Special Topics in Business
Syllabus - Fall 2019

Instructor: Dr. Ming Chen

Class hours: Section DSBA6010/MBAD 7090, Tuesday, 5:30 pm – 8:15pm, Center City Building (904)

Office: 250C, Friday Building

Office hours: Wed/ Thursday 2:00 – 3:00pm 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 hand-son 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.

The covered analytical skills and methodologies include:

- Descriptive analysis
- Data visualization in Excel
- Data mining and statistical methods:
  - Data summary and search trend analysis
  - Forecast new product sales
  - Market segmentation
  - Data visualization
  - Predictive analysis using Machine Learning method

Required Course Materials


- **Case reading:** most cases covered in this class would at most cost $5 each and can be purchased from the Harvard Business Publishing via the link: [https://hbsp.harvard.edu/student/](https://hbsp.harvard.edu/student/)

- **Lecture notes:** lecture notes for each session of the class will be posted the day before 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) + StatTools (not compatible with Mac OS)
  - [https://www.palisade.com/cart/products_EN.asp?cat=51panel=0](https://www.palisade.com/cart/products_EN.asp?cat=51panel=0) ($65 for the student version; license expires after one year and can be installed on one computer only)

**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>In-class Contribution</td>
<td>5</td>
<td>Individual/Team</td>
</tr>
<tr>
<td>Homework Assignments (2/3)</td>
<td>40</td>
<td>Individual</td>
</tr>
<tr>
<td>Case Assignments (2)</td>
<td>10</td>
<td>Individual</td>
</tr>
<tr>
<td>Group Project Presentation (1)</td>
<td>10</td>
<td>Team</td>
</tr>
<tr>
<td>Individual Essay (1)</td>
<td>5</td>
<td>Individual</td>
</tr>
<tr>
<td>Final Exam (1)</td>
<td>30</td>
<td>Individual</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Grading Breakdown**

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**

*In-class contribution (5’)*

Given that analytics in digital marketing is an applied subject, in-class activities such as exercises and/or discussions are essential for learning. Students who attend entire class sessions and well prepare before each session (e.g. reading and homework) and actively participate in-class activities typically receive very high or even full score for attendance and participation.

*Homework assignments (40’)*

There will be two or three homework assignments during the course of the semester. The specifics
about each assignment will be posted on the date listed in the course schedule. 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.

**Group project (10’): group participation (2’) + group presentation (8’)**

This is one group project with group presentation. Groups will be formed voluntarily before the third week of the semester (by Sep 3rd). Each group will consist of 4-5 students, depending on the size of the class. The group project is to develop a digital marketing plan for a real firm. Students can choose either the firm from the assigned firm list or any firm of your choice. More information about the assigned firms and the case project will be provided. Students will play a real-world role of marketing consultants to synthesize, conduct analysis, interpret and recommend a viable digital marketing strategy for an existing company based on what you've learned in this course.

Group project, accounts for 10’ of each student's final grade, consists two parts. One part is group participation (2’ of the group project score) and group presentation (8’ of the group project score). Every group member is expected to participate actively in all aspects of the group exercises. One group member’s group participation score will be determined by the average of all the other peer members’ evaluations. Every group member will evaluate, at the end of the course, any other group members’ performance on a 100-point scale. The rubric of the evaluation sheet will be posted.

**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 (30’)**

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.

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. The “In-class contribution” score is reduced by 5% per missed class;
- A prior notification to the instructor is necessary if students have to arrive late or leave early; a 5% reduction will occur without any notification;

The following rules are the general guidance to determine the final scores of “Participation”:

- Students achieve full participation score by positively 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 other 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.

**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.

**Disability**

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.
### Schedule of Topics and Readings (subjective to change)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic &amp; Reminder¹</th>
<th>Assigned Readings²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/20</td>
<td>Introduction and Course overview</td>
<td>Syllabus</td>
</tr>
<tr>
<td>2</td>
<td>8/27</td>
<td><strong>Special Topic</strong>: Data Summary and Trend Analysis</td>
<td></td>
</tr>
</tbody>
</table>
| 3    | 9/3   | **Topic**: Forecasting New Product Sales  
Case1: TruEarth Case  
* Case Assignment 1 (out)  
Case2: Harper Case  
* Case Assignment 2 (out)  
* Case Assignment 1 due | TruEarth Case (will be posted on Canvas) |
| 4    | 9/10  | **Topic**: Market Segmentation  
Case2: Harper Case  
* Case Assignment 1 due | "Online Metrics: What are you measuring and why?" Harper Case (will be posted on Canvas) |
| 5    | 9/17  | **Topic**: What Do Customers Want?  
* Assignment 1 (9/17 out)  
* Case Assignment 2 (9/17 due) | Textbook: Chapter 16, 17, 18 |
| 6    | 9/24  | * Assignment 1 (9/17 out)  
* Case Assignment 1 due | Solver: Chapter 2 & 4 (hand-out) |
| 7    | 10/1  | **Topic**: Advertising  
* Assignment 2 (out) | Textbook: Chapter 34, 35, 36 |
|      | 10/8  | **Fall break**  
[No class] |
| 8    | 10/15 | **Topic**: Retailing  
* Assignment 3 (out)  
* Assignment 1 & 2 due | Textbook: Chapter 29, 30  
Video: "Where are our digital ads really going?" Ted Talk (2014) (11mins) |
| 9    | 10/22 | **Topic**: Internet Marketing | Textbook: Chapter 42, 43 |
| 11   | 11/05 | **Special Topic**: Conjoint Analysis using StatTools  
**Hands-on Exercise**: StatTools Exercise | "Social media are giving a voice to taste buds" "Online Chatter That Moves Markets", WSJ (2012) |
| 12   | 11/12 | **Special topic**: Machine Learning | TBD |
| 13   | 11/19 | **Special topic**: Data Visualization  
**Hands-on Exercise**: StatTools Exercise | TBD |
| 14   | 11/26 | **Group presentation & Final Exam Review**  
* Peer evaluation due  
* Individual Essay due | Notes: final exam practice questions |
| 15   | 12/03 | **Final Exam** |

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