



KELLOGG

DEPARTMENT OF MANAGERIAL ECONOMICS AND DECISION SCIENCES
J.L. KELLOGG GRADUATE SCHOOL OF MANAGEMENT, NORTHWESTERN UNIVERSITY

COURSE SYLLABUS

The Economics of Competition

Executive Masters Program

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What is this course about?

This course draws upon contemporary scholarly work in the fields of industrial economics and behavioral economics to present a set of tools and frameworks that can help you perform market analysis, competitor analysis, and evaluate the competitive consequences of behavioral biases and irrationality. In particular, the course introduces the following major strategic issues:

- **Product positioning:** We will use *the location model of product differentiation* to examine competitive strategy issues centered around product positioning decisions. The leading example is *Gillette's positioning of the excel sensor*. We will also use this framework to examine strategies like *fighting brands, competitive convergence, couponing and rebates, loyalty programs, price protection policies*, among others.
- **Short-term price competition.** The leading cases are *American Airlines Value Pricing* and *GE vs. Westinghouse*. The latter documents 10+ years of destructive price dynamics in an industry where just two firms have a virtually complete lock on a highly lucrative market. We develop sets of tools and frameworks to help us understand destructive short-run price competition and price wars, including reaction functions, spatial models of product differentiation, and short- vs. long-term incentives.
- **The durability of competitive advantage.** We study two short cases on *Motorola* and the *PBX market*. The main framework is the idea of judo strategy, a strategy by which the dominant position of a large powerful incumbent can be effectively challenged by a weaker, but focused and nimble challenger.
- **Irrationality and competitive strategy.** Traditional strategic and economic analyses rely on highly unrealistic representation of firms and managers as perfectly rational decision makers. In studying the above cases, we will often depart from this assumption by taking into account more realistic aspects of human behaviors, such as the sunk cost bias, market share bias, the immediacy bias, self-control, herd behavior, among others.

Course requirements

Homeworks:

Homeworks are optional (see explanation below) and are to be done in teams (one copy per team). Homework due dates appear in the course calendar.

I will occasionally distribute exercises. Problems denoted as “exercises” are for practice and review. They are not to be handed in and they will not be graded.

Term paper:

The paper is to be done in teams. Term paper guidelines, topics choice and miscellaneous information are included in the packet. I will discuss paper topics, style and expectation in class.

Due date appears in the Course Calendar.

In-Class Final Exam:

This is an in-class, closed book exam, except that you may bring a two-sided 8.5x11 sheet of any notes. The exam will consist of 3 short cases about real-world business situations that relate to the content of this course. Sample questions appear in the packet. Solution will be distributed in class.

Grading

Final Exam, 40%;

Team Term Paper, 40%.

Optional Team Homeworks, 20% (distributed equally across homeworks).

“*Optional*” means that homeworks count only if they help your overall grade. If they do not, their weight will be distributed equally over the Final Exam and the Term Paper. Basically, for each student I will compute and pick the highest of two averages: an average with the above weights, and an average with weights of 45% on the final and 55% on the term paper.

Participation: The final grade computed above may be adjusted up or down by a maximum of 10% to reflect class participation and, by an additional maximum of 10% to reflect participation in team efforts (term paper and homeworks).

Course Outline

A session is 1.5 hour of class time.

WEEK 1:

SESSION 1:

Course introduction;

*Product Positioning and Competitive Convergence:
Gillette's Excel Sensor*

Main concepts and frameworks:

The spatial model of product differentiation; product positioning; competitive convergence.

Readings:

I will use this fun article to motivate the course.

Roxburgh, C. (2003). "Hidden Flaws in Strategy," McKinsey Quarterly, 3, 27-39.

Reading material on Gillette will be passed out in class

Video:

This is the 2004 Nancy Schwartz Memorial Lecture delivered by Nobel Prize Laureate Daniel Kahneman. Although not required, viewing this video before our first meeting will be helpful (and, actually, lots of fun). The URL appears below (you will need a recent version of RealPlayer):

<http://www.kellogg.northwestern.edu/meds/deptinfo/schwartz.htm>

WEEK 1:

Sessions 2:

American Airlines Value Pricing Initiative

Main concepts and frameworks:

Punishment and Signaling Strategies; Tit-For-Tat Strategies; Price Competition Risk Factors.

Readings:

Garda, R. & M. Marn (1993). "Price Wars," McKinsey Quarterly, 3, 87 -100.

Team Homework:

Please hand in a case write-up as follows: Provide brief answers to the discussion questions in the packet. Total length of your answers is not to exceed 5 typed pages (double spaced with minimum 10pt font). Each team hands in a single copy.

Optional case presentation:

I will ask for volunteers to present strategic options playing Role A (see the case presentation guidelines). All Teams are invited to play Role B. See details of this assignment in the packet.

Cases:

"American Airlines' Value Pricing (A)," (HBS 9-594-001).
[The B case will be passed out in class. It is not included in the packet by design].

SESSION 3:

Anti-Trust Issues; Over-Reaction and Judo Strategies

All readings (by design) will be provided in class.

WEEK 2:

SESSION 4:

Short-Run Competitive Pricing Dynamics in Differentiated Markets

Main concepts and frameworks:

Reaction functions and Nash equilibrium; direct vs. strategic effects.

Classroom computer experiment:

Please make sure to bring your laptop to class on this day.

Readings:

This is a reading you should attempt only AFTER this class :

Al-Najjar, N. (2003). "Executive Summary of Reaction Functions," Kellogg School of Management.

SESSION 5:

GE versus Westinghouse in the Turbine Generators Market

Main concepts and frameworks:

Reaction functions and Nash equilibrium; direct vs. strategic effects.

Team Homework:

Please hand in a case write-up as follows: Provide brief answers to the discussion questions (found in the packet). Total length of your answers is not to exceed 5 typed pages (double spaced with minimum 10pt font). Each team hands in a single copy.

Optional case presentation:

I will ask for volunteers to present strategic options for GE and Westinghouse. Details are contained in a separate document in the course packet.

Cases:

"General Electric vs. Westinghouse in Large Turbine Generators (A)." (HBS 9-380-128). [The B and C cases will be passed out in class. You do not need them for the homework].

WEEK 3:

SESSION 6:

The U.S. Credit Card industry

Al-Najjar, N. and A. Malik: "The U.S. Credit Card industry." Kellogg School of Management.

Optional case presentation:

I will ask for volunteers to make a presentation addressing the discussion questions for this case (these will be send to you electronically early on in the course).

SESSIONS 7:

Behavioral Biases and Competitive Strategy:

Sunk Cost; Share-Building strategies; and Over-Reaction

Team Homework:

Please hand in answers to the following. Each team should hand a single copy.

Al-Najjar, N. & D. Besanko (2003). "Price Competition in the Canadian Stick Margarine Market," Kellogg School of Management.

WEEK 4:

SESSION 8:

Looking into the Future: *Inertia and Technological Innovation*

Cases:

Al-Najjar, N. & D. Besanko (2002). “The Erosion of Incumbency Advantage in Motorola’s Wireless Handset Business,” Kellogg School of Management.

Al-Najjar, N. and D. Besanko (2002). “The Erosion of Incumbency Advantage in the PBX Market,” Kellogg School of Management.

Exercise:

This is required for class preparation; there is nothing to hand in:

Baliga, S. and J. Dana (2004): “Innovation in the Pharmaceutical Industry.” Kellogg School of Management.

SESSION 9:

1- Course Summary and Wrap-Up

2-Capstone Case: The Great Hamburger Price War of 2002

Readings:

This may be a good point to review the *Roxburgh article* from Session 1. All other readings will be provided in class.

WEEK 5:

IN-CLASS FINAL EXAM