

MSIN0041 Marketing Science

Term 1 2019

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Office Hours: Tuesdays 1-2pm (EFB 4.01) and by appointment

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Important Dates: October 18 - Assignment 1
November 1 - Assignment 2
November 1 - Group Formation (Email TA)
December 11 - Group Project Presentation
December 13 - Group Project Report

MODULE DESCRIPTION

Marketing professionals have long used data to measure campaigns and make marketing decisions. But with the advent of new channels and devices, marketers now have access to an unparalleled amount of data. Marketers need a more systematic way of analyzing data, unearthing insights, and using those insights to improve business outcomes.

Marketing Science revolves around understanding complex market dynamics and using various tools to predict outcomes and recommend actions. Marketing scientists exhibit broader collaboration across the business, greater impact on customer engagement and a more pervasive culture of data-driven decision-making.

The aims of this module are:

- To provide students with an understanding of key ideas and concepts in marketing.
- To expose students to the range of marketing problems that leading companies are addressing with scientific approaches and the results they are achieving.
- To provide students with practical experience of working with the range and types of data, models, and tools used in marketing science.

COURSE MATERIAL

1. Textbooks (for reference, not required):
 - *Marketing Management* by D. Iacobucci
 - *Introduction to Algorithmic Marketing* by I. Katsov
 - *Business Data Science* by M. Taddy
 - *Mostly Harmless Econometrics* by J. Angrist and J. Pischke
 - *Industrial Organization: A Strategic Approach* by J. Church
2. PharmaSim simulation manual and software
3. Research papers, cases, and news articles (available on Moodle)

ASSESSMENT

1. (Term 1) Coursework: 2 problem sets – 10%
2. (Term 1) Group project – 30%
 - Presentation and 2,000 word written report (22.5%)
 - Simulation performance (7.5%)
3. (Term 3) Exam – 60%

SCHEDULE

Topic	Methods
1. Introduction to Marketing	Regression, Bayesian Methods
2. Product	Choice Models, Conjoint Analysis
3. Promotion	Experiments, Causal Effects, Matching
4. Pricing	Regression
5. Place	Applied Game Theory
6. No Class (Reading Week)	
7. PharmaSim	
8. Customers, Company, Competitors	CLV
9. Segmentation, Targeting, Positioning	Heterogeneous Treatment Effects
10. User Generated Content	Topic Models, Deep Learning
11. Group Presentations	

READING LIST

Week 2: Product

- Economic Valuation of Product Features by G. Allenby, J. Brazell, J. Howell, and P. Rossi, *Quantitative Marketing and Economics*, 2014.
- Apple vs. Samsung: The \$2 Billion Case, *Columbia Case Works*, 2014.
- [The Power of Brands, Conscious and Unconscious](#), *Knowable Magazine*, 2019.

Week 3: Promotion

- A Comparison of Approaches to Advertising Measurement: Evidence from Big Field Experiments at Facebook by B. Gordon, F. Zettelmeyer, N. Bhargava, and D. Chapsky, *Marketing Science*, 2019.
- Rocket Fuel: Measuring the Effectiveness of Online Advertising, *Berkeley Haas Case Series*, 2014.
- [Did eBay Just Prove That Paid Search Ads Don't Work?](#), *Harvard Business Review*, 2013.

Week 4: Pricing

- Personalized Pricing and Customer Welfare by J.P. Dubé and S. Misra, *Working Paper*, 2019.
- J.C. Penney's "Fair and Square" Pricing Strategy, *HBS Case Study*, 2013.
- [Retailers are Charging the Same Prices Across US](#), *CNBC article*, 2017.

Week 5: Place

- Inference on Vertical Contracts Between Manufacturers and Retailers Allowing for Nonlinear Pricing and Resale Price Maintenance by C. Bonnet and P. Dubois, *RAND Journal of Economics*, 2010.
- CDK Digital Marketing: Addressing Channel Conflict with Data Analytics, *Kellogg School of Management Cases*, 2014.
- [Should a Direct-to-Consumer Company Start Selling on Amazon?](#), *Harvard Business Review*, 2018.

Week 6: No Class (Reading Week)

Week 7: PharmaSim

- PharmaSim Manual

Week 8: Customers, Company, Competitors

- Valuing Customers by S. Gupta, D. Lehmann, and J. Stuart, *Journal of Marketing Research*, 2004
- [Subscription Businesses Are Booming. Here's How to Value Them](#), *Harvard Business Review*, 2017.

Week 9: Segmentation, Targeting, Positioning

- Retention futility: Targeting high-risk customers might be ineffective by Eva Ascarza, *Journal of Marketing Research*, 2018.
- [Why Marketers Should Target Individuals, Not Households](#), *Chicago Booth Review*, 2018

Week 10: User Generated Content

- Identifying Customer Needs from User-Generated Content by A. Timoshenko and J. Hauser, *Marketing Science*, 2019.
- [Consumers' Comments on TripAdvisor are Substitutes for Traditional Ad Spending](#), *UCLA Anderson Review*, 2019.

UNIVERSITY POLICIES

Student Disability Services

<http://ucl.ac.uk/disability/>

Plagiarism

<https://ucl.ac.uk/students/exams-and-assessments/plagiarism>

Academic Calendar

https://www.ucl.ac.uk/estates/sites/estates/files/cal_2019_2020_-_amended.pdf