DSBA-6100: MBAD-7090: Competitive Advantage with Big Data Analytics
SPRING 2019

5:30-8:15 PM, Wednesdays
Center City Building; Room 501
UNC - Charlotte

Instructor: Booshra Ahmed
E-mail: bahmed@uncc.edu
Phone: 704-441-2797
Office Hours: By appointment

Required Course Materials

Readings in this course consist of a mixture of cases and articles -- no textbook is required. The syllabus, additional course material, and lecture slides will be posted in Canvas. All material is organized by the class number it belongs to.

Course Description

Today's consumers are more empowered and connected than ever; their expectations have reached an all-time high. Businesses worldwide is under constant pressure to increase efficiency and improve results. There is a fundamental change in the ways that consumers interact with brands and each other. Data about our browsing and buying patterns are everywhere. From credit card transactions and online shopping carts, to consumer loyalty programs and user-generated ratings/reviews, there is a staggering amount of data that companies can collate from across their organizations and across broader industry sources. Access to this high volume, high velocity, and high variety of data (Big Data) can be used to create a significant competitive advantage and provide a unique opportunity to conduct in-depth market research - offering rich insight into recent sales trends, critical business improvements and gaps in the market to exploit.

The rules of business are changing, and the future seems uncertain for companies that have operated successfully for decades. In light of these fundamental changes, the overarching goal of this course is to help you learn when data and analytics work in tandem, companies can leverage data to improve cost savings, redefine processes, drive market strategy, build an exceptional customer experience and, perhaps most importantly, establish competitive advantages.

Learning these theories of the field of analytics would help you create new growth opportunities and make actionable business decisions.

This course is not intended to prepare students to perform data analytics.
Course Objectives

At the end of this course, successful students should be able to:

- Recognize the ways in which businesses and non-profits use big data analytics to create competitive advantage
- Learn how big data analytics can provide real-time insights into multidisciplinary business functions
- Understand how organizations can leverage data in a truly meaningful way
- Understand how data analytics can play a transformational role within the enterprise
- Comprehend the changes to marketing processes in a new economy that features interactive technology which allows for engaging consumers in dramatically different ways from the past
- Understand the major methods of data collection used by companies and understand how this data can inform business decisions
- Critically evaluate a wide variety of commonly used tools used to predict consumer behavior and identify the appropriate uses for each tool
- Understand the reasons why most analytics initiatives fail to deliver the value they promise

Course Requirements

- Basic statistics knowledge (correlation, standard deviation, parameter estimation, regression analysis, probability etc.)
- Laptop for hands-on SAS classes (refer to the syllabus for dates)

Students in MBAD/DSBA7090 can earn 100 points total over the course. The total points earned will determine the final grade:

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<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<td>B</td>
<td>80 – 89</td>
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<td>C</td>
<td>70 – 79</td>
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<td>F</td>
<td>69 and below</td>
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Grading:

The final grade will be determined on the following weights:

- Class Participation/Attendance: 20%
- Individual paper: 20%
- Mid Term: 10%
- Group Project: 20%
- Final: 30%

1. **Class Participation/Attendance (20%)**

   Attendance is obligatory since 20% of your grade is based upon active engagement and participation in class discussions and exercises. MBAD7090 is highly participatory and interactive. Failure to attend the entire class meeting and failure to actively participate will adversely impact your final grade. Quality contributions which are relevant to the discussion will improve your participation grade. I will call on students at random to open case and assignment discussions. Your participation grade will be significantly hurt if you are called upon to offer your analysis on a case or assignment question and you are not prepared.

   It is also worth noting that class attendance is critical to doing well in my course. Should an extreme situation arise, I must be notified prior to the class period. If you miss 3 or more classes I reserve the right to fail you.
2. **Individual Paper (20%)**
   There will be six (5) Individual Papers assigned in this course. Refer to the Class Schedule. Each paper is expected will be a 2 page, double-spaced, 12 point font, and 1 inch margin write-up on the assigned readings.
   As part of this deliverable, you will develop a coherent perspective on the content of the article and discuss your ability to apply the material to an organization or activity of your choice.

3. **Mid Term (10%)**
   Mid Term will be a combination of multiple choice and essay questions and require you to answer questions in a holistic way based upon the reading, class discussions and course concepts.

4. **Group Project (20%)**
   Each group will develop an integrated data analysis report for a true corporation. The report will include the current data analytics strategy, and the recommended strategy that your company should follow to gain competitive advantage in its respective industry.

   Requirements:
   - The report will be factual and analytical. The goal is for you to assess the gaps (performance or opportunity) in a company's existing marketing space (e.g., consumer segmentation & targeting, social media campaign, prospective new consumer identification etc.), collect data to describe consumer behavior and interpret your data to make decisions, use data about actions in the past to make predictions about actions in the future, and finally make recommendations for actions you can take to achieve your business goals.
   - You will submit your project in 4 phases (refer to the Class Schedule for the due dates)
     - Phase 1: Project proposal submission & presentation
     - Phase 2: Data analysis presentation
     - Phase 3: Final presentation with recommendation
     - Phase 4: Final written report
   *More details on each phase will be provided in the class*

   Your contribution to the Group Project will be evaluated by each member of your group, a confidential peer evaluation sheet is due on the day of final presentation. The template for evaluation will be provided in the class.
   Note: Peer evaluations will be included in your individual grade for the group project. The oral presentation will be delivered through PowerPoint. All group members are to speak during all phases of the project. Your presentation will be evaluated by the instructor and all your classmates.

5. **Final Exam (30%)**
   Final exam will be a combination of multiple choice and essay questions and require you to answer questions in a holistic way based upon the reading, class discussions and course concepts. Make-up exams will be given only under extreme circumstances with prior approval from the instructor.
   Students who miss the examination will receive a grade of “0.”
Grade Appeals
If you feel you were graded unfairly or harshly, students may appeal it according to the following guidelines:

• In writing, specify the reason for your appeal.
• Turn in your appeal no later than one week after the paper has been graded.
• The exam in question will be re-graded; note that your grade can go Up or Down due to re-grading.

Cases / Assigned Readings
Canvas and Class Schedule

Guest Speakers:
We will have guest speakers who will expose you to real-world, life experiences from the position of someone who has been there and done that. The purpose is for you to see the insight and perspective of an industry expert’s particular field including analytics.

Academic Integrity:

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.

Statement on Diversity & Disability:

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. Diversity is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.
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.
<table>
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Required Reading</th>
<th>Assignment Due</th>
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<tbody>
<tr>
<td>Jan 23</td>
<td>MLK Day (No Class)</td>
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<td>Jan 30</td>
<td>Descriptive Analytics; The Composition of Data</td>
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<td>Individual Paper 2</td>
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<td>Feb 6</td>
<td>The Art &amp; Science of Predictive Analytics</td>
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<td>Group Project: Phase 1</td>
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<td>Feb 13</td>
<td>Prescriptive Analytics; Taking the Big Plunge</td>
<td><a href="https://www.wsj.com/articles/SB10001424052702304723304577365700368073674">https://www.wsj.com/articles/SB10001424052702304723304577365700368073674</a> (Individual Paper 3)</td>
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| Feb 20     | Guest Speaker
SAS Classwork                                           |                                                                                 | Individual Paper 3                 |
| Feb 27     | SAS Hands On Exercise                                                |                                                                                 |                                    |
| Mar 6      | SAS Hands On Exercise                                                |                                                                                 |                                    |
| Mar 20     | Guest Speaker                                                        | "Boost your marketing ROI with experimental design," HBR, October 2001          |                                    |
| Mar 27     | The Big Rewards of Big Data                                          |                                                                                 | Individual Paper 4                 |
| Apr 24     | The perils of Data Efficiency; End of Class                         |                                                                                 | Group Project: Phase 4             |
| May 8      | FINAL EXAM                                                           |                                                                                 |                                    |
Instructor Bio

Booshra Ahmed is a Business Strategist, Technologist, Educator, Community Builder, and a Banker. She has over 20 years of leadership and 'Big 4' consulting experience in Enterprise Digital Marketing, Social Media, Big Data, Global Corp Social Responsibility, Global Human Resources, Finance & Administration Technology Services, and ERP.

As the Senior Vice President of Enterprise Digital Banking, currently Ms. Ahmed is in charge of accelerating the revenue growth by ensuring Bank of America’s digital decisions fits with its overall Enterprise Digital Strategy. She leads the overall strategic planning and roadmap execution for Bank’s next generation of digital products dedicated to 37MM Digital and 27MM Mobile Clients globally. Prior to this, she was in charge of the strategy development and execution for Bank of America’s Enterprise Social Media and Digital Marketing Technology platforms.

Ms. Ahmed also serves as a Leadership Council member on the Bank of America’s Global Diversity & Inclusion team; she also serves as a Business Development & Marketing Committee member on Charlotte Bilingual Preschool – a nonprofit organization. Additionally, Ms. Ahmed is a faculty member at Harvard Business School Club of Charlotte for a course geared toward mid-career executives. She has been featured alongside 17 HBS alumnae Female Leaders representing 13 countries in Corporate Feminology book.

Prior to joining Bank of America, Ms. Ahmed was with Duke Energy Corporation and Accenture. She and her husband have two sons and reside in Charlotte, NC.