

# BUSI 2305.201CL Business Statistics Spring 2023 6:00 – 8:50 p.m. Wednesday



**Instructor Information:** David Knopp

Office Location: ICB 222-29

dknopp@com.edu 409-933-8259

**Student hours and location:** 5:00 – 6:00 Wednesdays

I will also stay around after class if there are questions. Also by appointment.

Required Textbook/Materials: *Statistics for Business & Economics*, 14e, Anderson, Sweeney, Williams, et al.

#### **COURSE IMPORTANCE:**

"Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write." Those words by H.G. Wells support the enormous growth in data collection associated with the operations of a business, government, in the social sciences as well as the natural sciences has been truly remarkable over the past several decades. All these various applications of statistics provide vivid evidence of the need to be able to evaluate data sets intelligently. Consequently, one can use this ability to make intelligent decisions, inferences, and generalizations. Therefore, the study of statistics is an essential preparation for a role in modern society.

**Course Description:** Descriptive and inferential statistical techniques for business and economic decision-making. Topics include the collection, description, analysis, and summarization of data; probability; discrete and continuous random variables; the binomial and normal distributions; sampling distributions; tests of hypotheses; estimation and confidence intervals; linear regression; and correlation analysis. Statistical software is used to analyze data throughout the course. Prerequisite: MATH 1324 or MATH 1314 and BCIS 1305. Offered spring only.



<b>Course requirements:</b>	Grading Scale:	
<b>Exam I 100 points</b>	450-500 points	A
<b>Exam II 100 points</b>	400-449	В
<b>Exam III 100 points</b>	350-399	$\mathbf{C}$
<b>Exam IV 100 points</b>	300-349	D
Assignments/Quizzes 100 points	0-299	F
Total 500 points		

#### **Determination of Course Grade/Detailed Grading Formula:**

Exams, Assignments and Quizzes

Late Work, Make-Up, and Extra-Credit Policy: Students will be allowed to make-up missed work (except quizzes). However, be aware that the make-up work tends to be much more difficult than the original work.

### **Attendance Policy:**

Why attendance matters. When we talk about attendance, the focus is often on how a student's presence directly relates to the mastery of knowledge and skills. In fact, several studies have revealed that attendance positively affects both course grades and GPA and is the single strongest predictor of college grades. Indeed, the connection between attendance and student performance is well documented—but with important relationships to local context, prior performance, and motivation. Attendance matters not only because it enables the transfer of content knowledge within a particular course or student activity, but attendance provides students with access to other, non-content-specific contextual information, resources and relationships that can positively impact their knowledge and sense of belonging. Lectures provide students with far more than content—they provide students with information and orientations that they may not be able to access outside of class. Attending class sessions helps students to stay on track, understand expectations, foster important peer social interactions and generally promote a sense of connectedness. Increasingly, attendance is being understood as a precursor and leading indicator for student success.

Attendance improves performance. Although it is not the only factor, research shows that class attendance is positively related to subsequent academic performance. In particular, attendance has been linked to higher performance on exams and to final course grades. Indeed, some researchers have found that class attendance has a stronger effect on test scores than tutorial attendance and that these effects are stronger for underperforming students. Most importantly, attendance is but one, very controllable aspect of student behavior and self-regulation that can influence performance.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. I prefer that you email me as opposed to using D2L to email me.

### **CLASSROOM CONDUCT:**

A positive learning environment depends upon mature behavior. Among other things, this means arriving for class on time, listening quietly and respectfully when someone else is speaking, and always using socially acceptable business language. Appropriate steps will be taken to ensure this positive learning environment.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Describe the random		Exam I
processes underlying statistical		Assignment
studies.		Quiz
2. Calculate and use probability	Critical Thinking	Exam I
in solving business problems.		Assignment
		Quiz
3. Compute descriptive	Empirical and Quantitative	Exam I
statistics, construct graphs for	Skills	Assignment
data analysis, and interpret		Quiz
outcomes.		
4. Compute and interpret	Empirical and Quantitative	Exam I
measures of central tendency	Skills	Assignment
and dispersion.		Quiz
5. Calculate expected values to	Empirical and Quantitative	Exam I
evaluate multiple outcomes of a	Skills	Assignment
decision.		Quiz
6. Describe, interpret, and apply	Empirical and Quantitative	Exam II
discrete and continuous	Skills	Assignment
probability distributions.		Quiz
7. Construct and interpret	Empirical and Quantitative	Exam III
confidence interval for means	Skills	Assignment
and populations.		Quiz
8. Formulate, perform, and	Empirical and Quantitative	Exam III
interpret hypothesis tests (one	Skills	Assignment
and two population parameters).		Quiz
9. Calculate, evaluate, and	Empirical and Quantitative	Exam III
interpret simple linear	Skills	Assignment
correlation/regression.		Quiz
10. Use statistical software to	Communication Skills	Assignment
graph, compute, and analyze		
statistical data.		



#### **Academic Dishonesty:**

Academic honesty is required in all academic endeavors. Violations of academic honesty include any instance of plagiarism, cheating, seeking credit for another's work, falsifying documents or academic records, or any other fraudulent classroom activity. Violations of academic honesty may result in 0 points on the assigned work, failure in the course, or expulsion from school.

#### **Violations of Academic Honesty (DON'T DO IT!)**

Violations of academic honesty include, but are not limited to, the following activities:

- 1. Copying another person's work and claiming it as your own;
- 2. Using the work of a group of students when the assignment requires individual work;
- 3. Looking at or attempting to look at an examination before it is administered;
- 4. Using materials during an examination that are not permitted;
- 5. Allowing another student to take your exam for you;
- 6. Intentionally impeding the academic work of others;
- 7. Using any electronic device to transmit portions of questions or answers on an examination to other students;
- 8. Using any electronic device to improperly store information for an exam;
- 9. Knowingly furnishing false information to the College or its representatives.
- 10. Assisting other students in any of the acts listed above.

**Student Concerns:** If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Andrew Gregory, Program Chair at ICB 313-14, 409-933-8339, or at Agregory2@com.edu



## **COURSE OUTLINE:**

## **Topics and Assignments**

Week#	Date of Class	Topic	Chapter
1	18-Jan	Intro to Syllabus & Course	1
		Types of Statistics	
2	25-Jan	Descriptive Statistics	3-Feb
3	1-Feb	Descriptive Statistics	2-3
		Intro to Probability	4
4	8-Feb	Probability	4
5	15-Feb	Exam 1	1-4
		Binomial Distribution	5
6	22-Feb	Binomial Distribution	5
		Normal Distribution	6
7	1-Mar	Normal Distribution	6
		Sampling Distributions	7
_ [	8-Mar	Exam 2	5-7
8		Interval Estimation	8
9	15-Mar	Spring Break (no class)	
10	22-Mar	Interval Estimation	8
		Sample Sizes	8
11	29-Mar	Hypothesis Testing	9
12	5-Apr	Hypothesis Testing	9-10
13	12-Apr	Hypothesis Testing	10-11
14	19-Apr	Exam 3	8-11
		Chi-Squared Tests	12
15	26-Apr	Correlation & Regression	14
16	3-May	Correlation & Regression	14
	10-May	Final Exam	12, 14
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### **Institutional Policies and Guidelines**

**Grade Appeal Process:** Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook <a href="Student Handbook 2022-2023 v4.pdf">Student Handbook 2022-2023 v4.pdf</a> (com.edu). An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.

**Academic Success & Support Services:** College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

**ADA Statement:** Any student with a documented disability needing academic accommodations is requested to contact Kimberly Lachney at 409-933-8919 or <a href="klachney@com.edu">klachney@com.edu</a>. The Office of Services for Students with Disabilities is located in the Student Success Center.

**Textbook Purchasing Statement:** A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

**Withdrawal Policy:** Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1<sup>st</sup> 8-week session is March 1. The last date to withdraw from the 16-week session is April 24. The last date to withdraw for the 2<sup>nd</sup> 8-week session is May 3.

**FN Grading:** The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

### **Resources to Help with Stress:**

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at <a href="maintenangements/deanofstudents@com.edu">deanofstudents@com.edu</a> or <a href="maintenangements/">communityresources@com.edu</a>.