B9699: ANALYTICAL MODELS IN MARKETING
Fall 2018

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Room: Uris 327
Time: Wednesday, 9:45 am to 1:00 pm (October 24, 31, November 7, 14, 28, December 5)

Analytical research in marketing usually consists of applied microeconomics and game theory models aimed at understanding real-world phenomena. This course will provide broad knowledge of many substantive topics in marketing that are amenable to economic modeling and analysis, including pricing, product design and positioning, promotions, advertising, distribution channels, salesforce compensation and interface of marketing with operations. This knowledge will help you to appreciate and critique some of the major streams of quantitative marketing research, and to develop your own research interests. The main learning vehicle will be reading, presenting and discussing papers. The focus will be on understanding the main idea(s) of a paper along with the key implementation details. In addition, we will solve some toy models in class to familiarize you with the mechanics of some widely used modeling paradigms in marketing, and give you a hands-on experience with the economic modeling of marketing phenomena. As theory underpins good non-theoretical research, this course will be useful to you even if you do not plan to conduct research in analytical modeling.

The course will meet once a week for 180 minutes for six weeks. I will assign two or three papers for each class that you will be expected to have read before class. This will help you get the most out of class and also contribute to the discussions in a thoughtful manner.

Each class is organized by topic and I have listed a number of relevant papers. I will start off each class with a short overview. This will be followed by one or two student presentations of 30 minutes each (except for the first class). The aim of every presentation is to understand the key message of the paper being discussed, obtain a fair idea of the methodology and generate discussions. I will also discuss some other papers in varying degrees of depth.

The list of papers may change slightly as we proceed with the course. The papers are available from the Columbia library. If you are unable to access a paper, email me.

Class participation will account for 25% of your final grade. Your class presentation will account for another 25% of your grade. There will be one homework assignment involving some basic mathematical modeling and manipulations, which will account for another 25% of your final grade. A term paper is also required for this course, which will account for the remaining 25% of your final grade. Ideally, a good project paper is one that clearly defines a marketing problem amenable to economic modeling, sets up a reasonable model to address that problem, and draws some sensible conclusions based on technically correct analyses. I encourage you to choose to model a problem from a field of study that you are interested in.
### Overview

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic(s)</th>
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<tbody>
<tr>
<td>October 24</td>
<td>Product Design and Product Positioning</td>
</tr>
<tr>
<td>October 31</td>
<td>Distribution Channels</td>
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<tr>
<td>November 7</td>
<td>Pricing and Promotions</td>
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<tr>
<td>November 14</td>
<td>Advertising (Amin Sayedi guest professor)</td>
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<td>November 28</td>
<td>Advertising, Salesforce Compensation</td>
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<td>December 3, midnight</td>
<td><strong>HW due</strong></td>
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<td>December 5</td>
<td>Marketing and Operations Interface, Miscellaneous Interesting Recent Papers</td>
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<td>After course ends</td>
<td>Term paper</td>
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October 24: Introduction, and Product Design and Positioning

Introduction:


Product Design and Positioning


October 31: Distribution Channels:


November 7: Pricing and Promotions


November 14 and November 28 (first half): Advertising


November 28 (second half): Salesforce Compensation:


December 5: Marketing and Operations Interface, Miscellaneous Interesting Recent Papers

Marketing and Operations Interface:


Miscellaneous Interesting Recent Papers


