



## M772 Marketing Models and Modeling Fall 2023 Course Outline

# Marketing DeGroote School of Business McMaster University

### **COURSE OBJECTIVE**

The purpose of this seminar-based course is to acquaint students with theoretical models in the area of marketing as well as research techniques that help develop analytical and empirical models.

## INSTRUCTOR AND CONTACT INFORMATION

#### Prof. Manish Kacker

Associate Professor, Marketing mkacker@mcmaster.ca

Office: DSB #202 Office Hours: By appointment Tel: (905) 525-9140 x21658

## **COURSE ELEMENTS**

Credit Value: 3 Leadership: No IT skills: Yes Global view: Yes A2L: Yes Ethics: Yes Numeracy: Yes Written skills: Yes Participation: Yes Innovation: Yes Group work: No Oral skills: Yes Evidence-based: Yes Experiential: No Final Exam: No Guest speaker(s): No





### **COURSE DESCRIPTION**

From the Graduate Calendar: "This seminar will examine the theoretical models in marketing phenomena and techniques to develop analytical and empirical models explaining marketing decision making will be discussed and critiqued. The modeling techniques that will be discussed include Bass model, marketing channels, strategy and performance, innovation, new products, SEM, Conjoint, Panel Data, Diffusion, etc."

A common thread running through the examination of different marketing modeling approaches and techniques will be the theme of causal explanation – the course will emphasize discussion of the relative strengths and weaknesses of different marketing modeling methods for developing causal explanations and as well as ways to strengthen the quality of causal explanations for each of these methods and techniques.

This is a doctoral-level course designed for graduate students who have successfully completed the prerequisite (M771).

## **LEARNING OUTCOMES**

Upon successful completion of this course, students will be able to complete the following key tasks:

• Acquire methodological and modeling skills needed to explore research questions in the domain of marketing in a more scientifically rigorous manner.

#### Course Materials and Readings

The required materials for the course will largely focus on journal papers. A list of required and suggested readings for each week will be provided to you. In addition, portions of one or more of the following textbooks will be used for background readings:

- 1) Experimental and Quasi-experimental Designs for Generalized Causal Inference by W. R. Shadish, T.D. Cook, and D.T. Campbell (2002).
- 2) Marketing Models: Multivariate Statistics and Marketing Analytics by D. Iacobucci (latest edition)
- 3) *Multivariate Data Analysis*, by J.F. Hair, B.J. Babin, R.E. Anderson and W.C. Black, 8th Edition (latest edition)
- 4) Mostly Harmless Econometrics: An Empiricist's Companion by J.D. Angrist and J.S. Pischke (2008).
- 5) The History of Marketing Science, Winer, R. S., & Neslin, S. A. (Eds.). (2023).





### **EVALUATION**

Article critiques (2 x 12.5 %)	25 %
Idea Paper	5 %
Final research paper and presentation	40 %
Class preparation, presentations and participation	<u>30 %</u>
	100%

#### Conversion

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme.

Grade	Points	<b>Equivalent Percentages</b>
A+	12	90 – 100
A	11	85 – 89
A-	10	80 - 84
B+	9	77 – 79
В	8	73 – 76
B-	7	70 – 72
F	0	69 and under

## **Article Critiques**

Article critiques: This assignment is worth 25% (2 x 12.5%) of your final grade and will be marked individually. Each student will critically evaluate two journal articles (and the modeling approach underlying them). The papers will be selected from papers not on the reading list for this course.

## Idea paper

Idea Paper: This assignment is worth **5%** of your final grade and will be marked individually. Each student is required to submit one short "idea" paper (3 pages in length + references). The paper should reflect your original ideas, be in a research proposal format, reflecting learning from content covered in this course, and could be on (a) developing a conceptual or analytical model or extending an existing model and (b) proposing an empirical assessment – reusing/repurposing a paper submitted by yourself or others for other previous or concurrent courses is not acceptable. An extensive literature review or analysis of data for this paper is not expected at this stage. The focus will be on the idea. In general, the following format is suggested:

- a. Description of the problem,
- b. Discussion of relevant model(s)/paper(s) from which the idea originated,
- c. Development of your model,
- d. Proposal for empirical assessment, and
- e. Expected contribution.





Ideally, the idea should lead to a strong, potentially publishable working paper. I will review your paper and provide detailed feedback about your idea during an individual meeting.

## Final research paper and presentation

Research Paper and Presentation: This assignment is worth **40%** of your final grade and will be marked individually. Each student will select a topic of interest, prepare and present an original paper on it – reusing/repurposing papers submitted by yourself or others for other courses is not acceptable. The content could be based the idea paper or be entirely different. The level of detail expected is that of a sound working paper, ideally ready for a conference submission. The written papers should be formatted along the lines of a research journal and should not exceed 25 typed, double-spaced pages. The paper must clearly demonstrate the underlying methodological rigor of the conceptual/analytical and empirical modeling approaches used and should contain both:

- (a) A conceptual/analytical model: You should develop a sound model (reflecting learning from content covered in this course). If developing a conceptual model, develop a sound theoretical framework and approach (reflecting learning from content covered in this course) and a set of testable hypotheses (with well-formed underlying rationales). If developing an analytical model, please complete analysis and summarize major findings. Explain and justify the logic of the structure of the model and the mathematical results that emerge. The analytical model should reflect learning from content covered in this course. For both options conceptual or analytical model -- explain how the model contributes to the literature and how it can be further developed and/or refined.
- (b) An empirical model: Develop a clearly defined and rigorous method (reflecting learning from content covered in this course) to empirically assess hypotheses/predictions from your conceptual/analytical model. Provided details on how you implement your empirical approach (data, model estimation and analysis approach etc.). Explain why your data collection and analysis methodology are most suitable for empirically assessing predictions from your conceptual/analytical model, and how the proposed research can be further developed and/or refined.

## **Participation**

Class preparation, presentations and participation: Participation in class is worth 30% of your final grade. Students are expected to read on time and be prepared to discuss (with minimum facilitation) <u>all</u> of the required material. Students will be also required to present papers that will be pre-assigned. Contributions to class discussions will be assessed on the basis of a student's ability to comprehend, analyze, present, synthesize and evaluate the assigned readings. Additional guidelines will be provided in class.





## **ACADEMIC INTEGRITY**

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at:

## www.mcmaster.ca/academicintegrity

The following illustrates only three forms of academic dishonesty:

- 1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
- 2. Improper collaboration in group work.
- 3. Copying or using unauthorized aids in tests and examinations

## MISSED ACADEMIC WORK

Late assignments will not be accepted. No extensions are available except under extraordinary circumstances. Please discuss any extenuating situation with your instructor at the earliest possible opportunity.





## STUDENT ACCESSIBILITY SERVICES

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail <a href="mailto:sas@mcmaster.ca">sas@mcmaster.ca</a>.

For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities:

http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf

## ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the RISO policy. Students requiring a RISO accommodation should submit their request, including the dates/times needing to be accommodated and the courses which will be impacted, to their Program Office normally within 10 days of the beginning of term. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

## POTENTIAL MODIFICATION TO THE COURSE

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email.





## Course Schedule

Session	Week of	Topic	Assignments
1	Sept	Course Overview and Introduction to Modeling	
$\begin{vmatrix} 1 & 1 & 11 \end{vmatrix}$	11	Theoretical Models in Marketing Strategy	
2	Sept 18	Theoretical Models in Marketing Strategy	
3	Sept 25	Analytical Models in Marketing Strategy – Overview	
4	Oct 2	Analytical Models in Marketing Strategy – Theory	
5	Oct 9	Analytical Models in Marketing Strategy – Application Empirical Models in Marketing Strategy – Overview	Article critique #1 due by 4 p.m. on Oct 11, 2023
6	Oct 16	Empirical Models – Lab Experiments in Marketing Strategy	
7	Oct 23	Empirical Models – Field Experiments in Marketing Strategy	Article critique #2 due by 4 p.m. on Oct 25, 2023
8	Oct 30	Empirical Models – Quasi-Experiments and Panel Data Modeling in Marketing Strategy	
9	Nov 6	Empirical Models – Quasi-Experiments and Panel Data Modeling in Marketing Strategy	
10	Nov 13	Empirical Models – Event Studies in Marketing Strategy	Idea paper due by 4 p.m. on Nov 15, 2023
11	Nov 20	Empirical Models – Overview of Survey Research Modeling Empirical Models – Conjoint Analysis; Moderated and Nonlinear Regression Models in Marketing Strategy	
12	Nov 27	Empirical Models: Structural Equation Modeling in Marketing Strategy	
13	Dec 4	Empirical Models – Innovation Diffusion Decision Support Models in Marketing Reflections on Marketing Models and Modeling	
14	Dec 11	Final Paper Presentations	Presentation slides due by 4 p.m. on Dec 10, 2023 Final paper due by 4 p.m. on December 18, 2023

Note: The above schedule is tentative and is subject to change. Reading list provided separately.