

**MARKETING DEPARTMENT**  
**The Wharton School**  
**THE UNIVERSITY OF PENNSYLVANIA**

**Data and Analysis for Marketing Decisions (MKTG 212/712)**

**Fall 2015**

**Course Syllabus and Schedule—[8/17/2015](#)**

<i>Instructor:</i>	Professor Jehoshua (Josh) Eliashberg STE 700 JMHH; Tel. 215-898-5246 Email: <a href="mailto:eliashberg@wharton.upenn.edu">eliashberg@wharton.upenn.edu</a>
<i>Office Hours:</i>	Wednesday 5-6pm and by appointment
<i>Grader:</i>	Yupeng Chen: <a href="mailto:yupengc@wharton.upenn.edu">yupengc@wharton.upenn.edu</a> Office Hours: Thursday 5-6pm
<i>Administrative Assistance</i>	Kate Molt: <a href="mailto:katemolt@wharton.upenn.edu">katemolt@wharton.upenn.edu</a>
<i>Required Text</i>	Churchill and Iacobucci (CI) Marketing Research (11th Edition)
<i>Required Reading Pack:</i>	Available via Study.net
<i>Course Website:</i>	<a href="https://wharton.instructure.com/login">https://wharton.instructure.com/login</a>

**Overview and Objectives**

Firms have access to various data of customers. Such data may include in-store and online customer transactions, customer surveys as well user generated textual and biometric data. Using real-world applications from various industries, the goal of the course is to familiarize students with several types of managerial problems as well as data sources and analytical techniques, commonly employed in making effective marketing decisions. The course would involve formulating critical managerial problems, analyzing data and, most importantly, drawing inferences and telling convincing narratives, with a view of yielding actionable results. (Former course title Marketing Research).

**Prerequisites:** For MKTG 212: MKTG 101, STAT 101. Students are highly encouraged to take statistics in the semester immediately preceding this course. For **MKTG 712**: MKTG 611; STAT 613 strongly recommended.

## Course Materials and Approach

In the course we will use a variety of readings, cases, and applications. The most important readings and complete list of cases are contained in the Study.net. In addition, lecture notes will be made available on the **Course Canvas** throughout the semester. The readings are designed to introduce key concepts and principles. Cases will allow examining, in detail, the applications of particular data sources and analytical approaches and techniques. The course emphasizes applications and marketing decision making. To gain a practical experience, you will work on a group project involving data collection, analyses, and telling your story, whose progress will be monitored throughout of the semester. Statistical analyses in lecture will be demonstrated using the JMP statistical software.

There will also be a number of guest lecturers who will share perspectives into the practice of data-based decision making. **Please note that there may be some changes in the dates the guests are scheduled to visit the class. For updating, please check the course syllabus' date on the course Canvas.**

## Assessment

Your final grade in the course will be based on both individual and group work. The evaluation is as follows:

Exam	30%
Group and Individual Assignments	30%
Oral Presentation of the group project	5%
Group project written report—paper due last day of class	25%
Class Participation	10%

Please note the type of the assignments (**group vs individual**) and if in doubt, please check with me or the grader. **No late assignment will be accepted.** The due dates for the assignments are listed on the course schedule, and a more detailed outline of the evaluation procedure and requirements is included at the end of this document.

## Academic Integrity

Please familiarize yourselves with the University Code of Academic Integrity:  
[http://www.upenn.edu/academicintegrity/ai\\_codeofacademicintegrity.html](http://www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html)

**Marketing Research (212/712)**  
**Fall 2015**  
**Professor J. Eliashberg**  
**Tentative Course Schedule**

<b>Date</b>	<b>Session #</b>	<b>Topic, Readings, Cases, Assignments</b>	<b>CI</b>
W. August 26	1	<b>Introduction</b> <ul style="list-style-type: none"> <li>• Overview of the course</li> <li>• What you will learn</li> <li>• Course administrative issues</li> </ul>	
M. August 31	2	<b>The Research Process and Design</b> <b>Readings:</b> <ul style="list-style-type: none"> <li>• “ A Tale of Three Researchers” (in RP)</li> <li>• <b>Case:</b> The Coop (in RP)</li> </ul> Discussion Issues: (1) What are the factors that might be causing the decline in sales within stores (2) Evaluate the marketing research proposals: pros and cons	Read Ch.1,3
W. Sept. 2	3	<b>Primary Data Collection and Questionnaire Design</b> <b>Case:</b> “Compact Lemon” (in RP) “Canterbury Travel” (in RP)	Read Ch. 8,9
W. Sept. 9	4	<b>Secondary Data in Marketing Research</b> <b>Case:</b> Promotion of Rocket Soups (in RP)  <b>Due Hard Copy in Class: List of Groups Members</b>	Read Ch. 7
W. Sept. 16	5	<b>Looking at the Data: Scales of Measurement and Data Vetting</b>  <b>Marketing Problems, Hypotheses Testing, and Basic Data Analysis</b>	Read Ch.10  Read Chs.15 and 16
M. Sept. 21	6	<b>Applications of Qualitative Research</b>	
M. Sept. 28	7	<b>Regression Analysis</b> <b>Readings:</b> “Forecasting with Regression Analysis”(in RP) “Movie Stars and Box Office” (in RP) <b>Case:</b> “Colonial Broadcasting Company” (in RP)  <b>Due Hard Copy in Class: Group Assignment #1</b>	Read Ch. 17

W. Sept.30	8	<b>New Approaches to Collecting Primary Data: Neurophysiology and Biometrics</b>	
To M. Oct. 5	9	<b>Conjoint Analysis</b> <b>Readings:</b> “Conjoint Analysis: A Manager’s Guide” (in RP)  <b>Due Hard Copy in Class: One-page Group Project Topic</b>	Read Appendix to Chapter 17
W. Oct. 7	10	<b>Reporting Research Results: Telling the Story</b>	Read Ch. 19
M. Oct. 12	11	<b>Factor Analysis: The Fundamental Issues</b> <b>Readings:</b> “Analyzing Consumers Perceptions” (in RP) “Designing Better Products by Coordinating Marketing and Engineering” (in RP)  <b>Due Hard Copy in Class: Group Assignment #2</b>	Read Ch. 18- pp. 452-467
W. Oct. 14	12	<b>Summary of Regression, Conjoint, and Factor Analysis</b> <b>Case:</b> Portland Trail Blazers (in RP) Discussion issues: (1) Which attribute is most important in the purchase decision (2) Are the conjoint analysis results useful in making pricing decisions? (3) What about the promotional items? Which ones are worth it?	
M. Oct. 19	13	<b>Applications of Quantitative and Qualitative Data Analyses Methods</b>  <b>Due Hard Copy in Class: Individual Assignment #1</b>	
W. Oct. 21	14	<b>Causality and Experimentation</b>	Read Ch. 6
M. Oct. 26	15	<b>Projects progress review</b>	

W. Oct. 28	16	<b>Chi-Square Tests</b> <b>ANOVA Tests</b>	Read Appendix to Chapter 14 pp. 352-354 and Appendix to Chapter 16 pp. 395-398
M. Nov. 2	17	<b>Review Session</b>	
W. Nov. 4	18	<b>In Class Exam</b>	
M. Nov. 9	19	<b>The Media and Entertainment Industry: Problems and Challenges</b>	
W. Nov.11	20	<b>UGC and Text Analytics</b> <b>Reading:</b> Practical Text Analytics Chapters 1, 2 (In RP)	
M. Nov. 16	21	<b>Applications of Text Analytics</b>  <b>Due Hard Copy in Class: Individual Assignment #2</b>	
W. Nov. 18	22	<b>Case: E. T. Phone Home Inc.: Forecasting Demand (in RP)</b> Discussion issues: (1) Evaluate and propose, if necessary, improvements for the primary data collection employed by Digitron.(2) Evaluate the forecasting model developed by Digitron	
M. Nov.23	23	<b>Data, Analyses, and Decision Making in New Products Development</b>	
M. Nov. 30	24	<b>Summary and Preparation for the Projects Presentations</b>	
W. Dec. 2	25	<b>Projects Presentations</b>	
M. Dec. 7	26	<b>Projects Presentations</b>  <b>Due on Dec 7 hard copies in class: Group project presentation deck and written report</b>	

**University of Pennsylvania**  
**The Wharton School**  
**Mktg 212 and 712**  
**Data and Analysis for Marketing Decisions --Fall 2015**  
**Professor Jehoshua Eliashberg**

**Course Bulk Pack in Study.net: Table of Contents**

- “A Tale of Three Researchers” (Marketing Research Magazine)
- “The Coop: Market Research” (HBS, 9-599-113)
- “Compact Lemon” Case
- “Canterbury Travel” Case
- “Promotion of Rocket Soups” Case
- “Forecasting with Regression Analysis,” (HBS, 9-894-007)
- “Colonial Broadcasting Co. (A),” (HBS, 9-894-011)
- “Movie Stars and Box Office”
- “Conjoint Analysis: A Manager’s Guide (HBS, 9-590-059)
- “Analyzing Consumer Perceptions,” (HBS, 9-599-110)
- “Designing Better Products by Coordinating Marketing and Engineering”
- “Portland Trail Blazers” (Darden Business Publishing, UVA-M-0773)
- “Practical Text Analytics” by Steven Struhl. Chapters 1 and 2
- “E.T. Phone Home Inc.: Forecasting Business Demand,” (HBS, 9-583-121)

## Assessment Details

### Assignments

The purpose of these assignments is to give you “hand-on” experience with designing research and data analyses. These assignments will help clarify the concepts and techniques discussed in the classroom. **The assignments will be put in Canvas.** It will clearly be stated there whether it is a **group or individual** assignment. The **due dates** are given in the class schedule as well as on the assignments sheets.

### Group Project

**Group size** should be **four-six (4-6)**. I expect class members to select their own project groups and to be responsible for managing the division of labor within the group. Please submit a typewritten list of the persons comprising your group to me at the end of the fourth class session. In case you don't know other members of the class, you will be assigned by us to a group.

The group project will give you an opportunity to design and conduct a full-fledged market analysis project. Many, if not all, recent projects involved **startups** ideas. I prefer to stay in this space. It is in line with Penn students interests and careers objectives and it facilitates comparisons across groups. Since the research project will involve, however, a considerable amount of time and effort, it is vitally important that you work on a project that you find exciting and I will be receptive to special requests. It is expected that whatever project you and your group will select to pursue, will be: (1) **non-overlapping and different from the homework assignments**, (2) relevant for marketing decision-making, (3) require gathering of primary data, and (4) demonstrates applications of the principles and techniques covered in the class. The group should clearly identify the marketing problem it is working on and translate this problem into a set of sharply posed and answerable research questions and design. The projects progress will be reviewed throughout the semester.

Presenting research results convincingly to an audience is, in my opinion, a critical task. We will spend some time on it in the class. The last two sessions will give you such an opportunity (Approximately 20 minutes per presentation). Each group will be asked to make an in-class **final project presentation** in these sessions. (**Chapter 19** in the text provides some useful guidelines for successful presentations). The other members of the class are expected to participate and act as the client. **Remember the “10/20/30 rule of PowerPoint”—10 slides, 20 minutes and no font smaller than 30 point.** I will let you know the sequence of the presentations prior to December. The final written report should be no longer than **twenty** double-spaced pages in total (excluding exhibits, appendices, and other attachments) and it should follow the report format described in the text (again, please see **Chapter 19**). **The presentation deck and final report is due on the last class meeting.**

**At the end of the course syllabus you will find a Group Project Self-Evaluation Form which will give you an opportunity to share with me your evaluation of the relative contributions made by your groupmates.**

## Exam

The exam is open-book. No electronic devices other than calculator are allowed. **No make-up exams.**

## Class Attendance:

I expect you to be on time to class. Every session of the course will involve some discussion. Please be prepared. Some class sessions in this course follow a case discussion format. The assigned cases are intended to give you practice to support a decision. Further, the case method provides a vehicle by which to apply the theories, concepts, and analytical techniques discussed in a class or in the reading materials. You will also find them helpful in working on your group project.

Keep in mind that your grade for class participation is not simply a function of the amount of "air time" you take up. I will evaluate you on how well you respond to questions and on how effectively you take into account the comments and analyses of your classmates. In order to obtain a grade for class participation you must attend the class sessions and contribute meaningfully. **Presentation decks will be available before class and the use of laptops in the classroom is discouraged.**

The various **guest lectures** are intended to provide the class with an opportunity to get exposure to real-world problems and their research-based solutions. It is highly recommended that you familiarize yourself with the guest speaker's firm and its clientele. **It is expected that you email me at the end of the guest speaker's day your three key takeaways from the session.** Please note that there may be some *changes* in the dates they are scheduled to visit the class.

## **JEHOSHUA ELIASHBERG**

Jehoshua (Josh) Eliashberg is the Sebastian S. Kresge Professor of Marketing and Professor of Operations and Information Management, at the Wharton School of the University of Pennsylvania. He also held visiting scholar positions at the Business Schools of The University of Chicago, Chulalongkorn University (Bangkok, Thailand), Penn State University, INSEAD (Fontainebleau, France), Erasmus University (Rotterdam, The Netherlands), Singapore Management University, Carnegie-Mellon University, The University of British Columbia, UCLA, Time Inc., and at the Operations Research Department at AT&T Bell Laboratories.

Professor Eliashberg's research interests are in developing models and methodologies to solve business problems. His research has focused on various issues including new product development and feasibility analysis, marketing/manufacturing/R&D interface, and competitive strategies. He has particular interest in the media and entertainment, pharmaceutical, and the hi-tech industries. He has authored numerous articles appearing in major academic journals. His work in the entertainment industry has been the subject of articles appearing in *BusinessWeek*, *The Christian Science Monitor*, *The Financial Post*, *Financial Times*, *Forbes*, *Fortune*, *Los Angeles Times*, *The Philadelphia Inquirer*, *The New York Times*, *Variety*, *Newsweek*, *The Wall Street Journal*, and *The Washington Post*.

He is currently the Series Editor of Springer's International Series in Quantitative Marketing and the Editor-in-Chief of *Foundations and Trends in Marketing*. He was elected a Fellow of the INFORMS Society for Marketing Science for his contributions to the field in June 2010 and was named a Fellow of The Institute for Operations Research and the Management Sciences in November 2010. His other professional services have included membership on the advisory boards of the National Science Foundation, the American Councils for International Education, and the academic liaison committee of the CMO Council.

Professor Eliashberg has been teaching various courses at Wharton. Prior to joining academia, he was employed for a number of years as an electronic engineer and marketing. He has participated extensively in various executive education programs. His executive education and consulting activities include AccentHealth, AstraZeneca, AT&T, Booz, Allen & Hamilton, Bell Atlantic, Campbell Soup, Cheil Communications, CTV Television Network (Canada), Domino's Pizza, Franklin Mint, General Motors, Givaudan, HBO, IBM, Independence Blue Cross, Inmar, Janssen Pharmaceutica Inc., Johnson & Johnson, L G Electronics, Lucent Technologies, Multimedia Development Corp. (Malaysia), Pathe Cinema (Holland), Philip Morris, The Siam Cement Group (Thailand), Sirius Satellite Radio, Warner Home Video, Weave Innovations Inc., Woodside Travel Trust, and Wyeth/Pfizer Pharmaceuticals. He also serves as an advisor to a number of startup companies.

## Group Project Self-Evaluation Form

The purpose of this evaluation form is to communicate the contribution of each individual in the group. Do this by allocating points among group members: give more points to individuals who did more work or for some reason deserve more credit; give fewer points to individuals who did less work or for some reason deserve less credit. The total points available for the entire group **including you** are 100. Therefore, if there are five members in your group, and if you feel that each member did their fair share of the work, then give 20 points to each member. If you give one or more members more than 20 points, then one or more other members must receive less than 20 points. I will consider confidentially all of the evaluations turned in by the group and any other relevant information that emerges during the term in assigning points for the Individual Effort component of the project. (Of course, you may as a group decide jointly how you will make the point allocations, if you so desire.)

**Project Title:**

	<b>Group Member</b>	<b>Points</b>
Your Name:	_____	_____
Other Members:	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
Comments (if any):	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____