



**Marketing Analytics
Summer 2022**

Professor: Steven Carnovale, Ph.D.
Office: Virtual
Email: scarnova@rutgers.edu or steven.carnovale@rutgers.edu
Classroom: On-Line, via Canvas
Time: By arrangement
Course Web Page: <https://onlinelearning.rutgers.edu/canvas>
Course Dates: May 31, 2022 – August 17th, 2022

Textbook:

Marketing Analytics: Data-Driven Techniques with Microsoft Excel, by Wayne L. Winston, Wiley Publishing, 1st Edition, ISBN: 978-1-118-37343-9

Course Description:

This course prepares students to develop the analytical skills marketers require to monitor, grow, and sustain competitive advantage. Students will develop abilities in aligning business objectives with metrics; utilizing data visualization, modeling, and text mining techniques; analyzing quantitative and qualitative data; and drawing data-driven consumer insights. The applications will emphasize the use of analytics to help make strategic marketing decisions. *Prerequisite: Marketing Management 53:630:508*

Course Learning Objectives:

- Understand the logic of key statistical concepts (descriptive statistics, regression modeling, etc.)
- Correctly identifying the marketing question, and the best analytical; approach to solve it
- Leverage data to solve marketing problems and be able to answer descriptive, predictive and prescriptive questions relevant to marketing managers
- Connect managerial recommendations to the outcomes of analytical models

Course Format:

The course will consist of a combination of lectures, and class discussion, all of which conducted through the online course website. One or more textbook chapters will be covered in each weekly session (see the schedule below). Small ad hoc cases will be discussed from time to time. The lecture/discussion component will be devoted to presentation and discussion of theories, concepts, analytical techniques, and empirical findings that are helpful for marketing decision making. **Sessions are accompanied by assigned reading materials from the text** (see the schedule below). Given the entirely online format of the course, the reading material presented is vital; both to your understanding of the concepts as well as to connecting the theoretical frameworks discussed to the business world. The text serves as background information for lecture and casework. Students are *expected to read* the corresponding chapter(s) during the week.

Online Learning – Keys to Success

In addition to the basics like buying the book and logging in, the online learning process requires commitment on the student's part. Staying up with the class and completing all work on time is vital. *Once a student gets behind, it is almost impossible to catch up.* These 10 tips for successful online learning were taken from the University of Illinois web site. (<http://www.ion.uillinois.edu/resources/tutorials/pedagogy/StudentProfile.asp>)

1. Be open minded about sharing life, work, and educational experiences as part of the learning process. Introverts as well as extroverts find that the online process requires them to utilize their experiences. This forum for communication eliminates the visual barriers that hinder some individuals in expressing themselves. In addition, the student is given time to reflect on the information before responding. The online environment should be open and friendly.
2. Be able to communicate through writing. In the Virtual Classroom, nearly all communication is written, so it is critical that students feel comfortable in expressing themselves in writing.
3. Be Self-motivated and self-disciplined. With the freedom and flexibility of the online environment comes responsibility. The online process takes a real commitment and discipline to keep up with the flow of the process.
4. Be willing to "speak up" if problems arise. Many of the non-verbal communication mechanisms that instructors use in determining whether students are having problems (confusion, frustration, boredom, absence, etc.) are not possible in the online paradigm. If a student is experiencing difficulty on any level (either with the technology or with the course content), he or she must communicate this immediately. Otherwise the instructor will never know what is wrong.
5. Be willing and able to commit to 4 to 15 hours per week per course. Online is not easier than the traditional educational process. In fact, many students will say it requires much more time and commitment.
6. Be able to meet the minimum requirements for the program. The requirements for online are no less than that of any other quality educational program. The successful student will view online as a convenient way to receive their education – not an easier way.
7. Accept critical thinking and decision making as part of the learning process. The learning process requires the student to make decisions based on facts as well as experience. Assimilating information and executing the right decisions requires critical thought.
8. Have practically unlimited access to a computer and Internet Service. The course content and interaction are engaged by computer through the Internet. The student must have access to the necessary equipment.
9. Be able to think ideas through before responding. Meaningful and quality input into the virtual classroom is an essential part of the learning process. Time is given in the process to allow for the careful consideration of responses. The testing and challenging of ideas is encouraged; you will not always be right, just be prepared to accept a challenge.
10. Feel that high quality learning can take place without going to a traditional classroom. If the student feels that a traditional classroom is a prerequisite to learning, they may be more comfortable in the traditional classroom. Online is not for everybody. A student that wants to be on a traditional campus attending a traditional classroom is probably not going to be happy online. While the level of social interaction can be very high in the virtual classroom

given that many barriers come down in the online format, it is not the same as living in a dorm on a campus.

Policies:

- Please do not call the Department about grades and other course information. The secretaries in the Department will not have this kind of information.
- Important announcements will be made in class and posted on course web page.
- Final course grades are final. Changes will only be made if there is a mistake in the calculation of the final grade.
- Accommodating students with special learning needs: In accordance with the university policy, students with documented sensory and/or other learning disabilities should inform the professor, so that their special needs may be accommodated.

Academic Integrity

Policy found at <http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers>.

Students are responsible for understanding the principles of academic integrity and abiding by them in all aspects of their work at the University. Students are also encouraged to help educate fellow students about academic integrity and to bring all alleged violations of academic integrity they encounter to the attention of the appropriate authorities.

Academic Integrity means that you must:

- Properly acknowledge and cite all use of the ideas, results, or words of others,
- Properly acknowledge all contributors to a given piece of work,
- Make sure that all work submitted as your own in a course activity is your own and not from someone else
- Obtain all data or results by ethical means and report them accurately
- Treat all other students fairly with no encouragement of academic dishonesty

Adherence to these principles is necessary in order to ensure that:

- Everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments
- All student work is fairly evaluated and no student has an inappropriate advantage over others
- The academic and ethical development of all students is fostered
- The reputation of the University for integrity is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld. Violations are taken seriously and will be handled according to University policy. ***If there are questions on how to comply, please contact me immediately.***

Evaluation:

	Percent
HW Assignments	10
Discussion Threads	25
Exam I	20
Exam II	20
Final Exam	25
Total	100

Final grade will be based **on the final scores**: 93+=A, 86+=B+, 80+=B, 76+=C+, 70+=C and 60+=D, >59=F. Grades will be posted on the class website on a regular basis. Please review the postings and communicate with me if there are any discrepancies. Point totals are **NOT** rounded up at the end of the semester.

Assignments:

Each student is required to complete four homework assignments announced in the class and posted on the website. A write up will be turned in by each student **individually, digitally, and in an excel file via Canvas (there will be a corresponding dropbox)**. Check the schedule for deadlines. **Given that this class is mathematically intensive, and excel driven, be sure to show all work (both computationally as well as mathematically)**. There will be a 20% point reduction for each day or portion of a day the assignment is late.

Discussion Threads:

Success in business depends on being able to effectively communicate and persuade others to your viewpoint. Additionally, learning is enhanced when students work together and do not rely completely on the instructor for answers and direction. Everyone has something to add and I hope you will try to help each other.

Each chapter will be supplemented by an instructor-initiated online discussion thread. Each chapter will have two-three discussion questions. I expect you to make a substantive post for each discussion topic, as well as a substantive response to a classmate's post. A substantive post/response meets the following criteria:

- Relevance: relates to, or expands on, the main theme of the discussion topic (is it on point?)

- Quality of Expression: generates learning within the community; demonstrates knowledge and insight; understanding of material from the text; thoughtful; support points with reasons, logic and examples (how much does it move the discussion forward?)
- Delivery: Clear, grammatically correct, complete sentences with rare misspellings; postings done in the required timeframe (how well do you say it?)

You can expect me to access the discussion forum frequently. I may post if I think it would be helpful, for instance, if I think students are proceeding in the wrong direction, but generally these topics are for you to help and engage each other by sharing ideas, examples, resources and experiences, as well as to have a little fun.

In addition to the discussion questions I will provide each week, there will be an area where you can directly post questions regarding the week's learning concepts. I will answer each of those questions. You are not required to post a question nor respond to classmates questions, but your input is welcomed.

Topics are available Monday morning, and discussions close at midnight Sunday. You must most post/respond at least 2x per week (at least once Sunday-Wednesday, and at least once Thursday-Saturday). This is so that everyone does not wait until Saturday to post, thus inhibiting class interaction.

Your first post each week should be an original response (before reading other student's responses) to one of the questions each week. This post will be given more weight in the grading of the discussions each week. Your participation will be graded based on how well your discussion forum posts meet the relevance, quality of expression, and delivery criteria.

Exams

There will be three exams, two "midterms" and one final. Each of the midterms will be worth 20% of the final grade. The midterm will cover the material indicated on the course schedule and the final exam will be cumulative and account for 25% of the final grade. You will be allowed 1.5-2 hours to complete each exam. Make-up exams are not encouraged, however if it is absolutely necessary to miss an exam, notification must be given BEFORE the exam in a written form. Otherwise a make up exam will not be allowed. Essay style make-up exams will be given during pre-arranged timeframes for those with well-documented excused absences. Any makeup must be completed before the exams are returned to the class, which generally will be the week following the exam.

Tentative Course Outline**

Week #	Dates	Theme	Chapter(s)/ Materials	Topic	Assignment(s) <i>*Unless otherwise noted, all pages will be from the WIN Book</i>
Week 1	5/31 to 6/5	Descriptive Analytics in Marketing	PPT #1 WIN CH 1-3	What is Analytics? Excel Review/Prep	Pg. 27-28 #s 1&2 Pg. 56 #s 8&10 Pg. 80 #2,5&8 WORTH 3 POINTS
Week 2	6/6 to 6/12		PPT#2	Descriptive Analytics: Data, Statistics Review Data Visualization	
Week 3	6/13 to 6/19		PPT#3	Descriptive Analytics: Hypothesis Testing Type 1&2 Errors T-test, ANOVA, Chi-Square, Correlation	
Week 4	6/20 to 6/26		PPT#4 WIN CH 4&5	Descriptive Analytics: Product & Price	Pg. 104-106#s 2,5,&10 Pgs. 119-121#s 1,3,5 Due at the end of Week 5 WORTH 4 POINTS
Week 5	6/27 to 7/3		PPT#5 WIN CH 7&8		
Week 6	7/4 to 7/10	<u>Exam 1 Due 7/10/2022 at, or before, 11:59PM</u>			
Week 7	7/11 to 7/17	Predictive Analytics in Marketing	PPT#6 WIN CH 9,10, 12	Predictive Analytics Overview and Related Methods Linear Regression (Simple & Multiple) Forecasting	
Week 8	7/18 to 7/24		PPT#7 WIN CH 17	Predictive Analytics: Logistic Regression	Pgs. 300-301 #s 1,8 WORTH 3 POINTS
Week 9	7/25 to 7/31		PPT#8 WIN CH 19 &26	Predictive Analytics: Promotion & Price	
Week 10	8/1 to 8/7		<u>Exam 2 Due 8/7/2022 at, or before, 11:59PM</u>		
Week 11	8/8 to 8/14	Prescriptive Analytics in Marketing	PPT#10 & 11	Prescriptive Analytics: Linear Programming Prescriptive Analytics & the Four Ps	
Week 12	8/15 to 8/17	<u>Final Exam Due 8/17/2022 at 11:59PM</u> <u>(available 8/15/2022)</u>			

This schedule may be amended at any time as necessary based on the Professor's discretion