

Competitive Analysis

(C70.0015.01 / Spring 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. Questions about grading must be made in writing and no more than a week after the tests are returned.

■ **Code of conduct.** The NYU Stern Undergraduate Code of Conduct upholds the academic and professional mission of the College. The Code does not follow any specific legal doctrine, but rather adheres to a universal notion of character and personal responsibility.

The Code supports a meritocratic environment where students can develop their academic skill and personal integrity. The Code's Honor System is a way of maintaining order and allowing for academic fairness. The Honor System is designed to encourage academic pursuits and personal development. The Code of Conduct and Honor System promote a rewarding undergraduate experience that instills strength and accountability in members of the undergraduate community.

■ **Students with disabilities.** If you have a qualified disability and will require academic accommodation during this course, please contact the Moses Center for Students with Disabilities (CSD, 998-4980) and provide me with a letter from them verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the CSD, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation.

■ **Help.** There are times when a little help can get you past an obstacle. If you're stuck, send me an email (agavazza@stern.nyu.edu) or stop by my office (KMC 7th floor, room 81). I try to respond quickly to email. In addition to office hours, I am happy to answer questions in person whenever I am in my office.