

Competitive Analysis

(C70.0015.01 / Fall 2010)

■ **Course description.** This course takes a formal approach to analyzing the way firms make production and sales decisions and interact strategically with each other in the marketplace. We begin with a study of optimal pricing policies, including versioning, bundling, and related market segmentation strategies. In the second part of the course, we apply game theory to the study of oligopoly interaction, focusing on pricing and output strategies in a dynamic setting. Finally, we analyze strategies for firm dominance, especially through the deterrence of potential competition. The list of such strategies includes capacity expansion, product proliferation, and exclusive dealing contracts.

The main goal of the course is to develop the basic intuition for pricing and other forms of strategic behavior on the part of firms, both when faced with complex patterns of consumer demand and when faced with strategic competitors.

Readings in the textbook will provide background and introduction to a variety of topics, many of which will be covered in class in greater depth. Lectures, problem sets and exams will focus on formal analysis. Occasional supplemental readings will provide additional motivation and opportunities to develop intuition.

■ **Sketch of topics.** The topics developed in the course include: Introduction and overview; Basic pricing; Price discrimination by indicators and by self-selection; Static and dynamic oligopoly competition (tacit collusion and cartels); Strategic behavior, entry and exit: entry deterrence, predatory pricing, mergers. A more complete description will be available in a detailed course outline.

■ **Major.** Considering the relevance of competitive analysis for a variety of fields, the course is listed with an interdisciplinary course designator. Competitive Analysis counts towards a major in *economics*, *marketing* or *management*.

■ **Prerequisites.** Students are required to have taken a semester of microeconomics. Students are also expected to be comfortable with basic algebra and calculus, including systems of equations and derivatives.

■ **Readings.** The required text is Cabral, Luís, *Introduction to Industrial Organization*, MIT Press, 2000.

■ **Exams and problem sets.** There will be two tests, given in class, each covering approximately one half of the course material. There will also be four problem sets assigned throughout the semester. Please note that there are no make-up exams in this course. Students are responsible for checking the test dates and avoid any conflict with other commitments. During the tests, you are not allowed to consult class notes, books, or any other material.

■ **Grading.** Will be based on the two tests (40% each), as well as class participation (20%). Problem sets will be graded on a check/+/- basis.

At NYU Stern we seek to teach challenging courses that allow students to demonstrate differential mastery of the subject matter. Assigning grades that reward excellence and reflect differences in performance is important to ensuring the integrity of our curriculum. In general, students in this course can expect a grading distribution similar to that used in our core courses, where:

- 25-35% of students can expect to receive As for excellent work
- 50-70% of students can expect to receive Bs for good or very good work
- 5-15% of students can expect to receive Cs or less for adequate or below work

Note that while I will use the above as a guide, the actual distribution for this course and your own grade will depend upon how well each of you actually performs in this course.

■ **Re-Grading.** In line with Grading Guidelines for the NYU Stern Undergraduate College, the process of assigning grades is intended be one of unbiased evaluation. This means that students are encouraged to respect the integrity and authority of the professors grading system and discouraged from pursuing arbitrary challenges to it.

If a student feels that an inadvertent error has been made in the grading of an individual assignment or in assessing an overall course grade, a request to have the grade re-evaluated may be submitted. Students should submit such requests in writing to the professor within 7 days of receiving the grade, including a brief written statement of why he or she believes that an error in grading has been made.

■ **Student Code of Conduct.** The NYU Stern Code of Conduct is posted at www.stern.nyu.edu/uc/codeofconduct. All students are expected to abide by it. A students responsibilities include, but are not limited to, the following:

- A duty to acknowledge the work and efforts of others when submitting work as ones own. Ideas, data, direct quotations, paraphrasing, creative expression, or any other incorporation of the work of others must be clearly referenced.
- A duty to exercise the utmost integrity when preparing for and completing examinations, including an obligation to report any observed violations.

- Note: All assignments are to be turned in via turnitin.com.

■ **Students with disabilities.** Students whose class performance may be affected due to a disability should notify the professor immediately so that arrangements can be made in consultation with the Henry and Lucy Moses Center for Students with Disabilities to accommodate their needs.

Please see <http://www.nyu.edu/csd/> for more information.

■ **Help.** I would like each of you to learn and gain as much as you can from this course. If you are stuck, or have any difficulty with the material, don't hesitate to ask for assistance. Please send me an email at agavazza@stern.nyu.edu, or stop by my office (KMC 7th floor, room 81). I try to respond quickly to email.

You can also get help from the teaching assistant, TBA. You can email her at TBA@nyu.edu with questions, or set up a mutually convenient time to meet.