BINGHAMTON UNIVERSITY – SCHOOL OF MANAGEMENT

MKTG 480N – DIGITAL ANALYTICS

Instructor	**SATADRUTA MOOKHERJEE**
Office; Office Hours	**Academic A - 215; Wednesday 4pm-5pm or by appt.**
Email	**smookhe2@binghamton.edu**
Classroom	**AA G019**
Class time	**MW 6pm-7:25pm**
First & Last Class	**Wed Jan-17th ; Mon May-2nd**
Textbook (Optional)	**Digital Analytics for Marketing (ISBN: 9780789750303)**

COURSE PHILOSOPHY AND CONTENTS

This course is designed to help you think and act like a data scientist in the business world. It is about extracting information from real world data to understand and solve business problems. Although it may sound straightforward and easy, the entire process is actually challenging if you want accurate and meaningful insights. We will learn from basics and examine the following questions:

(1) Learn the different analytical approaches to digital data and understand how to address business issues with the help of these analytical tools. More current hot concepts are discussed and explained.
(2) How to extract, analyze and represent data to serve business issues.
(3) How to use the digital data to help improve business decision making.

We will study the fundamental principles and techniques of digital data mining, and we will examine real-world examples and cases to place data-mining techniques in context, to develop data- analytic thinking, and to illustrate that proper application is as much an art as it is a science.After taking this course you should have improved substantially at the following three dimensions. One pragmatic way to think about this is that you should be able to think more like a digital data-scientist to help you solve problems in your future career:

1. *Approach (business) problems data-analytically.* Think carefully & systematically about whether & how digital data can improve performance, to make better-informed decisions for management, marketing, investment, etc.

2. *Be able to interact competently on topic of digital data science and analytics.* Know the fundamental principles of data science, that are the basis for data mining processes, machine learning algorithms & analytic systems. Understand these well enough to work on data science projects and interact with everyone involved. Be able to explain it to your c-level managers or yourself if you are the boss of your own.

3. *Feel confident about extracting relevant data from the very beginning.* Instead of simply doing analytical task, you need to learn how to use the data to serve your own purposes, and how to help your company win the future.

METHOD OF INSTRUCTION

It will involve lecture followed by hands on practice of digital tools and assignments where you will be asked to address a business issue using the methods taught. This is to make sure that you can understand both the theories and practices of how to conduct data analysis.

GRADE EVALUATION

Your course grade will be determined as follows:

Tasks	Points
Attendance	100
Midterm	300
Assignments	300
Final project	300
TOTAL	**1000**

Please note that poor performance in any one or more of the above components of your grade cannot be made-up by any extra assignment or report. Each of the course requirements (e.g., midterms, assignments, final project) will be graded by assigning numerical points. Your final letter grade for this class will be assigned only at the end of the course based on the points accumulated by the student. Normally, the grades are curved as follows:

A	90
A-	85
B+	80
B	75
B-	70
C+	65
C	60
C-	55
F	Otherwise

Please note the following:
1) I will definitely fail a student for dishonest behavior e.g., cheating or plagiarism in midterm or any project
2) This class may seem easy but that does not automatically imply that you will earn an A in the class

TASKS DETAIL

(A) ATTENDANCE (Total 100 pts)

Attendance will be taken before each class with an attendance sheet, so please attend as many lectures as possible unless something really emergent happened. I understand taking attendance may sound silly and inflexible, but I am doing this to make sure you don't get left behind. The content especially the use of software tools may get hard to comprehend on your own and simply reading the slides will not help, so please take advantage of your presence in class. After all, I am doing this for your own good.

Missing a class will result in point deduction. Considering there will be many classes in this semester, this would not affect your grade that much. **However, if you are going to miss many classes (10+ classes), you WILL NOT GET an "A".**

(B) MIDTERM – TAKE HOME

(Total 300 points)

Due Date: Proposed 9th Apr 2018.

The objective of this midterm is to test your basic understanding of the concepts and tools learned in this class. In the midterm you will be asked to identify a business issue and apply some of the theories and digital analytic tools that you learned in class to discuss how you would address it. A detailed guide will be provided and you will have two weeks to submit the same. It will be individual not group.

(C) GROUP ASSIGNMENTS (Total 300 points)

Due Date: see schedule below.

There will be 6 group assignments for you to complete over the semester, I will have them posted on BB as we progress with the classes. You can make your own groups or I can assign depending on what you feel comfortable with.

The assignments will be mostly to do with applying the theory and analytical tools to address some real world business issue. Please submit the same on the required due date. Each assignment is worth 50 points, which makes it a total of 300 points for 6 assignments.

(D) FINAL GROUP PRESENTATION (Total 300 points)

Due Date: Proposed April 30th and May 2nd, 2018.

The objective of this group project is to enable you to understand how to collaborate and contribute in a group setting like how group data consulting projects are usually carried out in real practice. **The project is worth 300 points. You can make your own groups or I can assign depending on what you feel comfortable with.**

Since the project involves identifying a business issue, formulating research questions, extracting data, analyzing and reporting, I would encourage you all to start your project AS EARLY AS POSSIBLE and work hard together without letting your teammate down. This is not a project to be done at the last minute. Also let me know the topic in advance so it's not a surprise during final presentation.

(G) EXTRA-CREDIT
You may have the opportunity to earn up to **20 extra credit points** by participating in surveys conducted by faculty as part of their research. Your participation is voluntary, your responses are completely confidential, and the extra points are added *after* the grade cutoffs are established.

(H) COMMUNICATION/ OFFICE HOURS
You are expected to check Blackboard and your email regularly for any updates regarding this course. During my office hours, students can communicate through blackboard with instructor to clarify any problems regarding class materials, assignments, or exams. My communication goal is to reply your email ASAP, so you should expect me to reply within the same day or sooner, unless something emergency happened.

(I) DISABILITY – RELATED EQUAL ACCESS ACCOMODATIONS
Students needing accommodations to ensure their equitable access and participation in this course should register with Services for Students with Disabilities (SSD) office as soon as they're aware of their need for such arrangements. Please visit the SSD website (www.binghamton.edu/ssd) for more detailed information. The office is located in the University Union, room 119.

(J) ACADEMIC INTEGRITY
Binghamton University's academic integrity policy is available at
http://bulletin.binghamton.edu/program.asp?program_id=703#1.

Any student violating the academic integrity policy or engaging in any other unethical acts in this course will be removed from the course, turned over to the Dean of the School of Management and/or the Provost for appropriate action, and will receive an "F" as a final course grade.

Please read carefully what constitutes cheating during midterms and take home final.

CLASS SCHEDULE

Date	Day	Topic	Book Chapters.	Assignments Due
01/17	Wed	Introduction to Digital Analytics	Briefly Ch1	
01/22	Mon	Understanding digital media landscape and digital media concepts; Picking tools of Trade	Ch1 & 2, 3	
01/24	Wed	Social media listening-concepts and tools	Ch4	
01/29	Mon	Social media listening - application	Ch11&12	
01/31	Wed	Search Analytics	Ch5	
02/05	Mon	Search Analytics – tools hands on	Ch17	Assignment 1 due - Social media listening
02/07	Wed	SNOW DAY		
02/12	Mon	Correlation theory + hands on Excel		
02/14	Wed	Regression – hands on Excel		Assignment 2 due – Search analytics
02/19	Mon	Regression – hands on Excel		
02/21	Wed	Audience Analysis - concepts and tools	Ch6	
02/26	Mon	Content Analysis - concepts and tools	Ch7	
02/28	Wed	Engagement analysis	Ch8	Assignment 3 due – Regression
03/05	Mon	WINTER BREAK		
03/07	Wed	WINTER BREAK		
03/12	Mon	Network Analysis - concept		Assignment 4 due (content/audience/engage)
03/14	Wed	Network Analysis – tools hands on		
03/19	Mon	Digital influence online vs offline, Klout, customer service, new product	Ch9, 13,14	Explain Midterms
03/21	Wed	SPSS		Assignment 5 due – Network
03/26	Mon	SAS		Assignment 6 due - Klout
03/28	Wed	Google Analytics		
04/02	Mon	SPRING BREAK		
04/04	Wed	SPRING BREAK		
04/9	Mon	Google Tableau		
04/11	Wed	Google Tableau		Midterm Take Home Due
04/16	Mon	Mobile Analytics	Ch20	
04/18	Wed	Social CRM	Ch21	
04/23	Mon	Research plan & reporting	Ch15,16,19	
04/25	Wed	Review		
04/30	Mon	Group Presentations		
05/02	Wed	Group Presentations		

* The course schedule is subject to change. Changes, if necessary, will be posted on Blackboard.