

Krannert School of Management
Management 490 – Marketing Analytics¹
Spring 2011

Instructor: Prof. Sumon Datta, KRAN 439, 496-7747, sdatta@purdue.edu

Prerequisites: MGMT 324 and MGMT 305 (or any equivalent Statistics course)

**Class times, Location
and Office hours:** TBD

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Course Description and Objectives

Imagine a situation where your supervisor or senior manager approaches you with a huge data file and says, “Here are some of our consumers. Tell me what I should do.” As a *Brand Manager* or a *Marketing Strategy Consultant* you will often be required to formulate marketing strategies that create greater value for the company. Even if your career choice does not involve any marketing function, at some point you most likely will be required to evaluate marketing research proposals, interpret, review and criticize the subsequent reports, and appraise its usefulness to management. You may be familiar with fundamental marketing concepts such as *Market Segmentation*, *Targeting* and *Positioning*. But how does one implement these ideas to make strategic marketing decisions? How does one go from market data to effective solutions for marketing problems? How do we critique a marketing research analysis and evaluate a proposed marketing action?

The objective of this course is to equip you with tools required to address fundamental marketing decision problems. It will also train you to view marketing processes and relationships systematically and analytically. We will cover techniques such as: *Discriminant* and *Logit Analysis*, *Cluster Analysis*, *Factor Analysis* and *Conjoint Analysis*. These techniques are useful in market segmentation, targeting, and mapping market structure and product design. We will only briefly review analysis methods such as *Hypothesis Testing* and *Linear Regression*. We will also briefly discuss popular marketing decision support models such as New Product Diffusion Models, Test-market Models, and Price and Sales Promotion Decision Models.

¹ This course was earlier called Marketing Engineering.

The course will have a heavy “hands-on” flavor, where we will analyze datasets using the user-friendly “Minitab” statistical analysis software. Homework assignments and case studies will help you gain deeper understanding of the materials covered in class. You will also gain confidence in working with datasets, implementing the analysis techniques on a computer, and formulating context-specific operational marketing actions.

Resource Material

- **Lecture notes**, homework assignments, datasets, handouts and any additional course material will be posted on Katalyst. Some material may be distributed in class.
- You are encouraged to explore other resources to enrich your understanding of the course material. Some **textbooks (Optional)** are suggested below.

Optional Textbooks:

Marketing Research by David A. Aaker, V. Kumar, George S. Day, and Robert Leone. John Wiley & Sons Inc., 10th edition, ISBN: 978-0470317259 – *This textbook will be used to prepare some of the lecture notes but the material in the text covers a lot more than what will be taught in this course.*

Marketing Engineering by Gary L. Lilien and Arvind Rangaswamy. Trafford Publishing Revised 2nd edition, ISBN: 978-1412022521 – *Case studies are picked from this textbook.*

Marketing Research: An Applied Orientation by Naresh K. Malhotra. Prentice Hall, 6th edition, ISBN: 978-0136085430

- We will use **Minitab software** for this course. Classes will be held in a Computing Lab with the software installed on all computers. You may even purchase a license agreement (Valid till the end of July 2011) from ITap for a one-time fee of \$27.50 (see <http://www.itap.purdue.edu/support/licensing/search/list.cfm?agreementId=58>).
- Some articles that have appeared in the popular and business press, such as the *Wall Street Journal*, *Advertising Age*, and *McKinsey Quarterly* may be suggested as additional reading and may be discussed in class. The purpose of these discussions will be to relate topics covered in the course to current events in the marketplace.

Guest Speakers

- We will have at least one guest speaker from P&G's *Consumer Market Knowledge (CMK) Group*. The details of the event will be declared later.

Homework Assignments

- Homework assignments will consist of **three case study assignments** and **six problem sets**. All assignments will be posted on Katalyst at least a week in advance of their due dates.
- All three case assignments contribute to your final grade. However, out of the six problem sets, only your best five scores will contribute to your final grade.
- You are encouraged to discuss case study materials with one another. It is also acceptable to discuss the problem sets and solution strategies with other students. However, you must do the analyses on your own and submit independent work to be graded. It is not acceptable to do the assignments jointly and then submit the output of the group as individual assignments.
- Assignments must be turned in on the due dates which will be specified well in advance. Except in the event of exceptional circumstances, late assignments will not be accepted.

Exams and Quizzes

- There will be **no exams** for this course.
- There will be **4 short written quizzes** (10-15 minutes each; Open book and open notes) throughout the term of the course. These quizzes will consist of short answer questions and will cover material discussed in class. The quizzes will be given either at the beginning or before the end of a class session. The exact dates of quizzes will **not be preannounced**.
- Out of the 4 quizzes, only your best three scores will contribute to your final grade. Only under exceptional circumstances if you miss two or more quizzes, makeup tests will be given which may include oral exams.

Participation and Attendance

- Active class participation is an essential part of the learning experience in this course. Students are encouraged to ask questions and express views that help to improve the class discussion and enhance the understanding of the course material for everyone in the class. Your quality of class participation will carry a lot more weight than sheer quantity.
- Your class participation will be particularly judged during the discussion of case assignments.
- There will be no formal attendance call in every class. During class discussions, the instructor might sporadically cold call from the class roster as a random check for attendance.

Grading Policy

- Homework assignments
 - Case assignments (12 X 3) - 36%
 - Problem sets (7 X 5) - 35%
- Quizzes (5 X 3) - 15%
- Class participation & attendance - 14%

Code of Conduct and Academic Integrity

You are expected to follow Purdue regulations governing student conduct (see http://www.purdue.edu/univregs/pages/stu_conduct/stu_regulations.html). Any academic dishonesty and misconduct, if detected, will be seriously penalized.

Additional notes

- The information in this syllabus is subject to change at the instructor's discretion. Any changes will be announced at least a week before they are effective.
- In the event of a major campus emergency, course content, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. If and when there is any change, you will receive a class e-mail from the instructor. In addition, changes will be posted on the course webpage. In case of any ambiguity, you may directly contact either the instructor or the faculty assistant via phone or e-mail.

