



Math 1342.103H2
Elementary Statistical Methods
Spring 2025
STEAM Building, Room 105
Tuesday/Thursday 9:30 - 12:20pm

Instructor Information: Theophilus Boye, tbove@com.edu, 409-933-8758
Include your course & section in the subject line when emailing

Student hours: MW: 9:00 - 11:00am TTh: 8:30 - 9:30am

Location: TEAMS/STEAM 325-3

Required Textbook/Materials: Minimally, you are required to purchase the access code for MyLab Math to access the eText for the textbook and all course assignments. A hard copy of the textbook is recommended but not required.

ISBN 10: 0-13-825333-1

ISBN 13: 978-0-13-825333-2

Title: Statistics: Informed Decisions Using Data with Integrated Review with Pearson eText

Author: Michael Sullivan III

Edition: 7

Copyright: 2025

Publisher: Pearson

Course Description: This course includes collection, analysis, presentation, and interpretation of data and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing.

Course requirements:

- **Homework: Homework** assignments will be given each week for every section covered in the course. Homework assignments will count as 15% of your final grade.
- **Exam Reviews:** Four exam reviews will be given. Cumulatively, the exam reviews will count as 5% of your final grade.
- **Unit Exams:** Four exams will be given, and you will be provided with a review to prepare for each exam. Each test will count as 16% of your grade.
- **Final Exam:** The comprehensive final exam will be given at the end of the course during Week 8. The final exam will count as 16% of your grade and will replace your lowest exam grade if it is higher

Required Technology:

A TI-84 Plus graphing calculator is required for this course. A TI-89 or higher or a TI-Nspire are not permitted. Internet capability is also required to gain access to course materials and online assignments via MyLab Math software.

Determination of Course Grade/Detailed Grading Formula:

Grading Formula:

$$\text{Final Average} = .64(\text{Exam Average}) + .16(\text{Final Exam}) + .15(\text{Homework}) + .05(\text{Exam Reviews})$$

Grading Scale:

The course grade will be determined using the following scale:

Grade A: Final Average [89.5, 100]

Grade B: Final Average [79.5, 89.5)

Grade C: Final Average [69.5, 79.5)

Grade D: Final Average [59.5, 69.5)

Grade F: Final Average [0, 59.5)

Late Work, Make-Up, and Extra-Credit Policy: Your final exam grade will replace your lowest test grade. If you neglect to take a test by its due date, this grade will be the one replaced unless you have prior instructor approval to make up this test at an alternate time. Occasionally, extra credit points will be offered to the entire class; however, individually, extra credit assignments will not be available.

Attendance Policy: Students at COM are expected to participate every week for which they are registered. Per COM policy, students are required to log on to their course at least twice per week, but it may be necessary to log on more times each week to complete the assignments required of this course. When students are not actively participating (e.g., contributing to discussions and completing weekly online homework), the faculty member can initiate an instructor drop and, subsequently, the student will receive a **W** for the course.

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.

Table Mapping SLO's and Core Objectives

Student Learner Outcome	SLO Assessed via this Assignment	SLO Maps to Core Objective	Core Objective Assessed via this Assignment
1. Explain the use of data collection and statistics as tools to reach reasonable conclusions	Quiz 1		
2. Recognize, examine, and interpret the basic principles of describing and presenting data	Quiz 1	Empirical and Quantitative Skills (EQS)	Question on Exam 1
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics	Quiz 3	Critical Thinking Skills (CT)	Question of Exam 2
4. Explain the role of probability in statistics	Quiz 3		

5. Examine, analyze, and compare various sampling distributions for both discrete and continuous random variables.	Quiz 4		
6. Describe and compute confidence intervals	Quiz 5		
7. Solve linear regression and correlation problems	Quiz 2		
8. Perform hypothesis testing using statistical methods	Quiz 6		

Academic Dishonesty: College of the Mainland is committed to a high standard of academic integrity. All students are responsible for honesty and independent effort. Incidents of academic and scholastic dishonesty (including cheating, plagiarism, and collusion) will be dealt with in a manner that is consistent with College Policy and the Student Conduct. Any student found to have been academically dishonest on an assignment, quiz, or exam will receive a zero for that assignment, quiz, or exam, and he or she will be referred to the Office of Student Conduct for further disciplinary action. Please read the section on Standards of Student Conduct and Discipline and Penalties in the online Student Handbook.

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 Mr. Leslie Richardson, Math Department Chair, at (409) 933-8329 or at lrichardson@com.edu

Electronic Device Policies

You may use your laptop or tablet for taking notes during lecture; however, that privilege will be lost if I find that you are using them for non-course-related reasons (e.g., news, social media, shopping). All other electronic devices should be **silenced and hidden**. If there is an emergency and your phone must be on/visible, please inform me of this at the beginning of class

Classroom Conduct Policy

Arriving on time, staying the entire class period, eliminating distractions like cell phones, using appropriate language (no cursing), respecting your classmates and the instructor, and cleaning up after yourself are all expectations for students in the classroom. Please abide by these expectations so that the class setting is enjoyable for all students. **Regarding cell phones, they should be turned off or set on airplane mode and in your backpack/purse (not on your desk).**

It is extremely disruptive to the learning environment, so you will be asked to leave if it is a continuous problem. Infractions may result in an automatic withdrawal from the class. Cell phones cannot be used during tests or quizzes and refer to testing policies for additional information. Please notify me before class if you have an emergency that requires you to answer your phone during class. Take an emergency phone call outside of the classroom.

For their safety, unattended minors of students are not permitted on campus while students are in class. In consideration of fellow classmates, please do not bring children to class.

Testing Policy

- Prohibited devices include, but are not limited to:
 - Cell phones; smart phones; smart watches
 - Audio players/recorders, tablets, laptops, notebooks, or any other personal computing devices
 - Cameras or any other photographic equipment
 - Any devices, including digital watches, that can be used to record, transmit, receive, or play back audio, photographic, text, or video content.
 If your device makes a sound or is in your possession when the device goes off, you may be dismissed, and your score may be recorded as a zero.

- **If you leave the classroom at any time during an exam, the exam must be submitted for grading.** It is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

Course Outline: (Tentative)

Week Dates	Math 1342-103H2-SP2025 TTh 9:30 – 12:20pm			Due Date	
1 Mar. 10 - 16	In - class	T		Brief Course Introduction	Mar 16
			1.1	Introduction to the Practice of Statistics	
			1.2	Observational Studies vs. Designed Experiments	
		TH	1.2	Observational Studies vs. Designed Experiments	
			1.3	Simple Random Sampling	
			1.4	Other Effective Sampling Methods	
	Independent Study		2.1	Organizing Qualitative Data	
			MML Orientation, Syllabus		
			1.5 Bias in Sampling		
			1.6 The Design of Experiments		
2 Mar. 24 - 30	In - class	T	2.2	Organizing Quantitative Data: The Popular Displays	Mar 30
			3.1	Measures of Central Tendency	
		TH	3.2	Measures of Dispersion	
	3.3		Measures of Central Tendency and Dispersion from Grouped Data		
	Independent Study		2.4	Graphical Misrepresentations of Data	
		3.4	Measures of Dispersion and Outliers		
			Review for Exam 1		
3 Mar. 31 – Apr. 6	In - class	T	3.5	The Five-Number Summary Boxplots	Apr 6
				Exam 1 (1, 2, 3)	
		TH	4.1	Scatter Diagrams, Correlation, and the Coefficient of Determination	
			4.2	Least Squares Regression	
	Independent Study	4.2	Least Squares Regression		
4 Apr. 7 - 13	In-class	T	5.1	Probability Rules	Apr 13
			5.2	The Addition Rule and Complements	
		TH	5.3	Independence and the Multiplication Rule	
			5.4	Conditional Probability and the General Multiplication Rule	
	Independent Study	5.5	Counting Principles		
		6.1	Discrete Random Variables		

5 Apr. 14 - 20	In-class	T	6.2	The Binomial Probability Distribution	Apr 20
			7.2	Applications of the Normal Distribution	
	TH	8.1	Distribution of Sample Mean		
	Independent Study	7.1	Properties of Normal Distribution <i>Review for Exam 2</i>		
6 Apr. 21 - 27	In-class	T		Exam 2 (4, 5, 6)	Apr 27
			8.2	Distribution of Sample Proportion	
		TH	9.1	Estimating a Population Proportion	
		9.2	Estimating a Population Mean		
	Independent Study	10.1	The Language of Hypothesis Testing <i>Review for Exam 3</i> Exam 3 (7, 8,)- Online		
7 Apr. 28 – May 4	In-class	T	10.2	Hypothesis Tests for a Population Proportion	May 4
			10.3	Hypothesis Tests for a Population Mean	
	TH	10.3	Hypothesis Tests for a Population Mean		
	Independent Study		11.1	Inference about Two Population Proportions	
			11.2	Inference about Two Means: Dependent Samples <i>Review for Exam 4</i> Exam 4 (9, 10)- Online	
8 May. 5 - 9	In-class	T		<i>Review for Final Exam</i>	May 8
		Th		Final Exam	

Important Dates:

April 30 -Spring 2025 2nd 8-Week “W-Day”

May 8 -Spring 2025 2nd 8-Week Last Day of Class

****Course Outline is subject to change at the discretion of the instructor**

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 https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf. *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, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, 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 1st 8-week session is February 26. The last date to withdraw from the 16-week session is April 21. **The last date to withdraw for the 2nd 8-week session is April 30.**

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 <https://www.com.edu/community-resource-center/>. 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 deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.