College of Charleston  
School of Business  
Business Statistics  
Spring 2020

Instructor: Tingting Zhou  
Office: JCLong332  
Office hour: MW: 3:25pm-4:25pm TR: 4:30pm-6:00pm or by appointment  
Email: zhout@cofc.edu (Please start with [DSCI 232] in the title field)

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**Course Description:**  
Advanced statistical analysis with applications in business and economics utilizing relevant computer software. Topics include business applications in descriptive and inferential statistics emphasizing such topics as simple and multiple regression, analysis of variance, forecasting, quality control, and nonparametric techniques.

**Prerequisite:**  
MATH 104 or MATH 250, which covered probability concepts, descriptive statistics, binomial and normal distributions, confidence intervals, and tests of hypotheses. Although knowledge on these topics is expected, we will briefly review the most important topics in class.

**Course Objectives:**  
1. Interpret business data using descriptive statistics techniques, including the use of spreadsheet functions.  
2. Apply simple concepts of probability distributions to business problems, solving for statistics (given probabilities) and probabilities (given statistics) for normal, t-Student, Chi-Squared and F distributions.  
3. Use statistical tests to make inferences about a population based on a sample.  
4. Apply hypothesis testing for one and two populations to test for means and proportions in business applications.  
5. Apply ANOVA and goodness of fit for testing for differences among multiple populations in business applications.  
6. Apply Chi-Squared tests and regression for testing relationships between variables for business decision-making.

**School of Business learning goals:**  
Quantitative Fluency: Students demonstrate competency in logical reasoning and data analysis skills.
Textbook:

Major Topics:
1. Introduction. Descriptive Statistics
2. Continuous Probability Distributions
3. Interval Estimation
4. Hypothesis Testing
5. ANOVA Single Factor
6. Regression Analysis

Grading
The following percentages will be assigned:
Homework: 15%
Quizzes: 15%
Exams: 70%

Letter grades will be assigned according to the following scale. The scale is a guarantee. I reserve the right to lower the grade cutoffs, but I will not raise them.
A: $\geq$ 94  A-: 90 – 93.99
B+: 86 – 89.99  B: 83 – 85.99
B-: 80 – 82.99  C+: 76 – 79.99
C: 73 – 75.99  C-: 70 – 72.99
D-: 60 – 62.99  F: < 60

Homework:
All assignments must be submitted in hard copy and electronic format by the deadlines. The electronic copy need to be uploaded to dropbox on OAKS. No late homework will be accepted. Homework announcement will be posted on OAKS or sent via email. One lowest homework score will be dropped. I retain the right to enter a zero for assignment grade when the electronic copy has not been uploaded, even where the hard copy has been submitted on time. Students are expected to take care in writing their assignments. For instance, never forget to put your name on the top of your work; assignments should be written neatly with complete solutions.

Quizzes:
All Quizzes have time limits, so be sure you allot yourself enough time to take the quiz before the deadline. Make sure you will not be interrupted so you can focus on completing the quiz. Make sure the computer is working properly and charge your computer/laptop in advance. No make up quiz will be given
for any reason. Instead, one lowest quiz grade will be dropped. Quiz announcement will be posted on OAKS or sent via email.

FAQs:
1. Can a participant pause the time limit?
   No. Once participants press start they will be given the amount of time you have allowed to complete the quiz.
2. Can the participant do the test again if they don’t answer all questions within the time limit?
   No. 1 attempt for each quiz.
3. How does scoring work if the quiz is automatically submitted when the time limit has expired?
   All questions answered or unanswered will be saved and participants will be prevented from making further changes. Participant need to click the submit quiz button and will be given a score based on all questions in the test. Example: A participant is given 10 questions and only answers 5 questions in the allotted time. If all answers are correct, the participant will score 5 out of 10 or 50%.
4. How to review the quiz after submission?
   Inside the course, select the drop-down arrow from the Grades tool in the navigation bar. Click the Quizzes link from the drop-down list. In the Quiz List, select the drop-down arrow from the quiz you want to review, click Submissions and choose Attempt 1 to view quiz submission. You will be able to review answers to the questions, and can see your instructor’s feedback/solutions for selected questions by selecting "Feedback" under those questions.

Exams:
Exam 1 will cover the following material:
(1) Continuous Probability Distribution
(2) Sampling and Sampling Distribution
   **tentative date** for exam 1: Feb 13, 2019

Exam 2 will cover the following material:
(1) Interval Estimation
(2) Hypothesis Testing
   **tentative date** for exam 2: March 24, 2019

Exam 3 will cover the following material:
(1) Analysis of Variance
(2) Regression Analysis
   **tentative date** for Exam 3: please refer to final exam schedule

Turn off cell phones and any audible devices during exams. All exams are open book&notes and to be taken as scheduled. No makeup exams will be given except for documented emergencies. Exams cannot be made up except by prior arrangement with the instructor, at least 7 days before the scheduled exam date. Such a request must be made in person (not by email), and must
include written documentation of need. In case of emergency please contact the professor via e-mail by the end of the exam/quiz.

Extra Credit Assignments:

**Gmetrix Practice Exam 1**: 1 point (you will need to score 80% or more on the practice exam in **testing mode** to receive the extra credit. No extra credit will be given if your grade is below 80%).

**Gmetrix Practice Exam 2**: 1 point (you will need to score 80% or more on the practice exam in **testing mode** to receive the extra credit. No extra credit will be given if your grade is below 80%).

**Gmetrix Practice Exam 3**: 1 point (you will need to score 80% or more on the practice exam in **testing mode** to receive the extra credit. No extra credit will be given if your grade is below 80%).

For submission of Gmetrix Practice Exams grade report, please upload your grade reports to Assignments/Dropbox named Gmetrix Practice Exam 1, Gmetrix Practice Exam 2 and Gmetrix Practice Exam 3.

To create a grade report for submission, select Completed Tests on the left navigation bar, locate your desired test tile on that page, click on the tile of the desired test to show the grade report. Click on the print button on the top right corner of the grade report and save the pdf file to GmetrixExam_number_yourname.pdf. Example: the name of the grade report for Gmetrix Exam 1 should be GmetrixExam_1_yourname.pdf

If you score 80% on all Gmetrix Practice Exams in **testing mode**, you can register for the Excel Certification Exam. Complete the registration form (on OAKS) and email it to Dr Chou via chouc@cofc.edu

**Excel Certification Exam**: 3 points (you will need to score at least 700 out of 1000)

**POLICIES AND PROCEDURES:**

**OAKS and MyCharleston Usage:**
Grades will be posted on OAKS. It is the student’s responsibility to ensure that all grades entered are correct. If I have made a mistake, the student has two weeks from when the assignment/exam was handed back to notify me of the mistake. Failure to notify me within this time frame will result in the recorded grade becoming permanent.

**SNAP Students/Special Accommodations/Athletes:**
Students needing special accommodations should see the professor within the first week of class. If there is a student in this class who has a documented disability and has been approved to receive accommodations through the Center for Disability Services/SNAP (Students Needing Access Parity), please come and discuss this with me during my office hours. **SNAP Student should bring the envelope to the professor at least three days before the scheduled exam. No extended time will be given if valid documentation is not received before the exam.**
Attendance:
Students are expected to attend all classes, turn in all work by the due date and take examinations at the times and dates announced. Excessive absences (more than 5), excused or unexcused, will result in the student receiving a WA (an equivalent to an F) for the course. Attendance sheets will be used and it is your responsibility to sign them each class meeting.

Classroom Conduct:
Please turn off cell phones and any audible devices during class. Please do not hold private conversations during class. It is distracting to both the professor and to your fellow students. Internet will be given when necessary. Use of the lab computers is prohibited during class, unless instructed by the professor. Each of the lab computers is equipped with activity monitoring software, which links your computer (screen and all) to professor’s at the front of the class. The professor will use this software to monitor lab computer usage and the professor reserve the right to publicly display any lab computer’s screen at anytime to the rest of the class. The professor also reserves the right to take control over any lab computer using this software at any time during class.

Questions and Problems:
You are encouraged to ask questions during class and office hours, we all want to hear your ideas and opinions.

College of Charleston Honor Code and Academic Integrity:
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file. Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board. Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration
during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance.

Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at

http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

**Academic Support Services The Center for Student Learning**

The CSL, located on the first floor of the library, offers a wide variety of tutoring and other academic resources that support many courses offered at the College. Services include walk-in tutoring, by appointment tutoring, study strategies appointments, Peer Academic Coaching (PAC), and Supplemental Instruction (SI). All services are described and all lab schedules are posted on the CSL website http://csl.cofc.edu, or call 843.953.5635 for information.

**Useful links:**

University Academic Calendar and Final Exam Schedule:  
http://registrar.cofc.edu/calendars/

Students will be notified of any modifications from the syllabus throughout the course of the semester.