MKT/DSO 566 – Marketing Analytics	Professor:	Anthony Dukes
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Spring 2019	Office Hours:	Wednesdays 1:00-2:30pm
M/W 9.30-10.50am & 5.00-6.20pm	Office:	Hoffman Hall (HOH) 305
W 6.30-9.30p (MS Program)	Office Phone:	213-740-3846

Course Description

This course provides the skills needed to make intelligent use of marketing data in making recommendations about marketing strategies. These skills are learned through a combination of lectures, cases, and "hands-on" exercises with actual business data. The course is designed to equip the student with practical "know how", which can be used immediately on the job. Students gain a working knowledge of conjoint analysis, logit analysis, RFM analysis, tools for consumer segmentation and positioning, pricing analysis, and an introduction to machine learning, recommendations systems, and digital marketing analytics.

Learning Objectives

Upon successful completion of this course, students will be able to:
1. Describe the data-handling techniques used to make marketing decisions.
    a. Explain the basic principles behind these techniques and their limitations.
    b. Apply these techniques to propose marketing decisions involving new product design, consumer segmentation, targeting, and positioning, as well as pricing and online advertising.
2. Make marketing recommendations based on rigorous analysis and on sound reasoning.
3. Propose managerial ideas orally and in writing.
4. Utilize the commercial software used for marketing analytics.

Reading Materials

1. *Principles of Marketing Engineering and Analytics*, 3rd Edition, by Gary Lilien, Arvind Rangaswamy and Arnaud de Bruyn (DecisionPro, Inc. 2017),
   ISBN: 978-09857648

2. MKT/DSO 566 Course Reader for Spring 2019

3. Additional readings will be assigned during the class and linked via blackboard.

Prerequisites and/or Recommended Preparation

There is no official prerequisite for this course. However, a knowledge of the principles of marketing will be assumed. The textbook listed above reviews some of the basics, but it is not a substitute for prior course in marketing fundamentals. Students without such background may want to consult a basic introductory textbook on marketing, such as *Principles of Marketing, 16th ed,* by Philip Kotler & Gary Armstrong, Pearson 2015, ISBN: 978-0133795028.

Grading Policies

Formal Course Assessment

Individual Problem Sets	40%
Conjoint Project	20%
In-Class Exercises & Participation	15%
Midterm Exam	10%
Final Exam	15%

Grading Elements

Individual Problem Sets: Students need to develop their own competence in dealing with the subject matter of this course. To accomplish this, the instructor will provide 4 individual assignments covering material discussed in the course. Each student is required to complete all 4 assignments to pass the class. The due dates of these assignments will be specified when distributed. (Measures achievement in Learning Objectives 1b, 2.)

Conjoint Project: The course project is the opportunity for you to work in a group on an extensive marketing analytics project. The topic is yours to choose, but it must include a conjoint survey utilizing the cloud-based software, Discover, from Sawtooth. You will form your own problem and then collect the data you need to make the necessary recommendation. The project will involve a class presentation as well as a write-up. (Measures learning objectives 1b, 2, 3, 4.)

In-Class Exercises & Participation: This course is intended to be an active learning experience. Your learning is enhanced by actively participating in each lecture. This includes hands-on in-class exercises and interactive participation. Your interactive participation also improves the learning experience for your classmates. The grading will be determined by the quality (not necessarily quantity) of your participation during each lecture. (Measures learning objective 1.)

Midterm Exam: The midterm exam gives you an early assessment on how well you understand the principles of marketing analytics. (Measures achievement in Objective 1-a.)

Final Exam: The final exam will be a comprehensive test of your understanding of the principles of marketing analytics. (Measures achievement in Objective 1-a.)

Final Grades

Final grades represent how you perform in the class relative to other students. Your grade will not be based on a mandated target, but on your performance. Three items are considered when assigning final grades:

1. Your average weighted score as a percentage of the available points for all assignments (the points you receive divided by the number of points possible)

2. The overall average percentage score within the class

3. Your ranking among all students in the class

Assignment Submission Policy:

Assignments must be turned in on the due date/time electronically via Blackboard. Any assignment turned in late, even if by only a few minutes, will receive a grade deduction (for example, if your work is a B+ grade, you will be given a C+ grade).

Course Procedures

Readings: It is <u>required</u> that you do the assigned readings *before* each class. These readings provide useful background information for the lectures and will enable you to participate in class discussions productively. Some assigned readings will be distributed through the ME>XL software installation, while others will be distributed through their website links in lecture slides or on Blackboard.

Laptop and Software: It is <u>required</u> that you download and install all the software as per the instructions of the instructor. We will often use laptops for in-class exercises.
Please make sure that you bring your laptop to every class.

Classroom Conduct: There are certain rules that will help all of us to have a good experience in the classroom.

- Arrive on-time and remain throughout the class. Arriving late or periodic exits makes us all feel as if we were at the airport – not a place conducive to learning.

- Be prepared to participate actively. This is not the place to sleep, chat with your friends, read the news, text message, etc. There are more comfortable places for those activities than this classroom.

- No use of phones or tablet devices in the classroom

Violation of these rules will negatively affect your class participation grade.

Additional Information

Add/Drop Process

In compliance with USC and Marshall's policies classes are open enrollment (R-clearance) through the first week of class. All classes are closed (switched to D-clearance) at the end of the first week. This policy minimizes the complexity of the registration process for students by standardizing across classes. I can drop you from my class if you don't attend the first two sessions. Please note: If you decide to drop, or if you choose not to attend the first two sessions and are dropped, you risk being not being able to add to another section this semester, since they might reach capacity. You can only add a class after the first week of classes if you receive approval from the instructor.

Further, if you are absent from the first three weeks of classes, you will be required to withdraw by January 27. These policies maintain professionalism and ensure a system that is fair to all students.

Students with Disabilities

The Office of Disability Services and Programs (www.usc.edu/disability) provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter

of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: ability@usc.edu.

Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own (plagiarism). Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the SCampus, the Student Guidebook (www.usc.edu/scampus or http://scampus.usc.edu). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and Appendix A).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/ . Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ or to the Department of Public Safety http://dps.usc.edu/. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. The Center for Women and Men http://engemannshc.usc.edu/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage http://sarc.usc.edu/reporting-options/ describes reporting options and other resources.

Support Systems

Students whose primary language is not English should check with the American Language Institute http://dornsife.usc.edu/ali which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs (www.usc.edu/disability) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, USC Emergency Information (http://emergency.usc.edu/) will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Emergency Preparedness/Course Continuity

In case of a declared emergency if travel to campus is not feasible, the USC Emergency Information web site (http://emergency.usc.edu/) will provide safety and other

information, including electronic means by which instructors will conduct class using a combination of Blackboard, teleconferencing, and other technologies.

Please make sure you can access this course in Blackboard and retrieve the course syllabus and other course materials electronically. You should check Blackboard regularly for announcements and new materials. In the event of an emergency, the ability to access Blackboard will be crucial. USC's Blackboard learning management system and support information is available at blackboard.usc.edu.

Course Calendar: Topics, Readings, Assignments, and Events

This is a *tentative* plan of the weekly topics, the associated reading assignments, and other important due dates. All formal due dates, readings, assignments and will be announced on Blackboard. **The date/time of the Final Exam is determined by the University and will not be changed for anyone.**

Week		Topic	Reading Assignments* & Problem Sets
January	1	Introduction to Marketing Analytics Using ME>XL Software	LRD-1 CR-"Big Data's Problem: Little Talent" from *Wall Street Journal* (2012); CR-"Sure, Big Data is Great. But so Is Intuition," *New York Times* (2012) CR-"How Companies Learn Your Secrets" from *New York Times Magazine* (2012)
	2	Tools for Market Segmentation	LRD-2 (35-59); LRD-3 (71-100); ME>XL Segmentation & Classification Tutorial
	3	Identifying Target Markets	ME>XL Conglomerate Inc. New PDA
	4	Introduction to Choice Modeling	ME>XL Customer Choice (Logit) Tutorial (1-14)
February	5	Behavioral Targeting with Choice Models	LRD-3 (100-109) ME>XL Bookbinders Book Club
	6	Visualizing Market Positions: An Introduction to Perceptual Mapping	LRD-4; ME>XL Positioning Tutorial Problem Set 1 Due
	7	Tools for Brand Positioning	ME>XL Positioning the Infiniti G20
	8	Principles of Conjoint Analysis	LRD-6 CR-" Understanding Conjoint in 15 Minutes" Problem Set 2 Due
March	9	Market Simulation with Conjoint Analysis	CR-" Interpreting the Results of Conjoint Analysis" ME>XL Dürr Environmental Controls, Inc. Mid-Term Exam
		Spring Break	
	10	Product Design using a Conjoint Analysis	CR-" Managerial Overview of Conjoint Analysis" Problem Set 3 Due
	11	Tools for Price Optimization	LRD-7 (191-208) ME>XL Pricing Tutorial
April	12	Tools for Price Optimization	ME>XL Zach's Garage
	13	Digital Marketing Analytics	LRD-8 (229-247) Problem Set 4 Due
	14	Digital Marketing Analytics	CR-"Chapter 7: From Clicks to Value with Internet Marketing Metrics"
	15	Project Presentations	Conjoint Project
May		**Final Exam**: M/W Sections: TBD	
		Final Exam: T PM Section: TBD	

* Reading Sources: LRD = Textbook; CR = Course Reader; ME>XL = ME>XL Website (decisionpro.biz)