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Course Description

This course is intended to give you statistical knowledge which has become essential for modern day business. Even if you do not plan on doing quantitative work yourself, this will teach you the quantitative vocabulary to work alongside and manage people who do quantitative work. You will learn how to manipulate data, apply the fundamentals of probability, test basic hypotheses, and perform regression.

To practice using these tools in realistic settings, you will apply these techniques in excel---perhaps the most ubiquitous and important data management tool on the market. You will practice professionally communicating your findings via presentations, reports, and emails. You do not need any mathematical background beyond high school algebra to succeed in this class.

Course Learning Objectives

You will learn statistics in three broad domains:

Theory:

1. Explore and visualize data
2. Model outcomes using probability distributions
3. Perform hypothesis tests
4. Perform simple, multiple, and logistic regression analysis

Practice:

5. Implement statistical analysis in Excel
6. Clean data to prepare for analysis
7. Create business plans supported by statistical analysis
8. Collaborate with others to answer complex business questions
9. Understand the ethical guidelines for statistical practice

Communication:

10. Communicate your findings to audiences of varying statistical knowledge
11. Create visualizations that are engaging and incorporate statistics
12. Write reports describing data and communicating your findings
13. Draft professional quantitative emails

These course level objectives support the six Marshall Program Learning Goals to varying degrees. Details may be found in the Appendix of this syllabus.

Materials

1. The course textbook *Applied Statistics in Business and Economics* (7th Edition) by David Doane and Lori Seward, is available at the bookstore. You can purchase a hard copy at the bookstore or an electronic version of the textbook. After you have purchased a book, you must register with McGraw-Hill Connect, which is a website provided by the publisher.
2. **Each student has to register with McGraw-Hill's Connect** in order to have access to the homework, which will be administered online. Registration with Connect requires an access code, which you can either purchase online, or get automatically when you buy a new textbook at the USC bookstore. More details are provided on page 7 below.

Prerequisites and/or Recommended Preparation:

No mathematical background beyond high school algebra is required.

Course Notes:

Course materials like slides and announcements are posted on Blackboard.

Software:

Excel:

- **If you don't have Excel:** Students can take advantage of the free version of Office 365 that USC provides to students, which includes MS Excel 365. The free Microsoft USC Office Suite can be downloaded from <http://itservices.usc.edu/officestudents/>.
- **If you have a Mac:** you need to have either the Mac version of Excel 2016 or you can use the PC version by installing Boot Camp (free from Apple) - or other Windows emulation software for Mac - and Windows, or by using the Marshall Virtual Lab.
- **Your computer must be able to handle large datasets:** Please confirm that your computer can handle datasets with up to 30,000 rows and 100 columns without any decrease in performance. Computing capability is important for statistical analysis and is necessary for completing exams on time. If you cannot work with large datasets, please see the following options for borrowing laptops from Marshall and from USC libraries: <https://itservices.usc.edu/spaces/laptoploaner/>

Excel Add-ins:

- **The Analysis ToolPak:** Allows us to do regressions using Excel. It can be accessed in the PC environment by clicking on File/Options/Add-ins/Go, checking Analysis ToolPak and clicking OK. The procedure is similar for Macs. If you have trouble, Google it :)
- all students have access to ExcelNow!, an Excel tutorial that is an add-in that will plug into your version of Excel.

ASSIGNMENTS AND GRADING DETAIL

Your final grade will be determined as follows:

Component of Grade	% of Grade
<u>Assignments</u>	
ExcelNow! / Practice	5%
Homework* (Drop 1)	10%
Applications** (Drop 1)	10%
Case Month!	15%
<u>Exams</u>	
Midterm Exam	20%

Final Exam	25%
Application Exam	15%

The weights listed above will be used to calculate your overall score for the class.

* There are 11 homework assignments, each based on a maximum score of 100% if the assignment is submitted before the due date and time. Late submissions will be accepted for up to one week but will receive half credit. The best 10 scores out of 11 will be used to calculate the average for this component of the course grade.

** There are 9 weeks when application exercises will be due, not including case month. The lowest score will be dropped when calculating the average for this component of the grade. While accuracy will count, grades will be more a reflection of effort put in than accuracy of the answers.

Final grades represent how you perform in the class relative to other students. Two items are primarily considered when assigning final grades:

1. Your total weighted score for all assignments and exams.
2. Your rank among all students in the class.

Class Attendance & Participation:

You are expected to attend all classes. In addition to providing expanded explanations and examples of important statistical analysis concepts, the application sections also present you with the opportunity to pose questions.

I am happy to go over a concept multiple times. If you feel uneasy bringing up your questions in class, take advantage of the many opportunities to speak with me one-on-one. I am accessible by email and will be more than happy to speak with you during office hours.

Homework / Practice:

Practice work will be assigned weekly, and is designed to be a straightforward, low-stakes opportunity to practice the material. Hence the name.

Late submissions will be accepted for up to one week but will receive half credit.

AI

In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with assignments that indicate the permitted use of AI. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions.

Applications:

Statistics is a tool which is meant to be applied. To that end, your primary deliverables during the course will be application projects. Each week, you will receive dataset and will be tasked to complete some statistical analyses on that dataset based on what you are learning during class. Then, you will communicate these results in similar ways to how you might communicate them in the business world. For example, you will need to make presentations, reports, and emails which communicate your findings both clearly and professionally.

Some of your application work will be done individually, some as groups. Late submissions will be accepted for up to one week but will receive half credit.

Case Month!

The application portion of the class will culminate in a large activity which includes multiple projects called Case Month. This will require you address business issues by identifying necessary data, selecting which statistical tools you will use, and apply them to answer questions of your own. You will present your findings and any business strategies based on this work at the end of Case Month.

Exams:

The midterm and final focus on the theory of statistics. The midterm is held during lecture. The final date is listed below.

The application exam focuses on excel applications and is done in preparation for case month to ensure you're ready for your project.

If you miss an exam, you will receive a grade of zero unless you have a written excuse from your doctor or the University.

The final examination will take place on **Wednesday, May 1st 8:00AM – 10:00AM**. Note that it is an **exception final**, as it does **not** take place at the regularly listed time. The final exam is comprehensive but greater emphasis will be given to the material taught later in the semester. You **cannot** be exempted from this final under any circumstances. **The final exam will NOT be given at any other time.**

Note that according to the USC Office of Academic Records and Registrar, *“No student in a course with a final examination is permitted to omit the final examination or take the final examination prior to its scheduled date, and no instructor is authorized to permit a student to do so. No student is allowed to re-take a final examination or do extra work in a course after the semester has ended for purposes of improving his or her grade.”*

Collaboration Policy:

Discussion of practice problems is permitted and encouraged; however, each student is required to prepare and submit his or her solutions, including computer work, independently.

Collaboration of any sort on tests and exams is prohibited and will, at minimum, result in a 0 on that exam.

Add/Drop Process:

Please note that the last day to register and add classes is **Jan 26th**. The last day to drop a class without a mark of “W” is **Jan 26th** and receive a tuition refund. The last day to drop a class without a mark of “W” is **Feb 23rd**. The last day to drop with a mark of W is **Apr 5th**. For more information, visit <https://classes.usc.edu/term-20241/calendar/>

OPEN EXPRESSION AND RESPECT FOR ALL

An important goal of the educational experience at USC Marshall is to be exposed to and discuss diverse, thought-provoking, and sometimes controversial ideas that challenge one’s beliefs. In this course we will support the values articulated in the USC Marshall “[Open Expression Statement](https://www.marshall.usc.edu/open-expression-statement)” (<https://www.marshall.usc.edu/open-expression-statement>).

Academic Integrity:

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, compromises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university’s mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or “recycle” work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see [the student handbook](#) or the [Office of Academic Integrity’s website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. [The Office of Student Accessibility Services](#) (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has

completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call
Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

Class Notes Policy

Notes or recordings made by students based on a university class or lecture may only be made for purposes of individual or group study, or for other non-commercial purposes that reasonably arise from the student's membership in the class or attendance at the university. This restriction also applies to any information distributed, disseminated or in any way displayed for use in relationship to the class, whether obtained in class, via email or otherwise on the Internet, or via any other medium. Actions in violation of this policy constitute a violation of the Student Conduct Code, and may subject an individual or entity to university discipline and/or legal proceedings.

Classroom Zoom Policy (if and when applicable)

Zoom is the platform used for all online sessions and online office hours. A link and instructions to join the Zoom sessions will be posted in the Blackboard Course Pages. For more information about Zoom, go to: [Zoom Support Tutorials](#)

1. Class attendance and participation is important in developing a coherent view of the materials covered in the course. Unless accommodated as described in (b) below, attendance and active participation is expected at the synchronous Zoom class sessions.
 - a. Students are expected to have cameras on during the synchronous Zoom sessions, and preferably use headsets or earphones to ensure the best audio quality. *Please advise me if you have circumstances under which you will not be able to meet these expectations.*
 - b. For students who are located in a time zone where the synchronous class sessions or exams fall outside the window of 8 a.m. to 10 p.m. in your local time zone, please contact me. You will not be penalized for not attending the live Zoom class sessions. The Zoom sessions will be recorded and posted on Blackboard, and you will be responsible for watching the recorded sessions. Exams and other synchronous assessments will be scheduled for students to be able to complete the assessment between 8 a.m. and 10 p.m. in your local time zone.
 - c. [*If applicable*] In addition, for any student who does not attend the Zoom session live, you will be required to complete the following assignment as an alternate method of contribution to the class: [*insert; or see one sample below*]
2. During synchronous Zoom sessions, the following netiquette is expected, as if you were in a physical classroom.
 - a. Please do:
 - i. Log into class early or promptly

- ii. Arrange to attend class where there is a reliable internet connection and without distractions
 - iii. Dress respectfully. Video conference business meetings are and will be the norm, so practice your professional telepresence.
 - iv. If you use a virtual background, please keep it respectfully professional.
 - v. Display both your first and last name during video conferencing and synchronous class meetings.
 - vi. Respectfully minimize distractions by muting and or turning off video if necessary and when appropriate.
 - vii. Engage in appropriate tone and language with instructors and classmates.
 - b. Please try not to:
 - i. Engage in a simultaneous activity not related to the class.
 - ii. Interact with persons who are not part of the class during the class session.
 - iii. Leave frequently or not be on camera for extended periods of time.
 - iv. Have other persons or pets in view of the camera.
 - v. Use all CAPITAL LETTERS in emails or discussion board postings. This is considered "shouting" and is seen as impolite or aggressive.
 - vi. Use more than one punctuation mark, this is also considered aggressive!!!!
3. All Zoom sessions will be recorded and posted in the Blackboard Course pages.

Class Technology Requirements (when applicable)

The following equipment and system requirements are recommended to successfully participate in this online course:

- Computer with webcam
- Earphones or headset
- Reliable (preferably high speed) Internet connection
- Current operating system for Windows or Mac
- Current browser
 - Google Chrome
 - Firefox
 - Internet Explorer (not recommended)
 - Safari (Mac)

For technical support please see:

- **USC Systems** (Blackboard, USC Login, MyUSC, USC Gmail, GoogleApps)
For assistance with your USC login or other USC systems, please call +1 (213) 740-5555 or email Consult@usc.edu. They are open Mon – Fri 9:30am – 5pm and weekends from 8am - 5pm (all Pacific time).
- **Zoom Video Web Conferencing System** (MarshallTALK)
For assistance using Zoom, go to [Zoom Support Page](#). You may also call +1 (888) 799-9666 ext. 2. They are available 24/7.
- **Marshall Systems** (MyMarshall, Marshall Outlook email)
For assistance with Marshall systems you can call +1 (213) 740-3000 Mon-Fri 8am-6pm (Pacific), email HelpDesk@marshall.usc.edu, or use our self-help service portal as shown below. The portal allows you to get immediate assistance by searching for the information

you need. You can also use it to chat with a technician or input a request. To access the service portal, follow these steps:

- On a computer or mobile device, go to [MyMarshall Home Page](#) and click the “Help” link on the upper right.
- Log in using your Marshall username and password.
(If you don’t know your Marshall login please follow the onscreen instructions pertaining to login issues)

If your computer does not have Microsoft Word, Office 365 package is available to you free of charge and allows you to install Word, Excel, PowerPoint, Outlook, OneNote, Publisher, and Access on up to 5 PCs or Macs and Office apps on other mobile devices including tablets. Office 365 also includes unlimited cloud storage on OneDrive. To download Office 365 log into your student (University) email through a web browser, choose Settings (top right corner), and select software. If you have further questions or need help with the software, please contact the USC ITS service portal.

Emergency Preparedness/Course Continuity

If an officially declared emergency makes travel to campus infeasible, USC Emergency Information (<http://emergency.usc.edu/>) will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

AI Use Policy

In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with some assignments; for those assignments, we will explicitly tell you that AI is permitted. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus they are not yet prepared to produce text that meets the standards of this course. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions. AI use is not permitted at all on exams, and will result in a report to the Office of Academic Integrity.

McGraw-Hill's Connect

McGraw Hill's Connect is an online learning system where you can:

- Access two electronic versions of your textbook – a static eText that you can annotate and highlight, and an adaptive reading experience with personalized quizzes, called *SmartBook*.
- Complete homework assignments and practice assignments directly from your textbook, complete with tutorial videos, guides, and additional resources.
- Study more efficiently with a personalized study plan and exercises that match your book.

Before You Begin:

To register for Connect, you need:

- A Connect student access code** (packaged with your new text if you purchase a hard copy at the bookstore, or available for purchase with a major credit card when registering with McGraw-Hill online)
- Access to your BUAD 310 course in Blackboard**
- A valid email address**

Registration options

1. **Register on the McGraw-Hill site by going to the Blackboard section and clicking on Content and then the Homework Assignments folder.**
Click on any of the assignments and then [Go to My Connect Section](#). This will take you to a page where you can create your McGraw-Hill Connect Account and complete your Registration. This will give you a Connect license, which will give you an eBook and enable you to do the homework. In addition, you will also have the option to purchase a three-hole punched loose-leaf version of the text for \$39.
2. **Get a two-week trial Connect access.** Use option 1. above and select the trial option. This is a good option if you are not sure you are going to stay enrolled in the class.

Once your registration is complete, a **Confirmation** page appears. You will also receive this information by email. You are now ready to access your resources!

To access your Connect assignments:

- Click on any Connect assignment from within your Blackboard course (they will appear when assigned).
- Connect will automatically open directly to that assignment. Once you complete an assignment and select "Submit," your grade will automatically flow to your Blackboard grade book.
- *Always access your Connect assignments through Blackboard! If you access directly through McGraw-Hill, your grades may not sync over.*

Tech Support & FAQ:

Call: (800) 331-5094

Email & Chat: www.mhhe.com/support

Monday - Thursday • 24 hours

Friday • Until 6:00 PM

Saturday • 7 AM - 5 PM

Sunday • Until 9:00 PM

(All times Pacific)

Training & Tutorials:

connectstudentsuccess.com

LECTURE AND EXAM SCHEDULE – BUAD 310

<i>Date</i>	<i>Week</i>	<i>Day</i>	<i>Module</i>	<i>Lecture Subject</i>	<i>Description of Material</i>	<i>Readings</i>
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8-Jan	1	M	Introduction	Introduction		
10-Jan	1	W	Intro to Data	Descriptive Statistics	Data Types, organization, cleaning, central tendency, variability, shape	2.1 - 2.3, 4.1 - 4.6
15-Jan	2	M	BREAK	BREAK	BREAK	BREAK
17-Jan	2	W	Intro to Data	Data Visualization	Histograms (and their connection to descriptive statistics), Scatter plots, bar charts, line charts, hints at goodness of fit	3.2-3.9
22-Jan	3	M	Probability	Probability: Basics	What is a sample space, event, and probability? What are the different ways we can find probabilities? What are the formulas for union, intersection, complement, and conditional events?	5.1-5.5, 5.7
24-Jan	3	W	Probability	Probability: Basics cont'd		
29-Jan	4	M	Probability	Random Variables	What are random variables? Mean, Variance, Coefficient of Variation. Transforming random variables	6.1, 6.2, 6.8, 7.1
31-Jan	4	W	Probability	Discrete Uniform and Binomial Distributions	PDF and CDF, applications of both	6.3, 6.4
5-Feb	5	M	Probability	Discrete Uniform and Binomial Distributions		
7-Feb	5	W	Probability	Continuous Uniform, Exponential	PDF and CDF, applications of both,	7.2, 7.6
12-Feb	6	M	Probability	Normal, Standard Normal, Z score	PDF, CDF, why use z scores, translating z score to other normal distributions	7.3, 7.4
14-Feb	6	W	Probability	Normal, Standard Normal, Z score		
19-Feb	7	M	BREAK	BREAK	BREAK	BREAK
21-Feb	7	W	Inference	Prerequisites for making inferences	Sampling distributions, Sampling variability, Central Limit Theorem	8.1, 8.2
26-Feb	8	M	Inference	Inference for categorical data	Confidence interval and hypothesis test for proportion	8.3, 8.4
28-Feb	8	W	Inference	Inference cont'd		
4-Mar	9	M	Review for Midterm	Review for Midterm in Class		
6-Mar	9	W	Midterm	Midterm in Class		
11-Mar	10	M	BREAK	BREAK	BREAK	BREAK
13-Mar	10	W	BREAK	BREAK	BREAK	BREAK
18-Mar	11	M	Inference	Inference for categorical data	Goodness of fit using Chi-Square, one way and two ways	15.1, 15.2
20-Mar	11	W	Inference	Inference for Numerical Data	Testing means with t and normal distributions	9.1-9.6
25-Mar	12	M	Inference	Inference for Numerical Data	Difference of two means, ANOVA	10.1-10.6
27-Mar	12	W	Regression	Simple Linear Regression	Finding coefficients for line	12.1-12.8
1-Apr	13	M	Regression	Simple Linear Regression	ANOVA: testing the significance of the output	
3-Apr	13	W	Regression	Simple Regression	Transforming data and troubleshooting	
8-Apr	14	M	Regression	Simple Regression cont'd		
10-Apr	14	W	Application Exam	Application Exam in Class		
15-Apr	15	M	Regression	Multiple Regression	Adding new variables and interpretation	
17-Apr	15	W	Regression	Multiple Regression	Dummy variables and interaction terms	13.1-13.8
22-Apr	16	M	Regression	Multiple Regression cont'd		
24-Apr	16	W	Review for Final	Review for Final in Class	-	

The final exam is scheduled for Wednesday, May 1st 8:00AM – 10:00AM

PRACTICE AND APPLICATION SCHEDULE – BUAD 310

<i>Week</i>	<i>Homework Assigned</i>	<i>Application Assigned</i>
<i>1</i>	-	A1
<i>2</i>	-	
<i>3</i>	HW 1	A2
<i>4</i>	HW 2	A3
<i>5</i>	HW 3	A4
<i>6</i>	HW 4	A5
<i>7</i>	-	-
<i>8</i>	HW 5	A6
<i>9</i>	HW 6	A7
<i>10</i>	HW 7	-
<i>11</i>	HW 8	A8
<i>12</i>	HW 9	A9
<i>13</i>	-	Case Month!
<i>14</i>	HW 10	Case Month!
<i>15</i>	HW 11	Case Month!
<i>16</i>	-	Case Month!

APPENDIX I

How BUAD310 Applied Business Statistics Contributes to Student Achievement of Marshall's Six Undergraduate Program Learning Goals

Goal	Marshall Program Learning Goal	BUAD310 Course Objectives that support this goal
1	<p>Our graduates will demonstrate critical thinking skills so as to become future-oriented decision makers, problem solvers and innovators.</p> <p>Specifically, students will:</p> <p>1.1 Students will understand the concepts of critical thinking, entrepreneurial thinking and creative thinking as drivers of innovative ideas (not explicit for this course).</p> <p>1.2 Critically analyze concepts, theories and processes by stating them in their own words, understanding key components, identifying assumptions, indicating how they are similar to and different from others and translating them to the real world.</p> <p>1.3 Be effective at gathering, storing, and using qualitative and quantitative data and at using analytical tools and frameworks to understand and solve business problems.</p> <p>1.4 Demonstrate the ability to anticipate, identify and solve business problems. They will be able to identify and assess central problems, identify and evaluate potential solutions, and translate a chosen solution to an implementation plan that considers future contingencies.</p>	<p>1. Explore and visualize data</p> <p>2. Make inferences</p> <p>3. Perform hypothesis tests</p> <p>4. Perform simple, multiple, and logistic regression analysis</p> <p>5. Implement statistical analysis in</p> <p>6. Clean data to prepare for analysis</p> <p>7. Create business plans supported by statistical analysis</p> <p>8. Collaborate with others to answer complex business questions</p>
2	<p>Our graduates will develop people and leadership skills to promote their effectiveness as business managers and leaders in the 21st century's evolving work and organizational structures.</p> <p>Specifically, students will:</p> <p>2.1 Students will recognize, understand and analyze the roles, responsibilities and behaviors of effective managers and leaders in diverse business contexts e.g., functionally diverse, culturally diverse, geographically diverse, etc.</p> <p>2.2 Students will understand factors that contribute to effective teamwork including how to elicit, manage and leverage diverse perspectives and competencies.</p> <p>2.3 Students will recognize, understand, and analyze the motivations and behaviors of stakeholders inside and outside organizations (e.g., teams, departments, consumers, investors, auditors)</p>	<p>8. Collaborate with others to answer complex business questions</p>
3	<p>Our graduates will be effective communicators to facilitate information flow in organizational, social, and intercultural contexts.</p> <p>Specifically, students will:</p> <p>3.1 Identify and assess diverse personal and organizational communication goals and audience information needs.</p> <p>3.2 Understand individual and group communications patterns and dynamics in organizations and other professional contexts.</p> <p>3.3 Demonstrate an ability to gather and disseminate information and communicate it clearly, logically, and persuasively in professional contexts.</p>	<p>10. Communicate your findings to audiences of varying statistical knowledge</p> <p>11. Create that are engaging and incorporate statistics</p> <p>12. Write reports describing data and communicating your findings</p> <p>13. Draft professional quantitative emails</p>
4	<p>Our graduates will demonstrate ethical reasoning skills, understand social, civic, and professional responsibilities and aspire to add value to society.</p> <p>Specifically, students will:</p> <p>4.1 Understand professional codes of conduct.</p>	<p>9. Understand the ethical guidelines for statistical practice</p>

	4.2 Recognize ethical challenges in business situations and assess appropriate courses of action.	
5	<p>Our graduates will develop a global business perspective. They will understand how local, regional, and international markets, and economic, social and cultural issues impact business decisions so as to anticipate new opportunities in any marketplace. Specifically, students will:</p> <p>5.1 Understand how local, regional and global markets interact and are impacted by economic, social and cultural factors.</p> <p>5.2 Understand that stakeholders, stakeholder interests, business environments (legal, regulatory, competitor) and business practices vary across regions of the world.</p>	N/A
6	<p>Our graduates will understand types of markets and key business areas and their interaction to effectively manage different types of enterprises.</p> <p>Specifically, students will:</p> <p>6.1 Demonstrate foundational knowledge of core business disciplines, including business analytics and business economics.</p> <p>6.2 Understand the interrelationships between functional areas of business so as to develop a general perspective on business management.</p> <p>6.3 Apply theories, models, and frameworks to analyze relevant markets (e.g. product, capital, commodity, factor and labor markets).</p> <p>6.4 Show the ability to utilize technologies (e.g., spreadsheets, databases, software) relevant to contemporary business practices.</p>	<ol style="list-style-type: none"> 1. Explore and visualize data 2. Make inferences 3. Perform hypothesis tests 4. Perform simple, multiple, and logistic regression analysis 5. Implement statistical analysis in 6. Clean data to prepare for analysis 7. Create business plans supported by statistical analysis 8. Collaborate with others to answer complex business questions 10. Communicate your findings to audiences of varying statistical knowledge 11. Create that are engaging and incorporate statistics 12. Write reports describing data and communicating your findings 13. Draft professional quantitative emails