

**BUAD 310g – Applied Business Statistics**  
**Section 14896**  
**Spring 2020**

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<b>Professor:</b>	Inga Maslova	<b>Room:</b>	JFF LL105
<b>Office:</b>	Bridge 303C	<b>Lecture:</b>	MW 10:40 AM - 11:50 AM
<b>Email:</b>	imaslova@marshall.usc.edu	<b>Office Hours:</b>	MW 2:00 pm – 3:00 pm in BRI 303C. Other time by appointment (either in person or on Zoom)

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**Course Description**

In this course, we will focus on learning various statistical techniques and their applications that will assist you in making business decisions. The primary objective of this course is to enable students to perform and understand statistical analysis of data, with the view of being able to critically evaluate statistical reports or findings. You will learn to think critically about how statistics is used by others and how it impacts your day-to-day life and career. No mathematical background beyond high school algebra is required for an understanding of the material.

**Course Learning Objectives**

You will explore and describe data, examine sampling distributions, make estimations, test hypotheses, perform simple and multiple regression analysis, and build models using extensive software applications both independently and collaboratively.

These applications will guide you to:

1. Explain the concepts of descriptive statistics and use sample statistics to make inferences about population characteristics;
2. Recognize different models of statistical processes such as hypothesis testing and linear and multiple regression;
3. Explain statistical processes and choose which process to use for particular data analysis applications;
4. Learn to interpret statistical results as a basis for decision making;
5. Learn to use applicable statistics software;
6. Collaborate effectively to use statistical analysis to address business challenges
7. Communicate your interpretation of the results of statistical analysis logically and persuasively in speaking and writing
8. Become a very proficient user of Excel.
9. Understand the ethical guidelines for statistical practice.

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

**Required Materials**

The course textbook *Applied Statistics in Business and Economics* (6th Edition) by David Doane and Lori Seward, is available at the bookstore. You have to purchase a digital access code to McGraw-Hill Connect. It will provide the access to the e-book and the resources used in this course.

**Every student must 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.

Each student is required to purchase access to **TopHat** app that will be used in class during lectures. Use the link on Blackboard to locate the course. Use the course code: **912572** to register.

**Prerequisites and/or Recommended Preparation:**

No mathematical background beyond high-school algebra is required.

**Topics covered**

We will cover chapters 1-10, 12 of the textbook during the course of the semester. The link to the schedule can be found of the Blackboard. The due dates of the homework assignments, labs, tests are fixed. The actual timing of topics covered will depend on the class progress.

**Course Notes:**

The slides for the course and other handouts will be posted on the course Blackboard and TopHat sites. If you would like hard copies of the slides, it will be your responsibility to print them out. Please check the Blackboard site and your email daily for class preparation materials or instructions. All sessions will be recorded and the videos posted on Blackboard.

**Software:**

For the discussions/application sessions, students are **required to bring a laptop with Microsoft Excel 2016** software. Mac users can use the Mac version of Excel. Mac users can also use the PC version by installing Boot Camp (free from Apple) - or other Windows emulation software for Mac - and Windows. Students can take advantage of the free version of Office 365 that USC provides to students, which includes MS Excel. The free Microsoft USC Office Suite can be downloaded from <http://itservices.usc.edu/officestudents>. In addition, the Analysis ToolPak add-in is also required, which 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.

**Grading**

Your final grade will be determined as follows:

<b>Component of Grade</b>	<b>% of Grade</b>
In-class examples and participation	5%
Homework *	10%
Application Exercises/Lab **	10%
Application Exam	20%
Midterm Exam	20%
Final Exam	35%

\* There are weekly homework and reading LearnSmart assignments. An automatic extension will be granted for the homework assignments with 5% credit reduction per day for assignments done after the due date. The lowest HW assignment score will be dropped before calculating the average for this component of the course grade.

**Reading LearnSmart assignments do NOT have deadline extensions.**

\*\* The lowest application exercise (Lab) score will be dropped. No late labs will be accepted.

### **In-Class Examples and Participation:**

You are expected to not only to attend all classes, but also pay close attention, solve the in-class problems and submit your answers via TopHat. 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.

During lecture sessions we will apply the learned material on practice. You will do some work that will be turned in via TopHat during the class. This virtual classroom platform would provide me immediate feedback on where the class is. Your participation score is based on correctness of your answers (30%) and the fact that you've submitted an answer (70%). Simply checking in at the beginning of the class and not answering any questions during the lectures won't give you any participation credit.

I have no problem going 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 e-mail, and will be more than happy to speak with you before or after class or during office hours. Note: if your question requires a conversation rather than a short answer, email is not the best way to go – please talk to me after class or during office hours, and I will be happy to answer your question.

### **Homework:**

You will access your assignments and submit the answers online, using McGraw-Hill's Connect. There are two type of assignments: HW and LearnSmart.

There are *weekly homework assignments (aka HW)*. An automatic extension will be granted for all assignments where 5% credit deduction per day will be applied to assignments done after the due date. The lowest score will be dropped before calculating the average for this component of the course grade.

There will be *weekly reading assignments (aka LearnSmart)* that will require a review of the concepts and are done on Connect in the module called LearnSmart. The system can point you to the specific section of the textbook you need to read in order to answer the question. *No extension* is given on LearnSmart reading assignments. You will have to read the textbook and answer the questions by pressing the Practice button on the bottom of the page.

The HW assignments make up 90% and LS reading make up 10% of the Homework score.

### **Collaboration Policy:**

Discussion of homework 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 result in a 0 on that exam.** I reserve the right to bring any potential cheating issues to the administration for further penalties.

### **Application Exercises (aka Labs):**

You will use Excel for data-analysis and problem solving in the application (discussion) section of this course. The exercises are constructed in order to lead you through key topics introduced in lectures and reading. Your conclusions must explain the quantitative findings through a real-world business perspective. The lowest lab score will be dropped. There is no need for a calculator in the application sessions since you will be able to use Excel, which is much more powerful and efficient than a calculator and less prone to errors.

The application (discussion) section labs make up 10% of the course grade. The lowest lab grade will be dropped and the average of the remaining will count for 10% of the course grade.

### **Midterm Exam**

The midterm exam will be given on **March 11, 2020** during the lecture section of the course (10:40 am – 11:50 am). It is closed book and closed note, however, you may bring a single handwritten letter-

sized sheet (both sides) containing your notes to the midterm. Midterm will be held in the regular classroom unless told otherwise.

The midterm exam is multiple choice and will be held on Blackboard. You are allowed to use Excel for your calculations. We will go over the sample midterm in class to get ready for the exam.

Make-up midterm will be given only in case of documented emergencies, with instructor's consent. It can be made-up no later than one week after the official time. **Midterm can't be retaken!**

### **Applications Exam**

There will be one individual exam covering the work done in your application sessions. The Application Exam will be in a similar format to the weekly problem solving applications. Applications exam is comprehensive, you can prepare two handwritten sheets (front and back). It is scheduled on **April 22, 2020** during the lecture session: 10:00 am – 11:10 am and will take place in the regular classroom, unless told otherwise. You must bring your laptop with MS Excel.

### **Final Exam:**

Final exam is comprehensive. It is closed book and closed notes. You will be allowed two handwritten sheets (both sides) for the final exam. **You will receive a grade of zero for each missed test** unless you have a written excuse from your doctor or the University.

The final examination will take place on **May 6, 8:00-10:00 am for all BUAD 310 sessions**. Note that it is an **exception final**, as it does **not** take place at the regularly listed time. The final exam is comprehensive (this is inevitable in a Statistics course) 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.**

The final exam location will be announced later during the semester.

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.”*

### **Computer and Smartphone policy:**

Despite the temptations posed by computers in a classroom, I expect students to be engaged and to act like responsible adults. This means focusing on class, not doing other work or surfing the internet. In particular, when the class convenes after computer exercises to discuss results, you should cease working on the computer and join the discussion. Fiddling with the computers during discussion is disrespectful to your peers who are sharing, and generally unprofessional.

During the lectures you are required to join the TopHat app and follow the material presented. Failure to answer the questions posted during class will negatively reflect on your class participation score. You can access TopHat on your smartphone as well. Do not forget to silence it.

Use of laptops is required during the discussion sessions.

Students who act unprofessionally or fail to meet the Marshall standards of excellence may be asked to leave the classroom.

## **MARSHALL GUIDELINES**

### **Add/Drop Process:**

Please note that the last day to register and add classes is Friday, January 31. The last day to drop a class without a mark of “W” is also January 31 and receive a tuition refund. The last day to drop a class without a mark of “W” is February 28. The last day to drop with a mark of W is April 3. For more information, visit <https://classes.usc.edu/term-20201/calendar/>

### **Academic Conduct:**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own (plagiarism).

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the SCampus, the Student Guidebook ([www.usc.edu/scampus](http://www.usc.edu/scampus) or <http://scampus.usc.edu>). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and Appendix A).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/> . Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity <http://equity.usc.edu> or to the Department of Public Safety <http://adminopsnet.usc.edu/department/department-public-safety>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. The Center for Women and Men <http://www.usc.edu/student-affairs/cwm/> provides 24/7 confidential support, and the sexual assault resource center webpage <http://sarc.usc.edu> describes reporting options and other resources.

### **Support Systems:**

[Peer Tutoring](#) is available for this course via Marshall Office of Undergraduate Advising. It usually begins the third week of classes. Check the schedule at:

<http://students.marshall.usc.edu/undergrad/marshall-peer-tutoring-program/tutoring-schedule/>

Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students.

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.

The Office of Disability Services and Programs ([www.usc.edu/disability](http://www.usc.edu/disability)) provides certification for students with disabilities and helps arrange the relevant accommodations.

Students need to make a request with Disability Services and Programs (DSP) for each academic term that accommodations are desired. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Students requesting test-related accommodations will need to share and discuss their DSP recommended accommodation letter/s with their faculty and/or appropriate departmental contact person *at least three weeks before the date* the accommodations will be needed. Additional time may be needed for final exams. In case your accommodation includes any additional accommodations other than extra time, you need to schedule with DSP in advance. Reasonable exceptions will be considered during the first three weeks of the semester as well as for temporary injuries and for students recently diagnosed. Please note that a reasonable period of time is still required for DSP to review documentation and to make a determination whether a requested accommodation will be appropriate.

### **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.

### **Emergency Preparedness/Course Continuity:**

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.

**APPENDIX I**  
**How BUAD310 Contributes to Student Achievement of**  
**Marshall's Six Undergraduate Program Learning Goals**

Goal	Marshall Program Learning Goal	Course Objectives that support this goal
<b>1</b>	<p><b>Our graduates will demonstrate critical thinking skills so as to become future-oriented decision makers, problem solvers and innovators.</b> 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>	<b>4-8</b>
<b>2</b>	<p><b>Our graduates will develop people and leadership skills to promote their effectiveness as business managers and leaders in the 21<sup>st</sup> century's evolving work and organizational structures.</b> 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>	<b>N/A</b>
<b>3</b>	<p><b>Our graduates will be effective communicators to facilitate information flow in organizational, social, and intercultural contexts.</b> 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>	<b>7</b>
<b>4</b>	<p><b>Our graduates will demonstrate ethical reasoning skills, understand social, civic, and professional responsibilities and aspire to add value to society.</b> Specifically, students will:</p> <p>4.1 Understand professional codes of conduct.</p> <p>4.2 Recognize ethical challenges in business situations and assess appropriate courses of action.</p>	<b>9</b>
<b>5</b>	<p><b>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.</b> 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>	<b>N/A</b>

<p><b>6</b></p>	<p><b>Our graduates will understand types of markets and key business areas and their interaction to effectively manage different types of enterprises.</b> 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). 6.4 Show the ability to utilize technologies (e.g., spreadsheets, databases, software) relevant to contemporary business practices.</p>	<p><b>1-8</b></p>
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