ECO105 INDUSTRIAL ORGANIZATION
UNIVERSITY OF CALIFORNIA AT SAN DIEGO
SUMMER SESSION I 2014
SYLLABUS

Professor:

Michael Noel:	Office:	Econ Annex (However, office hours will be held in WLH 2111)
	Office Hours:	Wednesdays 1:00pm – 1:50pm
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Teaching Assistant:

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The Course

Industrial Organization uses non-cooperative game theory to analyze the strategic behavior and interaction of firms in imperfectly competitive markets. Topics include pricing strategies, collusive behavior, entry decisions, entry deterrence, advertising, research and development, firm structure and merger activity. Special attention will be given to teaching the skills of economic modeling. Students will learn how to develop models and solve them for the profit-maximizing strategies of firms under a variety of market situations and the social-welfare-maximizing outcomes promoted by government.

Required Textbook

Pepall, L., G. Norman and D. Richards. Industrial Organization: Contemporary Theory and Empirical Applications, 5th edition. Cincinnati, OH: Southwest College Publishing, 2013.

Grading

There will be one term test (40% of the total grade) held in class on July 23rd, and one final exam (60%) scheduled during the exam period on August 1st (check class schedule for the room). The term test will cover about the first two and a half to three weeks of material. If you have other plans on these two dates, then do not take the course. The only allowable reasons for missing a test or exam is a medically documented and unexpected illness on test day, a death in the family immediately preceding test day, or as permitted under the university policy on religious observances, disabilities, and UCSD athletics conflicts. There are absolutely no other exceptions. Check your schedules well in advance. For religious observances, disabilities, and

UCSD athletic conflicts, <u>notice must be given in the first week of class</u> and alternate arrangements will be made. For illness, you must provide within one week of the test date a note from a physician stating that he/she evaluated you the same day as the test and that your illness reasonably prevented you from taking the test. For a death in the immediate family, provide documentation within two weeks.

If you do miss a term test with a valid excuse, there will be no makeup and your grade will be based 100% on the final exam. If you miss the final exam, you will be given a grade of incomplete if your midterm is of passing quality and an F if not (as required under university grading policies). Therefore if you miss both exams, you will receive an F.

Note that if you start taking a test, the test <u>counts</u>. Under no circumstances can you have your test result not count (for illness or otherwise) after you have started taking it. Also note that the professor or t.a. will not pre-approve requests to miss an exam for illness (for example, a student does not feel well but comes to the start of the exam to ask permission not to have to take it), but rather a note from a licensed physician is required.

The test and exam are closed book. You do not need blue books. Exams are 100% electronics free. No calculators (you do not need them), no cell phones, no iPods, no headphones, etc., no electronics of any kind in the exam hall. Also, no sunglasses or hats are permitted on test days. The final exam is cumulative, but heavily weighted to material not covered by the midterm.

Also note that the marking scheme set out here is <u>final</u>. Under university regulations, the posted marking scheme applies to all students without exception. A student may not have a poor result excused, or make up for it by doing extra assignments, taking makeup exams or any other kind of additional work. There are no exceptions and all requests for exceptions are denied. So please be sure to do the problem sets thoroughly and be prepared for the test and exam. We can help you before the test, we cannot help you after.

Any regrade requests for the test or exam must be submitted <u>in writing</u> one week after the exam is returned to the class, with an explanation of the specific dispute written on a separate sheet of paper and attached to the front of the exam. The entire exam, start to finish, will then be regraded and your grade may go up or down. Be aware that exams, at the discretion of the professor, are photocopied prior to being returned to students the first time to eliminate the possibility of a student altering an exam (in serious violation of academic integrity rules) before resubmitting.

Problem Sets

Problems sets will be distributed on TED weekly and are <u>not</u> graded because of the tight summer schedule. Therefore there is no due date, but we strongly suggest you attempt every problem before you access the solutions and to see us in office hours to work through ones you are having trouble with. Experience has shown that simply reading the solutions without working through the problems first leads to a false sense of understanding and is a set up for disaster. Exams draw very heavily from these problem sets but to do well, memorizing answers is useless, you need to really understand what's going on.

Private Tutoring

The course can be difficult for some students, and for this reason, some consider private tutoring (at additional cost to them). But you should not consider paid private tutoring unless you are fully utilizing all the resources in the course. Your professor and teaching assistant are the best teachers around, and they are free for you to use. If you are using all the free resources and would still benefit from additional help, the professor can put you in contact with the economics department who in turn can provide information on qualified one-on-one private tutors from the Ph.D. program. Private tutoring on a group basis is never cost-effective and is discouraged by the professor.

Academic Dishonesty

There is a zero tolerance policy in this class for academic dishonesty. Any student found guilty of academic dishonesty will receive an F in the course. If you are unsure what constitutes academic dishonesty, please ask or consult with your college dean. In all cases, the student's name and test or exam will be immediately forwarded to the Academic Integrity Office, who will impose an additional penalty, up to and including expulsion from the university. Please do not even *consider* doing this. It is not worth it. Most quarters, there is at least one student caught and brought before the academic integrity board on academic dishonesty charges.

Some Advice

Begin studying for the test and exam starting on the first day of class. Do all the problem set questions and keep up with them. Summer moves very, very (very) fast. We cover a full week of material each class. That means if you take a Tuesday off, by Wednesday night you may find yourself two weeks behind! Office hours and additional sections will be available, and experience shows that it is in your best interest to use them early and use them often! We are here to help.

Topics

All readings from the Pepall, Norman, Richards text.

I. Introduction
- Industry Structures and Welfare Analysis
- Structure-Conduct-Performance and the New I/O
Chapter 1-2

II. Single Product Monopoly
- Uniform Pricing, Two Part Tariffs, and Price Discrimination
- Multiplant Monopolist
- Durable Goods and Leasing
Chapter 5-6

III. Multi-product Monopoly
- Pricing
- Spatial Models
- Tie-Ins and Bundling
Chapter 7-8

IV. Oligopoly
- Intro to Game Theory and Nash Equilibrium
- Static Models of Oligopoly and Spatial Models
- Measures of Industry Concentration
Chapter 3, 9-11

V. Collusion and Cartels
- Repeated Games, Threats, and Subgame Perfect Nash Equilibrium
- Cartels, Undercutting, and Price Wars
Chapter 14

VI. Entry and Strategic Investment
- Contestable Markets
- Capacity Expansion and Other Strategic Investments
- Brand Proliferation and Predatory Pricing
Chapter 12-13

VII. Mergers
Chapter 15

VII. Vertical Restraints
Chapter 16