Special Topics in Business: Digital Marketing & Analytics
Syllabus – Spring 2022

(subjective to change due to COVID-19)

Instructor: Dr. Ming Chen
Section: MBAD7090-U90/ DSBA 6090-U91
Class hours: M, 5:30 pm – 8:15pm (Jan 10 – May 12, 2022)
Where: Center City Room 1102 (Virtual for first two weeks)
Office hours: Monday 3:30-4:30pm, or by appointment (send via email)
Email: mchen37@uncc.edu

Course Description and Objectives

This is a graduate course in Marketing Analytics. With the technological advances and the increasing speed of data-generation in digital era, it is essential and imperative for managers to understand the capabilities and limitations of common analytical tools and gain managerial insights on the patterns and associations in business data in order to make informative decisions. This course covers important techniques in marketing analytics with a focus on digital marketing applications. This course would be found helpful for students who are interested in learning analytic techniques with emphasis on digital marketing aspect.

The primary purpose of this course is to expose students with the essential data-analysis knowledge, methodologies and hands-on experiences of analytical tools combined with the lectures, discussions and interactive communications to help students develop pragmatic problem-solving skills and learn to apply different tools in different decision-making settings. This course is structured on analyzing data through case studies and hands-on exercises either as homework/assignments or in-class exercises. Key concepts will be learned from a variety of activities including lectures, class discussions of assigned cases, individual exercises and a team project. This is an intensive course, so students are expected to get fully prepared with assigned readings and participate in class discussions.

Required Course Materials

- **Case reading:** most cases covered in this class would be provided by the instructor and will be posted on Canvas before class
- **Lecture notes:** lecture notes for each session of the class will be posted after the class on Canvas. Additional press articles, assigned reading, links to video and other supplementary materials will also be available on the course portal.
- **Software:**
  - Excel (Microsoft Office 2007 or newer)
Recommended Course Materials

- **Recommended but not required reading materials**: As the digital social media landscape moves so fast, there is no required textbook for this course although the following books are recommended for students who are motivated of learning more details about the analytics methodologies:
  - The essential guide to marketing in a digital world. Rob Stokers

Grading

The following table displays the components contributing the final grade and the corresponding percentage distribution.

<table>
<thead>
<tr>
<th>Components</th>
<th>Score</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation &amp; Attendance</td>
<td>5</td>
<td>In-class</td>
</tr>
<tr>
<td>Homework Assignments (3)</td>
<td>60</td>
<td>Take-home</td>
</tr>
<tr>
<td>Case Assignments (2)</td>
<td>10</td>
<td>Take-home</td>
</tr>
<tr>
<td>Individual Essay (1)</td>
<td>5</td>
<td>Take-home</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20</td>
<td>In-class, close book, close notes</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td></td>
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Grading Breakdown

*Unlike previous semesters, there are no planned grading exceptions due to COVID-19*

*P/U option will NOT be available in the Spring 2022 semester*

The final course grade will be determined by your total score based on all class activities listed in the table above. There is no (+) and (-) for this course. Once the course grades are released, requests without clear evidence for a change would not be considered. Your course grade will be assigned according to the following groups:

A (90.0% - 100.0%); B (75.0% - 89.9%); C (60.0% - 74.9%); U (Unsatisfactory)

Detailed Class Requirements

*Homework assignments (60’)*

There will be three homework assignments during the course of the semester. The specifics about each assignment will be informed and explained by the instructor in class. These homework assignments seek to reinforce the concepts, theories and methods that are covered in the lectures and case discussions. In addition, some in-class exercises will be given to provide some hands-on experience on the analytical tools. Assignments can be submitted on time in class or electronically before the scheduled class starts.

*Case assignments (10’)*

This course will cover two cases with each of being carefully selected to provide up-to-date material on the digital marketing analytics landscape. Some of the cases are data-intensive with the
purpose of guiding students to learn associated analytical tools and techniques. All students are expected to read all the cases and think about the questions assigned by the instructor before the class. Students are encouraged to involve with the discussion in class and provide meaningful insight from the case study. There will be two case assignments and the main purpose of the case assignments is to evaluate students’ understanding of the case background, the depth of the analysis covered in the case and the ability to generate managerial implications or solutions from the case.

**Individual Essay (5’)**

A concise summary of the major takeaways from this course and a reflection upon how they may/may not help advance your career or the organization you work for. This assignment is due prior to the final session.

**Final Exam (20’)**

There will be one final exam in this course. The purpose of the exam is to assess your overall understanding of the concepts, analytical skills and technical competence. Details about exam format and the sample practice questions will be provided in the review session before the exam.

Should students be absent for the class and miss the final exam, inform the instructor in writing (email) of any legitimate exam time conflicts at least two weeks before the exam date. If the instructor does not receive any written notice before the exam, there will be no opportunities for make-up exam. If students miss exam by emergent reasons, it is suggested to contact the instructor right away concerning missing an exam with supporting reasons. Students are responsible for contacting the instructor to make arrangement for the make-up exam if he/she misses the exam because of emergencies. The make-up exams will be only permitted as required by the University Policy and if the grounds for the application are genuine and unavoidable.

**Class Participation and Attendance**

Should students be absent for the class, inform the instructor in writing (email) of any legitimate class time / group presentation conflicts at least one week before the class date.

For clarification purpose, the following rules are the general guidance to determine the final scores of “Attendance”:

- No class missed for non-medical or emergent reasons;
- A prior notification to the instructor is necessary if students have to arrive late or leave early; The following rules are the general guidance to determine the final scores of “Participation”;
- Students achieve full participation score by actively contributing to an in-class discussion, raise insightful questions related to a particular topic, and voluntarily answer questions either raised by the instructor or by peer students;
- Students who attend each class but not actively contribute to class discussions are expected to receive only 80% of the participation score at the end of the semester.

**Late Submission Policy**
• In this course, for any of the deliverables (i.e. homework assignment, case assignment), the policy for late submission (late than the predetermined submission deadline) will be deduct half of the total points of that particular deliverable. The final deadline for all the deliverables are the last class.

**Academic Integrity**

The UNC Charlotte Academic Integrity Policy will be followed. The student is responsible for reading and understanding the policy: Students have the responsibility to know and observe the requirements of The UNC Charlotte Code of Student Academic Integrity. This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Any special requirements or permission regarding academic integrity in this course will be stated by the instructor, and are binding on the students. Academic evaluations in this course include a judgment that the student’s work is free from academic dishonesty of any type, and grades in this course therefore should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office. Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty to the course instructor.

**Belk College of Business Statement of Diversity**

The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

**University’s statement on Disability Accommodations**

UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from Disability Services early in the semester. For more information on accommodations, contact the Office of Disability Services at 704-687-0040 or visit their office at Fretwell 230.

**Tentative Schedule of Topics and Readings**

*(subjective to change due to the uncertainty of the pandemic)*
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic &amp; Reminder</th>
<th>Suggested Readings &amp; Assignment</th>
</tr>
</thead>
</table>
| 1    | 1/10   | Introduction and Course overview (Virtual class through zoom meeting)  
Zoom Meeting ID: 976 8263 9068  
Passcode: 187915  
Zoom link: https://uncc.zoom.us/j/97682639068?pwd=VO14TytoJFuZTAyM0N2TkhsajZhdz09 | Syllabus |
| 1/17 | Dr. Martin Luther King Jr. Day – No Class | University Closed |
| 2    | 1/24   | Topic: Data Summary and Trend Analysis  
Textbook: Chapter 1,2,3 |
| 3    | 1/31   | Topic: Forecasting New Product Sales  
Case 1: TruEarth Case  
Hands-on Exercise: Pivot Table | TruEarth Case (will be posted on Canvas)  
Chapter 27  
* Case Assignment 1 (out) |
| 4    | 2/07   | Topic: Market Segmentation  
Case 2: Harper Case  
Harper Case (will be posted on Canvas)  
Solver Handout  
* Case Assignment 2(out)  
* Case Assignment 1 due |
| 5    | 2/14   | Topic: Identify Customers’ Needs  
Hands-on Exercise: Customer Segmentation and Cluster Analysis | Textbook: Chapter 23,17, 18  
*Assignment1 out  
* Case Assignment 2 due |
| 6    | 2/21   | Topic: Targeting VIP Customers  
Hand-on Exercise: Predictive analytics using real retailer data | Textbook: Chapter 16 |
| 7    | 2/28   | Topic: Product Design  
Hand-on Exercise: Lead Scoring model | Textbook: Chapter 34, 35, 36  
*Assignment2 (out) |
| 3/7 ~ 3/12 | Spring Recess – No class | Textbook: Chapter 29, 30  
Video: “Where are our digital ads really going?”  
Ted Talk (2014) (11mins)  
*Assignment 1&2 due |
| 8    | 3/14   | Topic: Advertising  
Hand-on Exercise: Collaborative filtering & Adstock model using Solver | Textbook: Chapter 42, 43 |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>3/28</td>
<td>Pricing Bundling</td>
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<tr>
<td>4/04</td>
<td>Internet and Social Network Marketing</td>
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<tr>
<td>4/11</td>
<td>Digital Marketing</td>
</tr>
<tr>
<td>4/18</td>
<td>Special Topic I: Machine Learning/ Big Data &amp; Marketing</td>
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<tr>
<td>4/25</td>
<td>Special Topic II: (TBD)</td>
</tr>
<tr>
<td>5/02</td>
<td>Guest Talk (TBA)</td>
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<tr>
<td>5/09</td>
<td>Final Exam</td>
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**Hand-on Exercise:**
- SCAN*PRO Model
- Pricing Bundling
- NodeXL Excel (free data visualization tool)

**Assignment:**
- Assignment 3 out
- Assignment 3 due
- Individual Essay due

**Special Topics:**
- Machine Learning/ Big Data & Marketing
- (TBD)

**Guest Talk:**
- TBA

**Course Review:**
- Q & A

**Course Review:**
- In-class, close book and close notes

1. Reminders are listed with * in highlight.
2. Assigned readings will be posted one week before the session.
3. Please make sure to have an access to laptop/ computer for each hands-on exercise session.