

Math 1342.101CL **Elementary Statistical Methods** Steam, Bldg. #22, Room 105 **SPRING 2024** MW: 2 – 3:50 PM

Instructor Information: Kristi Kelley, kkelley9@com.edu, 409-933-8287

Student hours and location: MW: 9 – 10:30 AM in STEAM 325.05 TTH: 9 - 10 AM (Virtual: by appt) Join the Virtual Office Hours via Teams. TTH: 1:30 - 2:15 PM; 4:15 - 5 PM in STEAM 325.05

E-mail me prior to the virtual office hours session to schedule an appointment to meet with me virtually.

Microsoft Teams: Join the class team by clicking the link or by using the join code: oq9tnbg You need to use your COM credentials when logging into Microsoft Teams. You may need to un-install Teams and redownload the version for schools.

Remind101: To get text reminders about assignments that are due and to be able to text me from your phone, join your class's Remind101 by one of the methods below:

- 1) Join Remind101 by clicking the link. Click here to join Remind101
- 2) Join by texting @ag9gh2d to the number 81010

Required Textbook/Materials:

ISBN 10: 0-13-578018-7 ISBN 13: 978-0-13-578018-3 Title: Statistics: Informed Decisions Using Data with Integrated Review with Pearson eText Author: Michael Sullivan III Edition: 6 Copyright: 2021 Publisher: Pearson

Minimally, you are required to purchase the access code for MyMathLab to access the eText for the textbook and all course assignments. A hard copy of the textbook is recommended, but not required.

The cost of the access code is included in tuition for this course AS LONG AS YOU DID NOT OPT OUT OF INCLUSIVE ACCESS!! You will go to D2L to access MyMathLab.

Required Technology: A TI-84 Plus graphing calculator is required for this course. At the minimum, you need a TI 30 XIIS calculator. 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 MyMathLab software.

For Math 1342 in class quizzes and exams, a COM issued TI 84 Plus calculator



appropriate

will be provided and required. It is recommended you purchase your own TI-84 Plus calculator to use during lectures and on homework to assist with learning the

keystrokes. HOWEVER, you can download an app called Calculate84 on your smartphone to use at home which has almost all the features of the TI 84 Plus CE calculator.

Recommended Materials:

-A small 3 ring binder (to keep class notes in) -Spiral bound notebook (to do your homework in) OR notebook paper and a bradded folder -Pens and Pencils (You MUST complete your exam with a pencil or ERASEABLE pen) -index cards -highlighters

Points may be deducted for use of a non-erasable pen.

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:** Online MyMathLab homework assignments will be given each week for every section covered in the course. Homework assignments will count as 15% of your final grade. *There may be additional homework assignments assigned during class throughout the semester.*
- Quizzes: Six online MyMathLab quizzes will be given. Cumulatively, the quizzes will count as 10% of your final grade. *There may be in class quizzes given at any time.*
- Unit Exams: Four exams will be given, and you will be provided with an online and paper review to prepare for each exam. Each test will count as 15% of your grade. The exams count as 60% of your grade.

We will review for the exam in class IF time permits.

A review video will be provided if we do not complete the review in class.

• Final Exam: The comprehensive final exam will be given at the end of the course during Week 15. The final exam will count as 15% of your grade and will replace your lowest exam grade if it is higher.

Determination of Course Grade/Detailed Grading Formula:

Grading Formula:

The course average will be determined using the following formula:

Final Average = .60(Exam Average) +.15(Final Exam) +.15(Homework)+.10(Quizzes)

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: Each homework and quiz have a set due date. You can complete homework and quizzes after the due date until 11:59 PM on the day of the exam. Each homework question worked after the due date will receive a 20% late penalty. The late penalty applies only to questions worked after the due date and not the entire assignment.

Homework and quizzes will close on the day of the exam at 11:59 PM and will not be re-opened.

Make-Up Exams: A make-up exam will only be allowed at the discretion of the instructor under *extenuating circumstances (which have been documented)* and is limited to *one* exam. Not being prepared for the exam or forgetting there is an exam is not a legitimate reason for a make-up exam nor is scheduling work/appointments during the class period.

The requirements to be allowed to make up an exam are as follows:

- 1) Have an *extenuating circumstances (which have been documented)*
- 2) Contact me via *e-mail from your COM email* PRIOR to the exam starting.
- 3) Have 4 or less absences for the time frame that covered that exam material.

IF you are granted a makeup exam:

- You have one week from the day/time of the exam to complete the exam.
- You are responsible for scheduling your exam with the testing center which is located in the Administration building (where you get your student ID)
- If there are no time slots available, you will have to go as a walk-in.
- <u>Click this link to schedule your exam with the testing center.</u>

Extra-Credit Policy: Occasionally, extra credit points may be offered to the entire class; however, individually, extra credit assignments will not be available.

Attendance Policy: Regular attendance is a critical component to being successful in courses. Students at COM are expected to attend *and participate* in every session of all classes for which they are registered *if possible*. You cannot make-up classes, and it is your responsibility to be punctual and attend class regularly. If you find that you are having trouble arriving on time, adjust your schedule accordingly. Students should consult with their instructors when it becomes necessary to miss a class.

Classroom Expectations

To be counted present for the day, you need to:

- 1) Arrive on time and have a productive workspace by the time class begins.
 - Get out your writing utensils (pencil or erasable pen), notebook paper, daily handout, and approved calculator out on your desk.
 - Put away cell phone, laptop, or any electronic device, <u>including your earbuds</u>. Preferably, put in your backpack. Put your backpack/purse on the floor between your feet/under the desk. The only thing you need on your desk is your writing utensils, calculator, and handout/paper!!

2) Be engaged in the lecture.

- Keep your cell phone, laptop, and any electronic devices put away during lecture.
- Take notes.
- Answer questions directed towards you or the class.
- Complete independent/group work as assigned.
- 3) Remain in the class the entire time IF possible.

Tardiness, leaving early, getting up multiple times during class, not taking notes, not participating in class, and/or being on your cell phone/laptop during class can cause you to be counted absent.

Laptops, cellphones, earbuds are not allowed to be out during class time. If you refuse to put these items away, you will be marked absent for the day and possibly asked to leave the class.

Please be advised that it is your responsibility to get caught up when a class is missed.

<u>The final exam will replace your lowest exam grade (if higher) for students who have missed 6 or less classes.</u> <u>You will be allowed to make up an exam if you have missed 4 or less absences for that exam period AND you have</u> <u>met the criteria in the make-up policy above.</u>

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 will respond to emails within 48 hours excluding weekends and holidays.*

Table Mapping SLO's and Core Objectives

St	udent Learner Outcomes	SLO assessed via this assignment	SLO maps to Core Objective	Core Objective assessed via this assignment
1.	Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.	Exam 1		
2.	Recognize and apply polynomial, rational, exponential, and logarithmic functions and solve related equations.	Exam 2, Exam 3	Critical Thinking Skills (CT)	2 application problems on Exam 3
3.	Apply graphing techniques.	Quiz 3	Communication Skills (CS)	Graphing question on Exam 1
4.	Evaluate all roots (zeros) of higher degree polynomials and rational functions.	Quiz 2		
5.	Recognize, solve and apply systems of linear equations using matrices.	Exam 4	Empirical and Quantitative Skills (EQS)	2 application problems on Exam 4

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 will 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 <u>lrichardson@com.edu</u>.

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_2023-2024_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 at 409-933-8919 or <u>klachney@com.edu</u>. 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 1st 8-week session is February 28. <u>*The last date to withdraw from the 16-week session is April 22*</u>. The last date to withdraw for the 2nd 8-week session is May 1. The last date to withdraw for spring mini session is May 29.

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

Course outline:

	Math 1342.101 Spring 2024					
	MW: 2 – 3:50					
Week	Week Assignment					
1 Jan. 16 - 21	<i>Orientation-W</i> 1.1 Introduction to the Practice of Statistics-W	Jan 21 st				
2 Jan. 22-28	2 1.2 Observational Studies versus Designed Experiments-M 1.3 Simple Random Sampling-M 1.4 Other Effective Sampling Methods M/W					
3 Jan. 29- Feb 4	 2.1 Organizing Qualitative Data-M 2.2 Organizing Quantitative Data: The Popular Displays-M/W 2.3 Additional Displays of Quantitative Data-W 2.4 Graphical Misrepresentations of Data-W Quiz 1 (1.1-1.6, 2.1-2.4) – SLO 1 and 2 	Feb 4 th				
4 Feb. 5-11	 3.1 Measure of Central Tendency- M 3.2 Measures of Dispersion- M/W 3.3 Measures of Central Tendency and Dispersion from Grouped Data-W 	Feb 11 th				
5 Feb. 12-18	3.4 Measures of Dispersion and Outliers-M3.5 The Five-Number Summary Boxplots-M<i>Review for Exam 1-W</i>	Feb 18				
6 Feb. 19-25	Exam 1 (1.1-1.6, 2.1-2.4, 3.1-3.5) – M – 2/19 4.1/4.2 Scatter Diagrams, Correlation, Coefficient of Determination, & Least Squares Regression-W Quiz 2 (4.1-4.2) – SLO 7	Feb 25				
7 Feb. 26- Mar. 3	 5.1 Probability Rules-M 5.2 The Addition Rule and Complements-M/W 5.3 Independence and the Multiplication Rule-W 	Mar 3 rd				
8 Mar. 4-10	 5.4 Conditional Probability and the General Multiplication Rule-M 5.5 Counting Techniques-M/W Quiz 3 (5.1-5.5) – SLO 3 and 4 6.1 Discrete Random Variables-W 	5.4, 5.5, Quiz 3 - Mar 10 th 6.1 - Mar 24 th				
Mar. 11-17	SPRING BREAKKKKK 🌝					
9 Mar. 18-24	 6.1 Discrete Random Variables-M 6.2 The Binomial Probability Distribution-M <i>Review for Exam 2-W</i> 	Mar 24 th				
10 Mar.25-31 <mark>*Mar 29 – Good</mark> Friday	Exam 2 (4.1, 4.2, 5.1-5.5, 6.1, 6.2) – M – 3/25 7.1 Properties of Normal Distribution-W 7.2 Applications of Normal Distribution-W Quiz 4 (6.1, 6.2, 7.1, 7.2) – SLO 5	Mar 31 st				
11 Apr. 1-7	7.2 Applications of Normal Distribution-M8.1 Distribution of the Sample Mean-M/W8.2 Distribution of the Sample Proportion-W	Apr 7 th				

12 Apr. 8-14	 9.1 Estimating a Population Proportion-M 9.2 Estimating a Population Mean-M/W Quiz 5 (9.1, 9.2) - SLO 6 Review for Exam 3-W 	Apr 14 th
13 Apr. 15-21	Exam 3 (7.1, 7.2, 8.1, 8.2, 9.1, 9.2) – M – 4/15 10.1 The Language of Hypothesis Testing-W 10.2 Hypothesis Tests for a Population Proportion-W	Apr 21 st
14 Apr. 22-28	LIL Interence about Two Population Proportions-M/W	
15 Apr 29 – May5	11.3 Inference about Two Means: Independent Samples-M (if time permits) Ouiz 6 (10 1-10 3, 11 1-11 3) – SLO 8	
16 May 6-9	Final Exam Review-M Final Exam – W – 5/8	Rev – May 7 th

Calendar is subject to change **Withdraw Date: 4/22/24**