SYLLABUS
Industrial Organization
ECON 4340 Fall 2014

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IMPORTANT NOTE: Replies to emails should be provided within 24 hours, excluding weekends, holidays and during the professor’s absence. Please ensure that you clearly identify yourself in your message and address your email to my name. Carefully read the syllabus, course notes and reference materials for answers to your questions prior to contacting the professor. I try to be available to my students. But, you should help me for this. Specifically, you should NOT e-mail me for unnecessary details such as grading procedure, things that you can find in the syllabus, things that are not urgent and you can ask after/during the class. I might supplement your book with other materials. This means that if you miss a class, it might be difficult to catch up the materials that I cover. Hence, whenever you miss a class you should, at least, get the lecture notes from one of your friends. No student is allowed to ask a personal negotiation on the letter grade; I will not reply to such emails. However, if you catch a mistake in the grading process, you are welcome to point it out so that I can fix such mistakes. Finally, the syllabus is subject to change as the semester progresses if I believe that this will enhance student learning and the overall quality of the course.

Course Overview
The objective of this course is to gain an understanding of the structure of markets for goods and services, and how different markets may imply different kinds of strategic behavior by firms. We will examine how markets populated with a few firms may show different pricing and production behavior as compared to the competitive or monopoly cases. We will also examine a variety of issues related to product differentiation, price discrimination, collusion between firms, strategic investment behavior, and some aspects of public policy related to antitrust and regulations. The materials in several of the chapters are quite complex and will require you to put in serious work systematically, and pay attention to the details of how to solve the mathematical models. For calculus and algebra: we will use differential calculus and algebra throughout the course. To sum up, this is a mathematically demanding course.

Textbook and Course Materials

T-Square
I will use t-square (www.t-square.gatech.edu/portal) to post announcements, distribute class notes and readings, practice quizzes, etc. You need to have a GaTech email account to use T-square. Please verify that you can log on to T-Square and access the information for this class.

Grading
Midterm 1 30 points
Midterm 2 30 points
Final exam 40 points

Curve
If the class mean on a particular test falls below 75%, I will add a curve to bring it up to 75%. For example, if the class mean on a test is 60%, I will add a 15% curve to that test. This protects you from tests that may be somewhat more difficult than others. Only individual tests (midterm 1-2 and final) are curved if necessary. Since each test is curved if necessary, there is no additional curve at the end of the semester. You might get a small bonus if the student participates to the class discussions very actively.
Letter grade cutoffs
A: 90% B: 80% C: 70% D: 60% F: Below 60%
NOTE: the cutoffs are strict. That is, 89.9% is a B, 79.9% is a C, 69.9% is a D and 59.9% is an F. This scale is firm (e.g., 79.9 is really a B.) and please do not send me emails or ask questions about this.
If you picked a P/F or a S/U option, you will have to get a letter grade of C to get P or S.
A letter grade of D counts as F/U. There will be no exceptions to this rule.

Exams
Students are required to take two midterm exams. Please inform me during the first two weeks if you have a schedule conflict on one of the exam dates. Acceptable reasons for missing an exam are: a personal illness, a serious illness, or absence due to Georgia Tech business. If you are ill – the accompanying doctor’s note must say that you cannot (or could not) take the test. If the doctor’s note does not state this clearly, your score on the missed test will be zero. Merely producing a note saying that you visited the GT health center does not count as a valid reason; the note must specifically state that you were in no position to take the test. Makeup tests create a wide range of problems including scheduling and fairness. The most important one being that for the regular test I will have exhausted all the reasonable questions I can ask based on the materials. For a makeup, I will have to come up with questions not asked in the regular test. Invariably these turn out to be more difficult, lead to lower scores and create issues related to fairness. Hence, if you miss a midterm for a valid reason as stated above your final will be used as a proxy for the missed midterm. To be fair to all students in the class, there will be no exceptions to the makeup test policy stated above.

EXAM DATES:
Midterm 1: 10-08-2014
Midterm 2: 11-10-2014
Final: The date determined by GaTech.

During exams students may NOT use a calculator. Use of electronic devices that permit text storage is strictly forbidden and will result in a failing grade.

Course Outline
The following is a rough course outline. The timing and material we cover is subject to change.

1. Lectures: For some topics I will follow the textbook closely. For other topics I will add material from other sources. And, for some of the material, I will provide an alternative way of interpreting the model and results. All of this implies that you need to pay careful attention to class lectures. If you miss class, please ask other students regarding the material that was covered. This is your responsibility. I will not go over missed class lectures on an individual basis.
2. Most chapters contain a lot of text based details. I will only briefly cover these in class and you are expected to read these yourself. In the lectures, after providing the motivation, I will mainly focus on the mathematical and graphical materials.
3. Unless specified, skip the material in the Appendix.
4. I will not cover everything in a given chapter. Hence, if you do not want to study those parts that are not related to exams, you have to follow the lectures.

A. Foundations
Ch.1: Industrial Organization: What, How and Why? (Read this material yourself.)
Ch.2: Some Basic Microeconomic Tools. (You are expected to read this material yourself.)
Ch.3: Market Structure and Market Power.
Ch.4: Technology and Cost.
Ch.5: Monopoly and Price Discrimination: Linear Pricing.
Ch.6: Monopoly and Price Discrimination: Non-linear Pricing.
Ch.7: Product Variety and Quality Under Monopoly.
B. Game Theory and Oligopoly Markets
Ch.9: Static Games and Cournot Competition.
Ch.10: Price Competition.
Ch.11: Dynamic Games and First and Second Movers.

C. Anticompetitive Strategies
Ch.14: Price Fixing and Repeated Games.
Ch.15: Collusion: Detection and Public Policy

Class Conduct
Please turn off all pagers, music players, cell phones, and laptops during class. If you must leave early or arrive late, please sit in one of the two back rows in order to avoid inconveniencing others. If you are found listening to music, watching a movie, playing a videogame or any such activity that may distract other students you will be asked to leave the class. For every two times you were asked to leave the class during the semester, your grade will be lowered to the next grade level, for example, from an A to a B level.

Special Accommodations
Students requesting academic accommodations based on a documented disability are required to register with the Access Disabled Assistance Program for Tech Students (ADAPTS). Please obtain a form from the ADAPTS office and turn it in to me during my office hours in the beginning of the semester.

The ADAPTS Office is located in the Smithgall Student Services Building, Suite 220. The phone number is 404-894-2563 (V). [http://www.adapts.gatech.edu/index.html](http://www.adapts.gatech.edu/index.html)

Academic Integrity
You are encouraged to work together with other students on the homework. Exams are taken individually, without any help from other students or any resources. Each student is expected to maintain academic integrity and to report violations to me or to the office of the Dean of Students.