Math 1342.237H1
Elementary Statistical Methods
Steam, Bldg. #22, Room 107
Spring 2024
TTH 7:30 – 9:20 PM
Hybrid

This is a Hybrid course. You will have some in class instruction and will be responsible for learning some of the material online via lecture videos/handouts provided by me AND/OR the provided Pearson resources.

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

Student hours and location:
M: 11:30 – 1:30 PM in STEAM 325.05
T: 2:30 – 3:30 PM in Tutoring Center
T: 3:45 – 4:45 PM in STEAM 325.05
W: 11:30 – 1:30 PM in STEAM 325.05
TH: 3:30 – 5 PM in STEAM 325.05
You can come to student hours in person or meet virtually via Teams.
Office location: STEAM 325.05
Join the Virtual Office Hours

Send me an E-mail if you'd like to meet virtually during office hours.

Microsoft Teams: Join the class team by clicking the link or by using the join code: **i8pwt6u**
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 reminders about assignments that are due and to be able to message me from your phone using the Remind101 app, join your class's Remind101 by following the instructions below:

1) Download Remind101 from the app store on your smart phone
2) Create a username and password. You MAY need to use your COM email address as your username.

Method 1

3) Go to Add Class on the app
4) Type in the code **@6e38b7a.** (You do not need to type in the @ symbol)

Method 2

3) Open the syllabus on your smart phone by going to D2L on your phone. (Can go to D2L by using the Pulse Bright Space app)
4) Click the link Join Remind101 and click the Join button in the top right corner.

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:** 7 **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 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 appropriate 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. The first two exams are short answer paper exams given in class. The last two exams will be short answer online exams taken online. For the in-class exams, a paper review will be provided. For the online exams, an online MyMathLab review will be provided. To be successful on the exams, it is crucial for you to complete the exam reviews and have a strong understanding of the material. Questions on the exam can come from reviews, homework problems, or quiz problems. The exams count as 60% of your grade.
  We will review for the exam in class IF time permits.
- **Final Exam:** The final exam is comprehensive. 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:
Your overall average/grade will be located in you MML Course. We will NOT be using the D2L gradebook to keep up with your overall average.

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.

Submitting Exam Scratch Work for Online Exams

-You will be **REQUIRED** to submit scratchwork for the two online exams. You will submit your scratchwork to D2L as a SINGLE PDF file. There will be a slot in Assignments in the top toolbar in D2L for your scratchwork submission for each exam. I will grade your scratch work. Problems that lacks work to support your answer, will lose points.

-Exam scratchwork needs to be submitted using the following criteria or will not be accepted:

1) Pages must be numbered and submitted in the correct order

2) Problems must be numbered and worked according to the methods provided in the instructor's lecture videos and/or Pearson resources. Problems worked via methods not appropriate for this course may not be given credit. **Scratchwork that is not legible will not be graded.**

3) You must take pictures of your scratchwork using a smart phone, convert to a **SINGLE PDF FILE** (multiple PDFs will not be accepted) using a PDF converter app such as CamScanner, and upload to D2L within **15 minutes** of completing the exam.

Exam Pre-requisites:

- **There is a pre-test quiz that contains testing instructions that must be completed prior to the exam opening.** Also, any quizzes over the material covered on that exam must be attempted at least once before the exam review will open. The review for the exam must be at least opened before the testing instructions quiz will open. The testing instructions quiz must be completed before the exam will open. Make sure you are leaving yourself plenty of time to attempt the quizzes and reviews prior to completing the exam.

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: There are no make-up exams. If you miss an exam, your final exam will replace that exam grade at the end of the semester. If you know you are going to miss an exam, you can take the exam prior to the exam date in the testing center.

There is NO extra credit for this course.

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. (Faculty may add additional statement requiring monitoring and communication expectations via D2L or other LMS)

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

Student Learner Outcome	**Assessed via this Assignment**	**Maps to 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 on 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		

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 October 2. The last date to withdraw from the 16-week session is November15. The last date to withdraw for the 2nd 8-week session is November 26.***

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.

Important Dates

Census Day: 8/26
1st 8 weeks W Day: 10/2
Last Day of Class: 10/10
Grades Due: 10/11 by 11AM

Wk	Dates	Math 1342.237H1 TTh 5:30 – 9:20				Due Date
1	Aug. 19-25	In – class	T		Brief Course Introduction	Su-Aug. 25
				1.1	Introduction to the Practice of Statistics	
				1.2	Observational Studies vs. Designed Experiments	
			TH	1.3	Simple Random Sampling	
				1.4	Other Effective Sampling Methods	
				2.1	Organizing Qualitative Data	
		Online			MML Orientation, Syllabus Video, Syllabus Scavenger Hunt	Su-Aug. 25
				1.5	Bias in Sampling	
				1.6	The Design of Experiments	
2	Aug. 26 - Sept. 1	In – class	T	2.2	Organizing Quantitative Data: The Popular Displays	Su-Sept. 1
				3.1	Measures of Central Tendency	
				3.2	Measures of Dispersion	
			TH	3.2	Measures of Dispersion (ctd)	
				3.3	Measures of Central Tendency and Dispersion from Grouped Data	
		Online		2.4	Graphical Misrepresentations of Data	Su-Sept. 1
					Quiz 1 (1.1-1.6, 2.1-2.4)	
				3.4	Measures of Dispersion and Outliers	
3	Sept. 2-8	In – class	T	3.5	The Five-Number Summary Boxplots	W-Sept. 4
					Review for Exam 1	*Th-Sept. 5*
			TH		**Exam 1 – Thursday 9/5**	**Th-Sept. 5**
				4.1/4.2	Scatter Diagrams, Correlation, and the Coefficient of Determination Least Squares Regression	Su-Sept. 8
		Online		4.1/4.2	Scatter Diagrams, Correlation, and the Coefficient of Determination Least Squares Regression	Su-Sept. 8
					Quiz 2 (4.1-4.2)	
4	Sept. 9-15	In-class	T	5.1	Probability Rules	Su-Sept. 15
				5.2	The Addition Rule and Complements	
			TH	5.3	Independence and the Multiplication Rule	
				5.4	Conditional Probability and the General Multiplication Rule	
		Online		5.5	Counting Principles	Su-Sept. 15
					Quiz 3 (5.1-5.5)	
5	Sept 16-22	In-class	T	6.1	Discrete Random Variables	Su-Sept. 22
				6.2	The Binomial Probability Distribution	
			TH		Review for Exam 2	
				7.2	Applications of Normal Distribution	
		Online		7.1	Properties of Normal Distribution	Su-Sept. 22
					Quiz 4 (6.1, 6.2, 7.1, 7.2)	
6	Sept. 23-29	In-class	T		**Exam 2 (In class) – Tuesday 9/24**	**T: Sept. 24**
				8.1	Distribution of Sample Mean	Su-Sept. 29
			TH	8.2	Distribution of Sample Proportion	
				9.1	Estimating a Population Proportion	
		Online		9.2	Estimating a Population Mean	Su-Sept. 29
					Quiz 5 (9.1, 9.2)	
					Review for Exam 3	*M-Sept. 30*
					Exam 3 (online) – due Sunday 9/29	**M-Sept. 30**
7	Sept. 30- Oct. 6	In-class	T	10.1	The Language of Hypothesis Testing	Su-Oct 6
				10.2	Hypothesis Tests for a Population Proportion	
			TH	10.3	Hypothesis Tests for a Population Mean	
				11.1	Inferences on two Population Proportions	
		Online			*Quiz 6 (10.1-10.3, 11.1-11.3)*	*Su-Oct 6*
					Review for Exam 4 (Ch. 10, 11) Review for Exam 4 (Ch. 10, 11)	*M-Oct. 6*
					Exam 4 (online) – due Sunday 10/6	**M-Oct. 6**
8	Oct. 7-11	In-class	T		*Review for Final Exam*	*Th-Oct. 10*
			Th		**Final Exam – Thursday 10/10**	**Th-Oct 10**