Math 1342.103CL
Elementary Statistical Methods
STEAM Bldg, Room 105
Fall 2023
TTH: 11 – 12:20 PM
F: 9 – 9:50 AM

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

Student hours and location: MW: 9:30 - 11 AM in STEAM 325.05
TTH: 1:30 - 2 PM; 4:30 - 5 PM in STEAM 325.05
TTH: 9 - 10 AM (Virtual) in TEAMS
Click the Teams link above to join virtual office hours.

Microsoft Teams: Join the class team by clicking the link or by using the join code: **3yqsfzy**
You need to use your COM credentials when logging into Microsoft Teams. You may need to un-install Teams and re-download 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 **@8726ff** to the number 81010

Required Textbook/Materials: 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. You will go to D2L to access MyMathLab.*

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

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 MyMathLab software.

Note: A TI-84 Plus graphing calculator will be used for some Math 1314 class demonstrations. Having your own TI-84 Plus calculator to use outside of class or during class presentations would be beneficial to you to assist with learning the appropriate keystrokes. **For Math 1314 in class quizzes and exams, a COM issued TI 84 Plus calculator will be provided and required.** These graphing calculators cannot be checked out since they are used in multiple classes. 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.
- **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, Make-Up, and Extra-Credit Policy: Each homework and quiz has a set due date. You can work questions after the due date up until the day of the exam with a 20% late penalty. 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. You are required to e-mail the instructor **before** the exam is given to be considered for a make-up 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. 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. *Tardiness, leaving early, not participating, and/or being on your cell phone during class can cause you to be counted absent. Also, please be advised that it is your responsibility to get caught up when a class is missed.*

The final exam will replace your lowest exam grade (if higher) for students who have missed less than 5 classes.

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

Student 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 lrichardson@com.edu.

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 klachney@com.edu. 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 October 11. The last date to withdraw from the 16-week session is November 28. The last date to withdraw for the 2nd 8-week session is December 7.

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.

Course outline:

Week	Assignment	Due Date (by 11:59PM)
1 Aug 28 – Sept 3	*MyMathLab Orientation - T* 1.1 Introduction to the Practice of Statistics – T/Th 1.2 Observational Studies versus Designed Experiments - Th 1.3 Simple Random Sampling – F	Su - 9/3
2 Sept 4 – 10 Holiday: 9/4 M	1.4 Other Effective Sampling Methods - T 1.5 Bias in Sampling - T 1.6 The Design of Experiments – Th 2.1 Organizing Qualitative Data – Th/F	Su – 9/10
3 Sept 11 - 17	2.2 Organizing Quantitative Data:The Popular Displays –T 2.3 Additional Displays of Quantitative Data – Th 2.4 Graphical Misrepresentations of Data – Th 3.1 Measure of Central Tendency – F **Quiz 1 (1.1-1.6, 2.1-2.4) – SLO 1 and 2**	Su – 9/17
4 Sept 18 - 24	3.1 Measure of Central Tendency – T 3.2 Measures of Dispersion -T/Th 3.3 Measures of Central Tendency & Dispersion from Grouped Data – Th/F	Su – 9/24
5 Sept 25 – Oct 1	3.3 Measures of Central Tendency & Dispersion from Grouped Data - T 3.4 Measures of Dispersion and Outliers - T 3.5 The Five-Number Summary Boxplots - Th *Review for Exam 1 – Th/F*	Su – 10/1
6 Oct 2 - 8	**Exam 1 (1.1-1.6, 2.1-2.4, 3.1-3.5) - T** 4.1/4.2 Scatter Diagrams, Correlation, Coefficient of Determination, & Least Squares Regression – Th/F **Quiz 2 (4.1-4.2) – SLO 7**	**Exam 1: T – 10/3** 4.1/4.2, quiz 2: Su – 10/8
7 Oct 9 - 15	5.1 Probability Rules - T 5.2 The Addition Rule and Complements – T/Th 5.3 Independence and the Multiplication Rule – Th/F	Su – 10/15
8 Oct 16 - 22	5.4 Conditional Probability and the General Multiplication Rule - T 5.5 Counting Techniques – Th **Quiz 3 (5.1-5.5) – SLO 3 and 4** 6.1 Discrete Random Variables – F	5.4, 5.5, Quiz 3: Su – 10/22
9 Oct 23 - 29	6.1 Discrete Random Variables – T 6.2 The Binomial Probability Distribution – T/Th *Review for Exam 2 – Th/F*	Su – 10/29
10 Oct 30 – Nov 5	**Exam 2 (4.1, 4.2, 5.1-5.5, 6.1, 6.2) – T** 7.1 Properties of Normal Distribution – Th 7.2 Applications of Normal Distribution – Th/F	**Exam 2: T – 10/31** 7.1: Su – 11/5

Week	Assignment	Due Date
11 Nov 6 - 12	7.2 Applications of Normal Distribution – T 8.1 Distribution of the Sample Mean – T/Th 8.2 Distribution of the Sample Proportion – Th/F **Quiz 4 (6.1, 6.2, 7.1, 7.2) – SLO 5**	Su – 11/12
12 Nov 13 - 19	9.1 Estimating a Population Proportion – T 9.2 Estimating a Population Mean – T/Th *Review for Exam 3 – Th/F* **Quiz 5 (9.1, 9.2) – SLO 6**	Su – 11/19
13 Nov 20 – 26 <mark>Holiday: 11/23 - 26 Th-Su</mark>	**Exam 3 (7.1, 7.2, 8.1, 8.2, 9.1, 9.2) – T** 10.1 The Language of Hypothesis Testing – T (video lecture provided if we do not finish 10.1 in class) ***No class Thursday 11/22 and Friday 11/23***	**Exam 3: T– 11/21** 10.1: Su – 11/26
14 Nov 27 – Dec 3	10.2 Hypothesis Tests for a Population Proportion – T 10.3 Hypothesis Tests for a Population Mean – T/Th 11.1 Inference about Two Population Proportions – Th 11.2 Inference about Two Means: Dependent Samples – F	10.2, 10.3, 11.1: Su – 12/3
15 Dec 4 - 10	11.2 Inference about Two Means: Dependent Samples – T 11.3 Inference about Two Means: Independent Samples (optional – if time permits) - T Review for Exam 4 – T **Quiz 6 (10.1-10.3, 11.1-11.3) – SLO 8** **Exam 4 (10.1-10.3, 11.1-11.3) - Th** Final Exam Review - F	11.2, 11.3, E4 Rev, Quiz 6: W – 12/6 **Exam 4: Th – 12/7**
16 Dec 11 - 15	Final Exam Review - T **Final Exam - Th**	F.E. Rev: W – 12/13 **F.E: Th– 12/14**

Math 1342-101 (MW) Calendar

Week	Assignment	Due Date (by 11:59PM)
1 Aug 28 – Sept 3	*MyMathLab Orientation - M* 1.1 Introduction to the Practice of Statistics - M 1.2 Observational Studies versus Designed Experiments - W 1.3 Simple Random Sampling – W 1.4 Other Effective Sampling Methods - W	Su - 9/3
2 Sept 4 – 10 <mark>Holiday: 9/4 M</mark>	1.4 Other Effective Sampling Methods - W 1.5 Bias in Sampling - W 1.6 The Design of Experiments - W	Su – 9/10
3 Sept 11 - 17	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**	Su – 9/17
4 Sept 18 - 24	3.1 Measure of Central Tendency – M 3.2 Measures of Dispersion -M/W 3.3 Measures of Central Tendency & Dispersion from Grouped Data - W	Su – 9/24
5 Sept 25 – Oct 1	3.3 Measures of Central Tendency & Dispersion from Grouped Data - M 3.4 Measures of Dispersion and Outliers - M 3.5 The Five-Number Summary Boxplots - W *Review for Exam 1 - W*	Su – 10/1
6 Oct 2 - 8	**Exam 1 (1.1-1.6, 2.1-2.4, 3.1-3.5) - M** 4.1/4.2 Scatter Diagrams, Correlation, Coefficient of Determination, & Least Squares Regression – W **Quiz 2 (4.1-4.2) – SLO 7**	**Exam 1: W – 10/2** 4.1/4.2, quiz 2: Su – 10/8

7 Oct 9 - 15	5.1 Probability Rules - M 5.2 The Addition Rule and Complements – M/W 5.3 Independence and the Multiplication Rule -W	Su – 10/15
8 Oct 16 - 22	5.4 Conditional Probability and the General Multiplication Rule - M 5.5 Counting Techniques – M/W 6.1 Discrete Random Variables – W **Quiz 3 (5.1-5.5) – SLO 3 and 4**	Su – 10/22
9 Oct 23 - 29	6.1 Discrete Random Variables – M 6.2 The Binomial Probability Distribution – M/W *Review for Exam 2 - W*	Su – 10/29
10 Oct 30 – Nov 5	**Exam 2 (4.1, 4.2, 5.1-5.5, 6.1, 6.2) – M** 7.1 Properties of Normal Distribution – W 7.2 Applications of Normal Distribution – W	**Exam 2: M – 10/30** 7.1: Su – 11/5
11 Nov 6 - 12	7.2 Applications of Normal Distribution – M 8.1 Distribution of the Sample Mean – M 8.2 Distribution of the Sample Proportion – W **Quiz 4 (6.1, 6.2, 7.1, 7.2) – SLO 5**	Su – 11/12
12 Nov 13 - 19	9.1 Estimating a Population Proportion – M 9.2 Estimating a Population Mean – M/W *Review for Exam 3 – W* **Quiz 5 (9.1, 9.2) – SLO 6**	Su – 11/19
13 Nov 20 – 26 Holiday: 11/23 - 26 Th-Su	**Exam 3 (7.1, 7.2, 8.1, 8.2, 9.1, 9.2) – M** 10.1 The Language of Hypothesis Testing – M (video lecture provided if we do not finish 10.1 in class) ***No class Wednesday 11/22***	**Exam 3: M – 11/20** 10.1: Su – 11/26
14 Nov 27 – Dec 3	10.2 Hypothesis Tests for a Population Proportion – M 10.3 Hypothesis Tests for a Population Mean – M 11.1 Inference about Two Population Proportions – W 11.2 Inference about Two Means: Dependent Samples – W	10.2, 10.3, 11.1: Su – 12/3
15 Dec 4 - 10	11.2 Inference about Two Means: Dependent Samples – M 11.3 Inference about Two Means: Independent Samples (optional – if time permits) - M Review for Exam 4 – M **Quiz 6 (10.1-10.3, 11.1-11.3) – SLO 8** **Exam 4 (10.1-10.3, 11.1-11.3) - W**	11.2, 11.3, E4 Rev, Quiz 6: T – 12/5 **Exam 4: W – 12/6**
16 Dec 11 - 15	Final Exam Review - M **Final Exam - W**	F.E. Rev: T – 12/12 **F.E: W – 12/13**

Calendar is subject to change
Census Date: 9/13/2023
Withdraw Date: 11/28/23