**ECON 4190**

**INDUSTRIAL ORGANIZATION**

**Fall 2017**

**Mr. Mills**

**GOALS AND RULES**

Industrial organization is the branch of economics that is about business firms and how they compete. The emphasis is on market power, strategy and competition.    The course examines the practices and strategies of firms in imperfectly competitive markets (which is to say most real markets).  Course goals include:

* Strengthen analytical skills
* Understand business practices and strategies
* Understand why some firms and industries outperform others
* Appraise economic policies that affect how firms compete

The prerequisite for this course is intermediate microeconomics (ECON 3010 or equivalent).  All readings are accessible via links in the syllabus on the course web page.  Some of the readings overlap material in the lectures; other readings are supplementary, although strongly related.

Your grade is based on a midterm exams (25%), a cumulative final exam (50%), a group classroom presentation (15%), and homework and participation (10%).  Exam dates are indicated in the schedule below.\*  You will be assigned to a work group of about five students for the purpose of completing homework assignments.  Homework assignments must be turned in at class time on the dates shown below.   Each group will hand in one paper; individual papers are not accepted.  You may collaborate freely with other students in working these assignments; this work is not pledged.  Homework and participation grades are based on your group's cumulative score on homework assignments and your own participation, in part determined by other members of your group.  Your group also will organize a classroom presentation on an assigned topic near the end of the semester.  Details to follow.

My office is 218 Monroe Hall.  I hold regular office hours (first-come-first-seen) on Wednesdays from 3:30 until 5:00 PM.  You can make an appointment to see me at other times if you have a conflict during these hours.  Send e-mail to [*mills@virginia.edu*](mailto:mills@virginia.edu)*.*

*\* If you are unable to take either exam at the scheduled time because of illness or an emergency, and if you notify me of your situation (in advance unless it is an extreme emergency), I will allow you to take a cumulative make-up exam in lieu of the exam you miss. The makeup exam will be scheduled near the end of the semester.*

**SCHEDULE AND ASSIGNMENTS**

**I. COMPETITION, MARKET POWER & PROFIT**

**Aug 23** Course Introduction

**Aug 28** Structure, Conduct & Performance

Read R. Sherman, [“Market Structure,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Market%20structure%20RS.pdf) *Market Regulation*, pp. 162-174

**Aug 30**  Market Power

Read K.G. Elzinga and D.E. Mills ["The Lerner Index of Monopoly Power"](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Lerner%20Index%20of%20Monopoly%20Power%20AEA.pdf) *American Economic Review* (2011), and D. Besanko and R.R. Braeutigam, [“Dominant Firm Markets,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/B_B%20Dominant%20Firms.pdf) *Microeconomics* (4th ed.), pp. 546-549

**Sep 4**  Innovation & Intellectual Property

Read S. Scotchmer and S.M. Maurer, [“A Primer for Non-lawyers on Intellectual Property,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Scotchmer%20IP.pdf) *Innovation and Incentives* (2004), pp. 65-95, and J. Romero, ["What We Don't Know About Innovation,"](https://www.richmondfed.org/-/media/richmondfedorg/publications/research/region_focus/2012/q1/pdf/cover_story.pdf) *Region Focus,* (2012), pp. 12-16, and B. Morris, ["From Music to Maps, How Apple’s iPhone Changed Business,*"*](https://collab.its.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/From%20Music%20to%20Maps.docx) *Wall Street Journal,* June 23, 2017

**Sep 6** Antitrust

Read J.H. Shenefield and I.M. Stelzer, [*The Antitrust Laws: a Primer*](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Antitrust%20Laws%20Primer%20AEI.pdf)(2001), pp. 5-23 and 30-35

**II. PRICING WITH MARKET POWER**

**Sep 11** Price Discrimination

Read R. S. Pindyck and D. L. Rubinfeld, [“Pricing with Market Power,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Price%20Discrimination%20P_R.pdf) *Microeconomics* (8th ed.), pp. 399-413, and [“Pharmaceutical Companies’ Variation of Drug Prices Within and Among Countries Can Improve Long-Term Social Well-Being,”](http://content.healthaffairs.org/content/30/8/1539.long) Frank Lichtenberg, *Health Affairs,* August 2011

**Sep 13** Multi-Part Pricing

Read R. S. Pindyck and D. L. Rubinfeld, [“Pricing with Market Power,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Two%20Part%20Tariff%20P_R.pdf) *Microeconomics* (8th ed.), pp. 414-419

**Turn in Homework No. 1**

**Sep 18** Pricing Discrete Choices

Read C. Shapiro and H.R. Varian [“Versioning: the Smart Way to Sell Information,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Shapiro%20and%20Varian%20Harvard%20Business%20Review%201998.pdf) *Harvard Business Review* (1998), pp. 106-114

**Sep 20** Bundling

Read R. S. Pindyck and D. L. Rubinfeld, [“Pricing with Market Power,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Bundling%20P_R.pdf) *Microeconomics* (8th ed.), pp. 419-428  and ["Why Unbundling Cable Would Not Save You Money,"](https://www.nytimes.com/2014/05/15/upshot/why-unbundling-cable-would-not-save-you-money.html?_r=1&abt=0002&abg=1) *New York Times*, May 15, 2014

**III. NETWORKS & PLATFORMS**

**Sep 25** Networks and Standards

Read [“Sony's Blu-Ray wins HD DVD Battle,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Sony_s%20Blu-ray%20Wins.docx) [*T*](https://collab.itc.virginia.edu/access/content/group/0f7e4d75-1d9a-401a-a8f9-19fb667b5961/Readings/Sony_s%20Blu-ray%20Wins.docx)*he Guardian,* February 19, 2008

**Sep 27** Two-Sided Platforms

Read D. S. Evans and R. Schmalensee, [“A Table for Four at Eight,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Two%20sided%20platforms%20E_S.pdf) *Matchmakers: the New Economics of Multisided Platforms* (2016), pp. 7-20

**IV. OLIGOPOLY INTERACTIONS**

**Oct 9** Oligopoly I

Read R. S. Pindyck and D. L. Rubinfeld, [“Oligopoly,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Oligopoly%20P_R.pdf) *Microeconomics* (8th ed.) pp. 456-469 (and review [A Primer on Game Theory](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/A%20Primer%20in%20Game%20Theory.pptx) as needed)

**Turn in Homework No. 2**

**Oct 11** Oligopoly II

Read R. S. Pindyck and D. L. Rubinfeld, [“Oligopoly,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Oligopoly%20P_R.pdf) *Microeconomics* (8th ed.), pp. 456-469

**Oct 16 Mid-term Exam**

**Oct 18**Tacit Collusion

Read J.H. Shenefield and I.M. Stelzer, [*The Antitrust Laws: a Primer*](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Antitrust%20Laws%20Primer%20AEI.pdf)(2001), pp. 44-56

**Oct 23** Cartels

Read R.C. Marshall and L.M. Marx, [“Narrative of a Cartel,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Marshall%20and%20Marx%202.pdf) *The Economics of Collusion* (2012), pp. 29-54

**Oct 25** Mergers I

Read J.H. Shenefield and I.M. Stelzer, [*The Antitrust Laws: a Primer*](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Antitrust%20Laws%20Primer%20AEI.pdf)(2001), pp. 57-70, and M. Lipton, and [“Merger Waves in the 19th, 20th and 21st Centuries”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/MergerWavesTorontoLipton.pdf) (2006)

Visit [“These Are the 12 Biggest Mergers and Acquisitions of 2016”](http://fortune.com/2016/06/13/12-biggest-mergers-and-acquisitions-of-2016/)

**Oct 30** Mergers II

Browse ["Horizontal Merger Guidelines"](http://www.justice.gov/atr/public/guidelines/hmg-2010.html) and read [“Office Depot and Staples Call Off Merger After Judge Blocks It,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Office%20Depot%20and%20Staples%20Call%20Off%20Merger.pdf) *New York Times,* May 11, 2016

**V. EXCLUSIONARY BEHAVIOR**

**Nov 1** Deterring Entry

Read D. Besanko et al, [“Entry and Exit,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Entry%20and%20Exit.pdf) *Economics of Strategy* (5th ed.), pp. 299-308 and [“Letting Dentists Feel the Bite of Competition,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Letting%20Dentists%20Feel%20the%20Bite%20of%20Competition.pdf)  *Wall Street Journal,* March 8, 2015

            Visit [France Cracks Down on Uber Service after Protests](http://www.bbc.com/news/world-europe-33267581), BBC, June 26, 2015

**Nov 6** Predatory Pricing

Read K.G. Elzinga and D.E. Mills, [“Predatory Pricing,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Predatory%20Pricing.pdf) *Oxford Handbook on Antitrust Economics*, New York: Oxford University Press (2015), and ["Herbert Dow, the Monopoly Breaker,"](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Herbert%20Dow.pdf) Mackinac Center for Public Policy, May 1, 1997

**Turn in Homework No. 3**

**VI. VERTICAL ARRANGEMENTS**

**Nov 8**Vertical Integration

Read [”Vertical Integration and Vertical Restrictions”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Vertical%20integration%20C_P.pdf) *Industrial Organization* (4th ed.) by D. Carlton and J. Perloff, pp. 395-413 and [“Delta’s Oil Refinery Plan Flies against Economic Sense,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Delta%E2%80%99s%20Oil%20Refinery%20Plan%20Flies%20Against%20Economic%20Sense%20-%20Bloomberg.htm)  Bloomburg.com, April 9, 2012

**Nov 13** Tying

Read R.D. Blair and D.L. Kaserman, [“Tying Arrangements,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Tying%20B_H.pdf) *Antitrust Economics,* pp. 391-400, and B. Nalebuff, [“Tying and the HILTI Case,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/TyingandHILTI.pdf) DTI Econ Paper No. 1, Part 2 (2003) 17-21

**Nov 15** Resale Price Maintenance and Exclusive Territories

Read K.G. Elzinga and D.E. Mills; [“Leegin and Procompetitive Resale Price Maintenance,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/RPM%20Leegin-TAB.pdf) *The Antitrust Bulletin* (2010)

**Nov 20**Exclusive Dealing and Franchising

Read R.D. Blair and D.L. Kaserman, [“Exclusive Dealing,”](https://collab.itc.virginia.edu/access/content/group/a24e5ccc-0b1f-4f65-8c0c-f0def4181b7e/Readings/Exclusive%20Dealing%20B_K.pdf) *Antitrust Economics,* pp. 435-443

Visit [Top Franchises](http://www.entrepreneur.com/franchise500/index.html)

**Turn in Homework No. 4**

**VII. PRESENTATIONS**

**Nov 27, 28, 29, 30 and Dec 1, 4, 5 and 6**

               Classroom presentations

**Dec 12 Final Exam** (2:00 – 5:00 PM)