Listeners, for confidential peer counseling and referral hotline:

<http://www.scarletlisteners.com/> or call (732) 247-5555