DSCI 232. Business Statistics

Classrooms: Tate 130 - 232-01 MWF 9:00 to 9:50 am; & Education 108 - 232-03 -11 to 11:50 am
Professor: Luis A. J. Borges, Ph.D. Office: BCTR (Beatty Center) 314
Office Hours: MWF - 9:55 to 10:55 am; MW -11:55 am to 1:55 pm, 2:55 to 3:55 pm & 5:20 to 5:50 p
Office Phone: (843) 953-6770 E-mail: borgesla@cofc.edu WebCT: link at www.cofc.edu

Note: Occasionally I will have meetings or other University activities during scheduled office hours. So that we can get together in a timely manner, I strongly encourage you to make an appointment to see me.

Course Description
Statistical analysis with applications in business and economics utilizing relevant computer software. Topics include business applications in descriptive and inferential statistics emphasizing selected topics such as simple and multiple regression, analysis of variance, time series analysis, and non-parametric techniques.

Prerequisite
MATH 104 (Elementary Statistics), 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. HOWEVER, THE PROFESSOR WON’T EXPLAIN IN DETAIL WHAT WAS EXPECTED FROM THE STUDENT TO LEARN IN MATH 104, IT IS THE STUDENT RESPONSIBILITY TO REVIEW THE NECESSARY CONCEPTS TO DO SATISFACTORILY IN THIS COURSE.

Learning 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.

This course addresses the following SBE learning goal:
Problem Solving Ability (every day for solving statistics problems in business applications).

Course Objectives:
1. Compute and interpret sample mean and standard deviation
2. Determine confidence intervals for the population mean and proportion
3. Test hypotheses about population mean and proportion
4. Test hypotheses comparing two population means
5. Test hypotheses comparing two population proportions
6. One-way analysis of variance
7. Simple linear regression
8. Multiple regressions
9. Chi square tests

Course Expectations
As your teacher I have the following responsibilities:
1. Come prepared to every class.
2. Plan my class so you can accomplish the objectives listed in the syllabus.
3. Treat you as responsible adults.
4. Consider that it is not always your fault if you don’t understand the material.
5. Create a mutually respectful classroom environment.
6. Encourage you to ask and answer questions.

Luis A. J. Borges, Ph.D.
As students you have the following responsibilities:
1. Come prepared to every class: read the chapter, learn the formulas, and follow the examples.
2. Complete all work on time with proper thought.
3. Behave as responsible adults.
4. Consider that it is not always my fault if you don’t understand the material.
5. Treat others with respect.
7. Learn the statistics software outside the classroom with guidance from the professor during office hours (Excel).
8. If you are not familiar with excel, it is YOUR responsibility to do the Excel Review by yourself during the first days of class. You are expected at least to have this knowledge for the class.

Text and Course Materials:


Teaching Method
Lecture, assigned reading, hands-on exercises, and cases. We will use e-learning as a support tools in the course, therefore, students should have the responsibility to learn how to use Excel (use the CD videos to review Excel). The professor will assume you know ALL the tasks practiced in the review. Any questions about excel, should be done outside the classroom to avoid distracting the class objectives.

In-Class Exercises
Each class session will consist of a period of lecture/demonstration, followed by a period of in-class exercises. The exercises will consist of hands-on computer exercises, which will serve as the primary means for you to learn to use the software applications covered in this course, so take them seriously. You should also spend at least 2 hrs. of review/study for every hour in class, for working on the exercises to fully understand the material covered in class. This time should allow you to understand the topics and apply them to solve real world problems.

Grading and Evaluation:

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Attendance Policies (non-negotiable policy)
Students are allowed to miss only ONE WEEK of class without penalty (three sessions for our MWF schedule). If you miss one week, the next missed session will turn your grade one level letter grade down and the next one.
another level letter grade down, and so on and so forth. This is a NON-NEGOTIABLE policy. You don’t have to come to me to excuse your absence, and every absence counts for this rule.

If you miss a session and a homework assignment was submitted, you cannot submit it late or delete the 0 grade of that quiz/homework, no exceptions to this rule.

- Attendance will be taken randomly in different time periods of the class. If you are absent at the time of attendance signing, it is considered absence. If you come in late and the attendance has already been passed, you will be considered absent. **Don’t bother to justify your absence since both justified and unjustified absences count for this rule.**
- **If you miss a session, the professor WON’T repeat the missed material on office hours,** it is your responsibility to read on your own and ask your classmates for missing concepts.

**Withdrawal Policy**

**The professor does not process Instructor Withdrawals for any reason.**

**Missing Exams/Homework**

- **No makeup tests will be given.** It is impossible to make an equivalent exam without the student at either an advantage or disadvantage. If you miss an exam without a legitimate excuse, you will have a zero for that exam. **This policy is non-negotiable.** Excusable absences (only athletes’ CofC games, sickness, or death in the family) will be done before the next test.
- **No makeup homework will be given.** This policy is non-negotiable. If you registered late for the course and you missed any quizzes, you will have zero on those missing quizzes. The professor cannot wait until the last day to add/drop to start the class.

**SNAP Students/Special Accommodations/Athletes**

- Students that require special accommodations for exams or athletes must talk to the professor no later than ONE week after the semester start and provide necessary documentation.
- **SNAP students are responsible to remind the professor one week in advance before each exam to allow the professor enough preparation time.** If a student fails to remind the professor one week in advance before each exam, the student will have the same evaluation time as the rest of the class for that particular exam.

**College of Charleston Honor Code**

All work that you submit in this course must be your own; unauthorized group efforts will be considered academic dishonesty. This is particularly important with regards to assignments and exams. The sharing or copying of program files (e.g., spreadsheets) is a form of plagiarism. Academic dishonesty is a serious offense, which may result in a failing grade for the course and/or report to the Honor Board for evaluation. If copying is involved, both parties will be judged equally guilty.

**Professional Behavior Guidelines:**

- **Tardiness:** Please arrive on time. If you are later than the start of the class for three times in the semester, it will count as one missed class. If you are late in a quiz day, you have until the other students finish the quiz, the time will not start when you come into the classroom.
- **Side Conversations:** Side conversations make it difficult for your classmates to actively listen and learn.
- **Sleeping:** falling asleep in class is not considered professional behavior.
- **Inattention:** Please don’t read other material (chat, browsing the web, books) or study for other courses during my class. It’s not polite. Please pay attention and join in the individual and group discussions. It will help you master the material.
- **Cell Phone:** Please set your cell phone to silent mode while you are in the class. Cell rings can disturb your classmates as well as me.
- **Printing:** Do not print outside work during class. I will turn off the printer at the beginning of class to prevent any interruption to the class.
- **Navigating or other computer tasks different than class matters:** It is not polite to be doing course work or assignments other than the ones required in class. Also, it is not polite to navigate internet or check email while in class. One point will be taken out from your final grade for every time you do this in class. If you
finish your work before other classmates, you might ask for permission to do other work in the computer and until given, you should not do other work. The Lab provides a software that the instructor can check if the students are surfing the internet.

Miscellaneous Policies:
- Although I will try to maintain the class schedule and objectives, I may need to make adjustments. You are responsible to check OAKS CALENDAR for the most recent calendar of activities and dates. Don’t ask the professor about quizzes or exams dates, since he will not give you as accurate information as the WebCT Calendar.
- **I do not give additional projects to increase one’s grade before or after the exam(s). The professor does not round grades; a 59.4 total grade is an F.**

Complaints about Exams
- The professor encourages students to review in detail when exams are returned. You have two days after the graded evaluation was given to you to make any questions or complaints about it. If that time is passed, it means you have accepted the grade given.
- **No complaints are accepted for any reason if the two days period has passed (non-negotiable)**

Assignments Submission Policies

Assignment submissions are to be turned in at the beginning of class on the scheduled due date. NO COPIES WILL BE ACCEPTED. When you use EXCEL your name, class, and the homework number must be in the file in the first sheet. Handwritten must be LEGIBLE. You have to show the work step-by-step. Simple answers are NOT ACCEPTED (with few exceptions that are obvious such as get a percentage directly from the table).

Late assignments will be immediately penalized 20%, and will incur an additional 10% penalty for each calendar day the submission is late.

Please be advised that technology is not perfect. System downtime, computer crashes, slow networks, computer viruses, etc. are facts of life; it is each student’s responsibility to take the necessary precautions and safeguards so as not to fall victim to these potential problems. **Technology-related issues and problems will not be accepted as reasonable causes for late assignments.** Therefore, students are advised to protect their work and their computers. Save your files often, make backups, and check your computer frequently for viruses. Get in the habit of practicing “safe computing” and following good computing practices.

SNAP Students/Special Accommodations/Athletes

Students needing special accommodations should see the professor within the first week of class. No additional time will be given for the theory part of the micro-exams, only on the practice part (Problems).

College of Charleston Honor Code

Students can find the complete Honor Code and all related processes in the Student Handbook at [http://www.cofc.edu/studentaffairs/general_info/studenthandbook.html](http://www.cofc.edu/studentaffairs/general_info/studenthandbook.html).

Miscellaneous Policies:

During exams, students are **not allowed to go to the bathroom.** Students should leave their cell phones on the table next to the classroom’s door and don’t take them with them to their seats. The same applies to any other electronic device such as ipods.

While I will try to maintain the class schedule and objectives, I may need to make adjustments.

No headphones can be used in the classroom.
Use of the lab computers for non class material is prohibited during class, unless instructed by me. Each of the lab computers is equipped with activity monitoring software, which links your computer (screen and all) to mine at the front of the class. I will use this software to monitor lab computer usage and I reserve the right to publicly display any lab computer’s screen at any time to the rest of the class. I also reserve the right to take control over any lab computer using this software at any time during class. Therefore, ensure that any and all of your computer activity is only as instructed by me.

No food or drinks allowed in the lab. This is a School-wide policy, non-negotiable!

**Tips for Success:**
This course requires study. Read the assigned material *before* the topic is introduced. I will assume you have done so in my lectures. Homework will cover this material. It makes a big difference in class discussion and usually in personal learning as well. Every student is expected to be able to discuss assigned material at any class.

Above all, do keep up. This material is not easily digested the night before the exam. The material is new to most students, covers a wide range of activities, and cannot be learned by simply listening. Come to class prepared in order to improve your grade, and more importantly, to improve your understanding of integrated business management.

**Take advantage of the tutoring support and the DSCI 232 Walk-in Lab for them in the CSL, besides my office hours.**

Bring sense of humor to the class.