Instructor

Professor Sam K. Hui
Tisch 910 (Office hours: Tuesday 1:30pm – 3:00pm or by appointment)
Email: khui@stern.nyu.edu

Course Overview

The main objective of this course is to equip students with the key concepts and methods of marketing research, and learn how to apply those tools to solve real-life business problems. This course focuses equally on (i) technical competence and (ii) applications to real-life problems. We cover the technical aspects of marketing research (both qualitative and quantitative research methods) through lectures and short individual homework assignments. We also discuss real life applications using various mini-cases. The other important element of this course is a marketing research project (more details under the “Marketing Research Project” section below) where students identify and solve a real business problem using marketing research methods.

This course is divided into three modules.

Module I — Basic concept and tools: We discuss the basic research process and briefly discuss the four main aspects of marketing research, which includes the followings.
- Problem definition: backward marketing research
- Research design: qualitative, descriptive, and experimental research
- Data collection: survey design and sampling methods
- Data analysis: basic statistical analysis and formal hypothesis testing

Module II — Advanced methods: Having mastered the basic concepts and tools of marketing research, we move on to study three specialized statistical methods most commonly used in marketing research. We study the application of these techniques to optimize the marketing mix (pricing, promotion, product design, positioning). The techniques that we cover include:
- Regression: forecasting, analyzing test market experiment, and marketing mix analysis.
- Conjoint analysis: understanding consumer preferences and application to product design
- Factor analysis and perceptual maps: understanding consumer perception and application to brand/product positioning.

The focus is on understanding the basic concepts behind these techniques and their real life applications. We will not go in depth into the technical aspects of these statistical techniques. For each technique, we will have a “computer workshop” session to go over the mechanics together.

Module III — Emerging trends and project presentations: In the third and final module, we explore some of the current developments and new application areas of marketing research, a
constantly evolving field. In this semester, we will invite guest speakers to discuss the following areas:

- In-store shopper marketing (Colgate)
- TBA

The course will conclude with student presentations of their group-based marketing research project.

**Required Material**

No textbook is required for this course. We will cover articles, notes, and selected textbook chapters, and cases in the required reading packet (please order from the NYU bookstore).

Require software:

- IBM SPSS Statistics 18 or above (Student version cost about $41.99 for a 6-month license on www.onthehub.com):
  - You may also access SPSS using NYU’s Virtual Computer Lab (VCL), but I highly recommend obtaining your own copy since there have been stability issues with VCL in the past.
- Microsoft EXCEL (version 2007 or newer)

**Pre-requisites**

- MKTB-UB.0001 Introduction to Marketing
- STAT-UB.0001 Statistics for Business Control OR
- STAT-UB.0103 Statistics for Business Control and Regression and Forecasting Methods

Note: A working knowledge of statistics (STAT-UB.0001 / STAT-UB.0103) is essential for understanding the quantitative aspects of marketing research covered in this class. Students who have not taken the pre-requisite course should talk to me before enrolling in this class.

**Class Requirements & Grading**

- Midterm I (covers Module I): 20%
- Midterm II (covers Module II): 20%
- Individual homework assignments 20%
- Class participation: 10%
- Group project: 30%

Students in Stern undergraduate (elective) courses can expect a grading distribution where:

- 25-35% of students can expect to receive A’s for excellent work
- 55-65% of students can expect to receive B’s for good or very good work
- 5-10% of students can expect to receive C’s or less for adequate or below work.
Detailed Class Requirements

Exams (40%)

The purpose of the exams is to assess your analytic skills and technical competence. The exams are not cumulative: Midterm I covers only materials in Module I, and Midterm II covers only materials in Module II. The exam will cover material presented in (i) lectures, (ii) assigned readings, and (iii) articles given out in class.

Exams are closed book, but you are allowed to bring in one letter-size sheet with notes on only one side. I will provide you with some sample practice questions before the exams, and will go over them during the review sessions. The focus of the exam would be on understanding and interpretation, rather than rote memorization. The goal of the midterms is to ensure that students have acquired a basic level of competence with marketing research techniques and concepts.

Homework assignments (20%)

There will be several individual-based short homework assignments during the course of the semester. These homework assignments seek to reinforce the concepts and methods covered in the lectures by applying them to real-life situations. In addition, I may also give out some in-class exercises to provide some hands-on experience with the marketing research tools.

Class participation (10%)

Given that marketing research is an applied subject where participation and discussion is essential for learning, I encourage class participation and interaction as much as possible, especially for the case discussions. Class participation is mainly evaluated by the following criteria:

- **Attendance:** You are expected to attend every class on time and well-prepared.
  - Electronic equipments (laptops, cell phones, PDA, MP3s, iPad, etc.) and other kinds of entertainment (e.g., newspaper) are not permitted in class unless I announce otherwise for a particular class session. Violations will adversely affect your grade for class participation severely.
  - Six classes that you **must** be here are: the four guest lectures (marked as [Guest] on the syllabus, and the two project presentation sessions).

- **Participation in case discussions:** You are expected to be thoroughly prepared for any assigned readings and cases before coming to class, and are expected to contribute in case discussions. I focus on the quality of your ideas, rather than the air time that you take.
Marketing Research Project (30%)

The objective of the research project is to provide students with experience in applying the concepts and methods learned in class to a real world problem. Students may choose any problem of their own. For example, past students have conducted marketing research studies to test a new product/service concept, or they may conduct a research study to offer recommendations to existing product and services. Either way, the problem should be relevant to a business or governmental organization. The project is to be done in groups of four or five students. The project proposal must be discussed and approved by the instructor in its early stage (see course schedule for exact dates).

Guidelines for the course project and project report

1. When selecting a project, make sure you have a clear understanding of the research problem(s) at hand, a realization of the organizational constraints for dealing with such a problem (including time and budgetary restrictions), and an understanding of how the information provided by your research will facilitate decision making.
2. Identify the information needed to address the research problem.
3. Choose a research design and justify its choice (e.g., survey, experiment, focus group, or combination of methods)
4. Develop the data collection method(s). This should include a sampling plan and instrument design (e.g., questionnaire).
5. Collect data. For the purpose of this course, you are required to collect at least 30 completed responses (See the instructor if your research design does not permit this, or if this is irrelevant).
6. Analyze your data using appropriate statistical techniques.
7. Present your recommendations based on your findings and discuss the limitations of your research.

The entire final project report (excluding questionnaire, tables, figures, etc.) should not exceed 20 double-spaced pages. I will give out more details about the requirements of the group project later.

Group members can evaluate each other’s performance on the project using a “peer review form” available on Blackboard. If no evaluation is turned in, I will assume that everybody in the group contributed equally. Individual project grades may be adjusted up or down depending on the evaluations.
Course Schedule

*[Pack]: available in the reading packet purchased from the bookstore. Other readings will be given out before class.

[Guest]: Guest lecture. You must attend this class unless you have a medical emergency.

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Topic</th>
<th>Assigned Readings*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Module I: Basic Concepts and Tools</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>T Jan 28</td>
<td>Introduction to Marketing Research</td>
<td>“If you’re creating ads…”</td>
</tr>
<tr>
<td>2</td>
<td>R Jan 30</td>
<td>Research Process and Problem Formulation [HW #1 out]</td>
<td>[Pack] Backward Marketing Research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Pack] Cost-conscious marketing research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Pack] “The Coop” case</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Deadline for forming groups)</td>
<td>“The Girl with the Gun”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“How Netflix drop the ball…”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“India’s Mobile Phone Hitmaker”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“Consumer Cartography”</td>
</tr>
<tr>
<td>4</td>
<td>R Feb 6</td>
<td>Research Design: Descriptive &amp; Experimental Research</td>
<td>[Pack] AKD Ch.5, p111-118, 144-145</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“How to Survive in Vegas”</td>
</tr>
<tr>
<td>5</td>
<td>T Feb 11</td>
<td>Data Collection: Survey design (Research proposal due)</td>
<td>[Pack] AKD Ch.11, p292-304</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[HW #1 due; HW #2 out]</td>
<td>“What the heck is a TV set?”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“Maritim hotels survey”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“Notes: Qualtrics tutorial”</td>
</tr>
<tr>
<td>6</td>
<td>R Feb 13</td>
<td>Project group meeting (problem definition)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>T Feb 18</td>
<td>Data Collection: Sampling and Sample Size [HW #2 due; HW #3 out]</td>
<td>[Pack] Z&amp;B Ch.12, p301-320</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Pack] AKD Ch.15, p422-426</td>
</tr>
<tr>
<td>8</td>
<td>R Feb 20</td>
<td>Data Analysis: Intro. To SPSS and basic analysis</td>
<td>“Notes: SPSS and Basic Analysis Tutorial”</td>
</tr>
<tr>
<td>9</td>
<td>T Feb 25</td>
<td>Data Analysis: Hypothesis testing</td>
<td>“Notes: Basic Hypothesis testing in SPSS”</td>
</tr>
<tr>
<td>10</td>
<td>R Feb 27</td>
<td>Review</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[HW #3 due]</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>T Mar 4</td>
<td>Midterm I</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Module II: Advanced Methods</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>R Mar 6</td>
<td>Regression I: Review and Introduction [HW #4 out]</td>
<td>[Pack] Simple Regression Mathematics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>“Notes: Regression (Introduction)”</td>
</tr>
</tbody>
</table>

5
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>T</td>
<td>Regression II: Applications</td>
<td>“Notes: Regression (Applications)” [Pack] Newfood case</td>
</tr>
<tr>
<td>14</td>
<td>R</td>
<td>Project Group Meetings (Research method) (Research method proposal due)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>T</td>
<td>Conjoint Analysis</td>
<td>[Pack] New Way to Measure Consumers’ Judgment</td>
</tr>
<tr>
<td>16</td>
<td>R</td>
<td>Conjoint Analysis (Computer Session)</td>
<td>“Notes on Conjoint Analysis”</td>
</tr>
<tr>
<td>18</td>
<td>R</td>
<td>Factor Analysis and Perceptual Maps (Computer Session)</td>
<td>“Notes on Perceptual Mapping”</td>
</tr>
<tr>
<td>19</td>
<td>T</td>
<td>Review</td>
<td>[HW #6 due]</td>
</tr>
<tr>
<td>20</td>
<td>R</td>
<td>Midterm II</td>
<td></td>
</tr>
</tbody>
</table>

### Module III: Emerging Trends and Project Presentations

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>T</td>
<td>[Guest] (TBA)</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>R</td>
<td>[Guest] (TBA)</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>T</td>
<td>[Guest] (TBA)</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>R</td>
<td>[Guest] Bill Bean, Colgate</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>T</td>
<td>Project Preparation &amp; meetings</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>R</td>
<td>Project Preparation &amp; meetings</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>T</td>
<td>Project Presentations</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>R</td>
<td>Project Presentations</td>
<td></td>
</tr>
</tbody>
</table>

### Other Class Related Issues

**Course Website:** All relevant material related to the course will be posted on NYU Classes. Schedules, reading material, cases, and class notes will be made available in class.

**Grading:** You can only appeal a grade if there is a clear misreading of what you wrote. I can give you suggestions for improving your work, but will not respond to emotional appeals.

**Due dates:** All due dates are strictly enforced without valid reason and prior permission. **Only 50% credit is given for late assignments, and no credit for assignments more than a week late.**

**Feedback:** My goal is to make this an excellent course and maximizes students’ learning. If, at any time, you feel that this course is not meeting your expectations, or if you want to provide feedback on how the course is progressing for you, please contact me.
Detailed Description of Each Session

[Pack] Reading material is in the reading packet purchased from the bookstore. Other material will be handed out in class.

Module I: Basic Concepts and Tools

Session 1--- Introduction to Marketing Research (Jan 28)

Overview: This session provides an overview of the entire course. We discuss the role of marketing research, and whether and when marketing research is preferred to “gut feelings.” We also provide a high-level overview of all the topics that will be covered in this semester, and how they fit into the framework of “marketing research process,” a framework that aims to maximize the benefit and minimize the cost of conducting marketing research.

Readings: - “If you’re creating ads, odds are you’re talking to yourself”

Session 2--- Research Process and Problem Formulation (Jan 30)

Overview: We describe the marketing research process, and argue that research is best done “from the end to the beginning” (i.e., “backward market research”). We also provide a modern example, through the use of social media, on how marketing research can be done in a cost-effective manner (“Cost conscious marketing research”). Finally, we go through the Coop case for a specific example of some of the issues involved in problem formulation.

Readings: - [Pack] Backward Market Research
- [Pack] Cost-Conscious Marketing Research
- [Pack] “The Coop” case
- “Social Media are Giving a Voice to Taste Buds”

Session 3--- Research Design: Exploratory/Qualitative Research (Feb 4)

Overview: We begin by providing an overview of the three main research designs in marketing research: qualitative, descriptive, and experimental research. We then discuss the two main methods of exploratory/qualitative research – (i) listening, and (ii) watching. We discuss both the “traditional” way of doing exploratory research as well as the “modern”/emerging approaches. Traditional ways of “listening to consumers” includes focus group and in-depth interviews, and the modern way to do so is through social media monitoring. Traditional way of “watching consumers” includes direct observation and shadowing, and modern ways includes various forms of consumer tracking (e.g., radio frequency identification tracking, video tracking).

- “The girl with the gun”
- “How Netflix drops the ball”
- “India’s mobile phone hitmaker”
- “Consumer Cartography”
Session 4--- Research Design: Descriptive and Experimental Research (Feb 6)

Overview: In this session we discuss the other two types of research design: descriptive and causal research. For descriptive research, we discuss various examples of secondary data that marketers collect to understand consumer behavior: internal records, website traffic data, media data, scanner data, and demographics data. We then move on to discuss experimental research in marketing, using taste test and website design testing as examples.

Readings: - [Pack] AKD Ch.5, p111-118; p144-145
- “How to survive in Vegas”

Session 5--- Data Collection: Survey Design (Feb 11)

Overview: We focus on the design of questionnaires in this session. We discuss the differences between cross-sectional and longitudinal survey research. Next we discuss some specific issues of questionnaire design including the choice of measurement scales, attitudinal rating scales, open vs. closed ended questions, and question wording. We then discuss these issues using a real survey from Maritim hotel. Finally, we introduce Qualtrics, an online survey platform.

Readings: - [Pack] AKD Ch.11, p292-304
- “What the heck is a TV set?”
- “Maritim hotels survey”
- “Notes: Qualtrics tutorial”

Session 6--- Project Group Meeting: Problem Definition (Feb 13)

Overview: I will meet with each group individually to discuss the marketing research problem that they intend to study for the group project. We will work together to identify a problem (and expand/narrow down its scope) so that it is appropriate and feasible for the group project.

Readings: N/A

Session 7--- Data Collection: Sampling and Sample Size (Feb 18)

Overview: From this session onward, we study the more quantitative aspects of marketing research. We discuss the use of different sampling methods: convenience sampling, snowball sampling, simple random sampling, and stratified sampling. We then review estimation theory from statistics, and demonstrate how to estimate population quantities (means and proportions) from a sample. We study how to determine an appropriate sample size for a marketing research project. Finally, we conclude with two real-life examples: (i) evaluating an advertisement using social media and (ii) estimating the market size of a healthcare product.

Readings: - [Pack] Z&B Ch.12, p301-320
- [Pack] AKD Ch. 15, p422-426
Session 8--- Data Analysis: Introduction to SPSS and Basic Analysis (Feb 20)

Overview: In this session and the next, we focus on conducting basic statistical analysis and formally reporting statistical results using SPSS. We will use the Maritim survey as an example, and demonstrate how to conduct various statistical analyses to answer different managerial questions.

Readings: - “Notes: SPSS and Basic Analysis Tutorial”

Session 9--- Data Analysis: Introduction to Hypothesis Testing (Feb 25)

Overview: For the formal reporting of marketing research results, p-values and the assessment of statistical significance is usually required. In this session, we cover the basic concept of hypothesis testing and “statistical significance”, and demonstrate how we can formalize the analysis we did in the previous session by computing p-value using SPSS.

Readings: - “Notes: Basic Hypothesis Testing in SPSS”

Session 10--- Review (Feb 27)

Overview: We will review what we have covered so far in Module I and go over some sample questions in preparation for Midterm I.

Readings: N/A

Session 11--- Midterm I (Mar 4)

Midterm is closed-book, closed notes. You are allowed to bring a one-page letter-size “cheat sheet”.

Readings: N/A

Module II: Advanced Methods

Session 12--- Regression I: Review and Introduction (Mar 6)

Overview: We start with an overview of the topics in Module II. We then cover the basic concepts of regression analysis, a technique that is widely used in marketing research. Much of this session is a review of the material covered in introductory statistical courses. We review the concepts and terminology of simple and multiple regression and demonstrate how to run regression in EXCEL and SPSS, using an example where twitter data is used to predict box office revenue.

Readings: - [Pack] Simple Regression Mathematics
Session 13— Regression II: Applications (Mar 11)

Overview: We illustrate the application of regression analysis in marketing research through three real life examples: predicting the sales of DVD using pre-orders, estimating price elasticity in price experiments, and analyzing a test market.

Readings: - [Pack] Newfood test market
- “Notes on Regression (Applications)”

Session 14— Project Group Meetings: Research Method (Mar 13)

Overview: I will meet with each group individually to discuss the research method that they intend to use for the group project. We will work together to ensure that the chosen research approach is appropriate to address the problem at hand.

Readings: N/A

Session 15— Conjoint Analysis (Mar 25)

Overview: We cover conjoint analysis, a very popular marketing research tool designed to understand consumers’ preferences for a product. We will discuss the underlying concepts of conjoint analysis and provide some hands-on demonstration with real life applications.

Readings: - [Pack] New way to measure consumers’ judgments

Session 16 --- Conjoint Analysis (Computer Session) (Mar 27)

[Computer Session]

Overview: We demonstrate how conjoint analysis is done in real life by analyzing a large dataset from a conjoint study using EXCEL.

Readings: - “Notes on Conjoint Analysis”

Session 17 --- Factor Analysis and Perceptual Maps (Apr 1)

Overview: We study consumers’ perceptions of different brands using factor analysis and perceptual maps. This session provides a conceptual overview of the methodology.

Readings: - [Pack] Analyzing consumer perceptions

Session 18 --- Factor Analysis and Perceptual Maps [Computer Workshop] (Apr 3)
Overview: We demonstrate how to produce a perceptual map using factor analysis, using SPSS & EXCEL.

Readings: - “Notes on Perceptual Mapping”

Session 19— Review (Apr 8)

Overview: We will go over some sample questions in preparation for Midterm II.

Session 20— Midterm II (Apr 10)

Module III: Emerging Trends and Project Presentations

Session 21— Guest Lecture : TBA

TBA

Session 22— Guest Lecture : TBA

TBA

Session 23— Guest Lecture : TBA

TBA

Session 24— Guest Lecture : Bill Bean, Colgate (Apr 24)

Guest lecture by Bill Bean, Worldwide Director of Global Shopper Insights, Colgate.

Session 25 & 26 — Project Preparation (Apr 29, May 1)

These two sessions are intentionally left blank for students to prepare for project presentations. I will meet with groups to discuss the final analysis of their projects upon request.

Session 27 & 28 — Project Presentations (May 6, May 8)

These two sessions are reserved for student presentations.