Marketing Analytics - MKTG 6234 - 01

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Northeastern University
D'Amore-McKim School *of* Business

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Office: Hayden 225E   **Class Room**: Richard's Hall 300 and Zoom
Office Hours: By Appointment Only   **Class Hours**: MW 5:20pm - 7:20pm
        (min 2 days advance notice)

Contents

1   Course Description

The objective of this course is to understand the importance of using an analytical approach to support marketing decision-making in organizations and approaches to implementation practice. The focus is on identifying and acquiring the right data for addressing different marketing challenges; building skills necessary for conducting relevant quantitative analyses; and using insights to make better marketing decisions. Topics may include product innovation, market identification and segmentation, customer valuation, media attribution models, and assessment of digital and social media. Students are expected to apply statistical concepts and use relevant software packages for analyzing marketing datasets.

2   Required and Recommended Materials

- Chapman, C., Feit, E. M. (2015). R for marketing research and analytics (p. 195e223). New York, NY: Springer.

- Weekly Reading Notes

3   Course Format

Our course structure will primarily be lecture, case study, and workshop/lab heavy. I am NOT a fan of powerpoint presentations, and I am a big believer in short-handout-style notes. Our lectures will primarily be based on these "handout-notes", which will be posted weekly in our modules, as well as weekly reading from the textbook. The entire course is organized into modules on Canvas. Each modules is labeled by "Class". All information discussed therein will be contained in the modules.

Generally, our course structure is as follows. On Mondays, we introduce new concepts within Marketing Analytics. These will be a combination of traditional lecture-style sessions as well as hands-on workshop-style sessions. On Monday, Tuesday, and Wednesday, you will have time to work on small exercise sets to solidify your understanding of the material discussed. These exercise sets are more of a technical test of knowledge. On Wednesdays, we will have case study day. You will form into groups and solve group exercises pertaining to the case study discussed in class. Each case study will have a class-component, group-component, and individual component. For the individual component, you have until Monday to complete this. You are required to submit your case study answers in Essay-style format. More details about submission format will be provided on the individual case study itself.

4   General Course Policies

1. Please adhere to professional behavior in class. What does this mean? No, you don't need to show up in business casual dress. This means that I ask you to respect others within the classroom and virtually. If you are in the class, please ensure to show up with a mask on (more on this later). In addition, please refrain from talking with peers while lecture and demonstration is occurring. This is disrespectful behavior, and I will enforce this rule very strongly, which may include a severe detriment to your grade. Note that interruption of

myself, via hand raising, to ask a question does not constitute unacceptable behavior. This is just fine, and even encouraged!

2. Part of this class will be virtual. To ensure proper behavior virtually, I ask that you mute your microphone when attending the class. If you do not, I will mute your microphone for you. Please do not interrupt me or others. Do not quickly shout answers to questions out. Please use the "Raise Hand" feature on Zoom to answer questions or to ask a question.

3. All virtual sessions will be conducted on Zoom. There is no exception to this. Attendance is mandatory, be it virtual or in person. Your weekly workshop participation grade will **not** be counted if you are absent, even if you submitted the work.

4. Important announcements will be made in class and on Canvas. Please ensure to check Canvas and the videos from live sessions. It is your responsibility to continually check for any announcements.

5. **Final course grades are final.** I and the teaching assistants grade on a fair basis. This means that regardless of your background, the rubrics and criteria are applied to everyone in a uniform manner.

6. Accommodating students with special learning needs should reach out to me with proper documentation immediately following the first class session.

7. It is against university policy to cheat. Please read the Northeastern University Policy on Academic Integrity at http://www.northeastern.edu/osccr/academichonesty.html. Cheating entails working in groups on individual assignments, completing others examinations and assignments, having others complete your examinations and assignments, or more generally having someone else complete the course on your behalf.

8. Extra credit opportunity is **not** offered outside of what already is offered, so please do not ask. You have every opportunity to do well in this course. Given that I grade everyone on an equal basis, offering extra credit to boost your grade will cause an inequity in the class. Hence, please do not request extra credit. More on extra credit below.

9. **It is YOUR responsibility, not mine, to keep track of your grades**. With that stated, if you are confused as to how your grade is computed, or you would like a clarification or a "what-if" analysis conducted, I will be more than happy to aid you. Please book and appointment with me to meet during my office hours.

10. All submissions in this course are digital and are to be completed via Canvas. Please do not submit hard-copy versions of assignments or exams.

11. Grades are not rounded, and if they need to be, they are rounded down. Please note that an 89.99 is not equal to 90.00. Put differently, if your grade is near the boundary points of letter grades, they will**not** be rounded up to the next letter grade. My reasoning is simple for this: you did not earn the extra grade that will move you to the next letter, and rounding down does not hurt you. For example, if you receive an 89.99, rounded down this is 89.00, either grade is still B+. Hence, nothing is "taken away" from you, since you did fail in this scenario to earn the extra 0.01 points to push you over. Arbitrary rounding creates unfair advantages, and hence, will not be practiced by this professor in this course.

12. Attendance: This is mandatory. For each class missed, you will suffer an immediate 5-point deduction from your final grade. **No Excuses are Permitted.**

13. Participation: This is also mandatory. While you do not "earn points" for participation, you will have points deducted. Failure to contribute to any class discussion will result in point deductions from your final grade for each class session. Participation can come in the form of answering questions, contributing to group discussions, etc. Participation grades are relative. The more that others contribute, the more points are deducted from your final grade.

5 Evaluation

Item	Points
Exercise Sets (5 Total)	2% Each
Case Studies (5 Total)	8% Each
Final Group Project Report	25%
Final Group Project Presentation	25%

Each component is computed out of 100 points. Your final grade is computed by taking each grade and multiplying it by its corresponding percentage in decimal format, followed by adding together all the terms.

Once your number grade is calculated, you can use the table below to determine your final letter grade in the course. I use a mathematical interval notation. So if your grade x is in the interval $[a, b)$ this is the same as saying $a \leq x < b$

Numerical Grade	Letter Grade
$[93.5, 100]$	A
$[90, 93.5)$	A-
$[88.5, 90)$	B+
$[83.5, 88.5)$	B
$[80, 83.5)$	B-
$[78.5, 80)$	C+
$[73.5, 78.5)$	C
$[70, 73.5)$	C-
$[68.5, 70)$	D+
$[63.5, 68.5)$	D
$[60, 63.5)$	D-
$[0, 60)$	F

In the "Grade Simulations" module of canvas, I have attached an Excel Spreadsheet for you to use to simulate how well or poorly you can do on the assignments to determine what your final grade will be.

6 Office Hours

While I do not hold a fixed time frame for "office hours", I try to make myself as available to you as possible. Do not hesitate to email me regarding a meeting. I ask that you email me at a minimum of 2-days before you intend to meet. The longer, the better, so that I can properly

schedule you in. I am very flexible for days and times most weeks, yet not all. How do you go about scheduling one? First, send me an email asking to meet, and please give me days and times. If you ask for a day and time within 2 days, my answer will be a hard "no". Please give me realistic days and times within this restriction. Next, I will look at my schedule, and hopefully find a spot that works. If not, I will email you back with other possibilities. Once we settle on a day and time, I will send you a Zoom link. Yes, it must be Zoom. Furthermore, I will be the one that sends the invite, not you. This is for security and planning purposes. Please abide by the following policies:

- All office hours are recorded. There is zero exception to this, **zero**. If you prefer to not be recorded, you can ask your questions to me via email, but please note, there will be a delay in a response. At the end of our meeting, I will forward you the recording information.

- Office hours are strictly held over Zoom. Please do not ask me to hold them over phone or some other technology (like Skype or Teams). I will kindly reject.

- Office hours are on strict 30 minute sessions. Failure to show up on time will cut into your scheduled 30 minute block of time if there is another appointment after you.

- I encourage "group" hours. If you and other students are struggling, my suggestion would be to group together and we will hold a group call. Note that group calls are also recorded.

7 Communication with Professor and Communication Silence Period

You are free to email me at m.garvey@northeastern.edu. As mentioned earlier, you are also free to book an appointment with me to meet virtually via Zoom. Please note that any emails pertaining to a case study that are sent to me within 48 hours of the case study's due date **will be ignored**. For example, if you have a case study due at 11:59pm on Monday, the latest you can email me with questions is on Saturday 11:59pm. For exercise sets, I have a 24 hour silent time frame. The latest you can email me questions is on Tuesdays at 11:59pm. Any emails after these deadlines **will be ignored**. I HIGHLY encourage all of you to leverage the discussion boards for questions, rather than emails. This will help others in the course know which questions are being asked.

8 Face Mask Policy

The university, and the state of Massachusetts, has put into effect a face mask policy. This is for the safety of our community. For our in-class sessions, a properly-worn face mask is **mandatory**. Properly-worn entails the mask covering one's mouth and nose. For more information on our face mask policy, please visit https://news.northeastern.edu/coronavirus/reopening/policies-and-protocols for more details. I am going to be very clear on this next point. If any student refuses to wear a mask while attending in class, they will be academically disciplined. I will refuse to continue to lecture the class, declare class over, and walk out. You will receive an immediate F for the course, and you will be reported to higher university officials, where further discipline may be pursued. Please, for the sake and safety of our community, wear a mask as instructed.

9 Social Distancing

In addition to face masks, we are asking students to remain socially distant from each other. Please do not congregate in the halls, in the classroom, etc. Also do not sit near others within the classroom. Do not hover over or come close to other students in the classroom. If you need to ask me or another student a question while in the classroom, please maintain a minimum of a 6ft distance from myself and others. I will kindly remind students who fail to meet this policy. Please do not take it personal, I am merely trying to ensure the safety of our classroom remains intact. A refusal to comply with this policy will result in the same consequences as indicated in the face mask policy.

10 Recording Policy

Every single one of our in-class sessions are recorded. This is for the benefit of every student. At the beginning of each session, everyone must consent to recording. If you do not consent, you will be required to complete an additional assignment in order to show your participation in the class. The assignment will entail a minimum of a 2-page, double-spaced, 12pt write up of a summary of our lecture. If you do not consent, you agree to not participate in class and agree to complete the additional assignment. If you are attending class virtually, please note that recordings on Zoom may show your name, picture, and voice. If you do not consent to recording, you agree to change your name to an unidentifiable one, to keep your camera and microphone turned off, and not to engage in the chat box. Active vocal, visual, or textual participation is assumed to be your implicit consent to recording. Put simply: consent to record if you would like to participate in class, do not consent and you will be required to complete an additional summary assignment for each class session.

11 Attendance and Participation

You are required to attend all courses. There will be a strict zero-tolerance rule to this. While attending alone will not count towards your final grade, missing class will count against your grade. For each class session missed (except the first one), you will have 5 points deducted from your final grade.

Likewise, attending class is not enough. You will be called on at random, expected to answer questions, as well as contribute to group discussions. Similar to attendance, participating will not count towards your grade, but failing to participate will. Participation deductions will be based on a relative scale. If everyone in the class is participating at an approximately equal level, no point deductions will occur for anyone. However, the more that smaller groups of students participate, and the less you participate, the more likely it is that you will have point deductions. Each week, I post participation numbers and "your score". If the score is negative, it means you under participated. If it is positive, it means you contributed greatly to the course. The numbers are cumulative. So it is possible to start the course with negative numbers and flip them positive.

12   Final Project

On Monday, May 17th, we will discuss the details of our final group project. You will be allowed to find a partner with whom to group. In addition, I will take a survey of each of your skills, and try to assign groups of 4 with opposing skills. Some of you may be better at coding, others may be better at communication. The point is for you to leverage your complementary skills to work on an analytics projects throughout the semester. There are three major deliverables to the project. The final deliverable will be the report and all of your code, as well as any presentations slides you intend to use for your final presentation.

   NOTE: part of your final project grade will be determined by your peers. So while I may assign a grade to your for your project and your presentation, your peers will as well. 75% of my grade will go to your final project grade, while 25% of your peer's grade will go to your final project grade. Failure to contribute could lead to big point deductions. Don't let this happen! Contribute early on, and you will do fine. I do have an appeals process in place. In the event another student does not objectively grade you, I remove their grade and only count the others. However, sufficient evidence is needed for me to overturn a peer grade.

13   Course Schedule

1. Monday, May 10th

   - Review of Syllabus
   - Meet and Greet
   - Review of R

2. Wednesday, May 12th

   - Introduction to Theories of the Firm
   - Marketing Strategy and Marketing Analytics
   - An Ontology of Marketing Analytics Methodologies

3. Monday, May 17th

   - Group Project Details
   - Cluster Analysis and Segmentation Analysis
   - Exercise Set 1 Posted

4. Wednesday, May 19th

   - Group Project Team Formation
   - Case Study (1) on Cluster Analysis and Segmentation Analysis
   - Exercise Set 1 Due Friday, May 21st @ 11:59pm

5. Monday, May 24th

   - No Class Session - Holiday

- Case Study 1 Due @ 11:59pm

6. Wednesday, May 26th

    - Market Basket Analysis
    - Case Study (2) on Market Basket Analysis
    - Exercise Set 2 Posted

7. Monday, May 31st

    - No Class Session - Holiday

8. Wednesday, June 2nd

    - Supervised Prediction Models
    - Case Study (3) on Prediction Models
    - Exercise Set 2 Due @ 11:59pm
    - Case Study 2 Due @ 11:59pm
    - Exercise Set 3 Posted

9. Monday, June 7th

    - Fundamentals of Experimentation and A/B Testing
    - Explanation Based Methods
    - Exercise Set 4 Posted

10. Wednesday, June 9th

    - Group Project Deliverable 1 Due @ 11:59pm
    - Case Study (4) on Experimentation, A/B Testing, and Explanation Based Methods
    - Case Study 3 Due @ 11:59pm
    - Exercise Set 3 Due @ 11:59pm

11. Monday, June 14th

    - Survey Construction and Conjoint Analysis
    - Exercise Set 5 Posted
    - Exercise Set 4 Due @ 11:59pm

12. Wednesday, June 16th

    - Case Study (5) on Survey Construction and Conjoint Analysis
    - Case Study 4 Due @ 11:59pm

13. Monday, June 21st

    - Social Network Analysis
    - Mini-Case on Social Network Analysis

- Exercise Set 5 Due @ 11:59pm

14. Wednesday, June 23rd

    - Social Media Analysis
    - Text Analytics
    - Mini-Case on Social Media Analysis and Text Analytics
    - Case Study 5 Due @ 11:59pm
    - Group Project Deliverable 2 Due @ 11:59pm

15. Monday, June 28th

    - Final Project Presentations

16. Wednesday, June 30th

    - Final Project Presentations
    - Final Project Deliverable Due @ 11:59pm