Math 1342.001IN
Elementary Statistical Methods
Summer 1 2024
Online

Instructor Information: Kristi Kelley
        kkelley9@com.edu

Student hours and location: Office hours will be held virtually through Microsoft Teams by appointment. Please send me an email AND/OR message through Remind101, and we will schedule a time to meet.

Join the Math 1342.001IN Microsoft class team to meet for virtual office hours.

Join Remind101 to get class assignment reminders and to be able to communicate with me via text.

Required Textbook/Materials: Required Textbook/Materials:
1. Textbook: **ISBN:** 9780134856254 **Title:** Statistics: Informed Decisions Using Data with Integrated Review, Books a la Carte Edition plus MyStatLab with Pearson eText **Author:** Michael Sullivan **Edition:** 6 **Copyright**: 2017 **Publisher**: Pearson
2. A computer/laptop and internet service are required to gain access to the required assignments.
4. A **TI-84 or TI 83 calculator** is needed for this course.
You can download a free TI 84 app on your smartphone. (I have Calculate84 on my iphone, and it is the best TI 84 app in my opinion. It looks JUST like the TI 84 calculator)
5. A free PDF converter app or a printer that can scan documents is needed to submit exam scratch work.
I recommend downloading the CamScanner or AdobeScan App on your smart phone.

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 Assignments:
 -There is assigned homework for each section to be done online using *MyMathLab* as well as test reviews.
 -You can re-try each problem 3 times. Once you attempt the problem 3 times incorrectly, it counts the problem wrong. You can then do a similar exercise for that problem and get 3 more chances on that problem. You can re-peat this process until you get the problem correct.
 -There are set due dates for homework assignments. Any problems worked after the due date will have a 20% late penalty. The homework will remain open until the exam closes.

Quizzes:

-There are six quizzes to be done online using *MyMathLab*. You can retake each quiz just once to improve your score; the higher score will be the one that counts.

-There will be slots in D2L for you two upload your quiz scratchwork. This is NOT required, but if you want me to review your quiz with you or see if you could get points back for something that MML counted wrong. For example, you put a comma in the wrong spot, typed a number in wrong, etc. Click Assignments at the top toolbar of D2L and then click the Quiz Scratchwork Submission assignment.

-There are set due dates for quizzes. However, quizzes will remain open for the entire semester.

Exams:

-There are four-unit exams and a comprehensive final exam to be done online using *MyMathLab*.

-There are no retakes on any of the exams, and there is only one attempt for each exam.

-If you have problems with your computer or internet in the process of taking an exam, contact the instructor immediately.

-The exam will remain open for a few days after the due date. There is a 5% late penalty on exams taken after the due date. *There are no extensions for exams.*

Exam	Due Date	Late Penalty Due Date
Exam 1	F: June 14	Su: June 16
Exam 2	F:June 21	Su: June 23
Exam 3	Th: June 27	Su: June 30
Exam 4	T: July 2	Th: July 5
Final Exam	W: July 3	F: July 5

Submitting Exam Scratch Work:

-You will be **REQUIRED** to submit scratchwork for the last question on each exam to D2L. I will grade the last problem on the exam based on your work provided. No work provided for the last question on the exam will result in points being taken away for that problem regardless of the answer being correct. To upload your scratchwork, click Assignments in the top toolbar of D2L and then click Exam Scratchwork Submission and the appropriate exam.

-It is HIGHLY RECOMMENDED that you submit scratch work for as many questions as possible on the exam. I will be checking your work to see if I can possibly give you any partial credit back for questions that MyMathLab has counted wrong. You could have put an answer in wrong, rounded wrong, worked a step wrong, etc. I can look at your scratch work and possibly give you credit for these mistakes. HOWEVER, if you do not write your work down and submit scratch work, there will be no way for me to give you any partial credit.

-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.

Class discussions:
   -There are 3 class discussions throughout the semester. The class discussions are located inside the week's instructions. Once you click Week ___, you'll notice the class discussion as the last button underneath week ___.
Discussion 1: Observational Vs. Designed Experiment Discussion
Discussion 2: Box Plot Discussion
Discussion 3: Probability Discussion
You must make an initial post by Friday and are required to respond to two other classmates' posts by Sunday of that week.

Determination of Course Grade/Detailed Grading Formula:
- **Homework:** Homework assignments (exam reviews are included in this) will count as 10% of your final grade.
- **Quizzes:** Cumulatively, the quizzes will count as 10% of your final grade.
- **Unit Exams:** Each test will count as 15% of your grade.
- **Final Exam:** The comprehensive final exam will count as 15% of your grade.
- **Discussions:** The class discussions will count as 5% of your grade.

Final Average = .60(Exam AVG) +.15(Final Exam) +.10(Homework AVG) +.10(Quiz AVG) + .05(Discussions AVG)

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)

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.

Late Work, Make-Up, and Extra-Credit Policy:
-**Due Dates** –There are set due dates for homework assignments, quizzes, and exams. *It is your responsibility to look at the week's instructions in D2L at the beginning of each week, so you do not miss any due dates. Due dates for homework, quizzes, and exams WILL NOT be extended. Please see the due date and late penalty information above.*

-As a general rule, there are no make-up exams. Please do not wait until the last minute to take an exam as assistance may be limited due to the reduced timeframe. *Make-up exams will only be allowed under extenuating circumstances. If you need to miss an exam, you must petition the instructor __before__ the 5% penalty day to be considered for a make-up exam.* If you do not reach out prior to the exam, an extension will not be granted. **Only extenuating circumstances of a serious nature that are documented will be considered such as a death in the family or hospitalization.**

Realize not being prepared for the exam is not a legitimate reason for a make-up exam. **No one will be permitted to take more than one make-up exam. All other missed chapter tests will be assigned a zero, and the zero(s) will be used to calculate final grade in course**.

<mark>*There is NO extra credit for this course.*</mark>

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)

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		

Academic Dishonesty: (Describe your academic dishonesty policy and state consequences if it is violated)

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 [insert name and title of direct supervisor] at [phone number/email address].

Course outline:

Week	Dates	Topics	Sections	Due
1	June 3 – 9	*Self-Introduction Flipgrid Assignment*		W: June 5
		Syllabus Scavenger Hunt/Course expectation Assignment		
		MyMathLab Orientation		Su: June 9
		Introduction to the Practice of Statistics	1.1	
		Observational Studies versus Designed Experiments	1.2	
		Simple Random Sampling	1.3	
		Other Effective Sampling Methods	1.4	
		Bias in Sampling	1.5	
		The Design of Experiments	1.6	
		Organizing Qualitative Data	2.1	
		Organizing Quantitative Data: The Popular Displays	2.2	
		Additional Displays of Quantitative Data	2.3	
		Graphical Misrepresentations of Data	2.4	
		*Observational vs. designed experiment Discussion-**original post due Friday 6/7 and two responses due Sunday 6/9***		
2	June 10 – 16	**Quiz 1** (1.1-1.6, 2.1-2.4) – SLO 1 and 2		W:June 12
		Measure of Central Tendency	3.1	
		Measures of Dispersion	3.2	
		Measures of Central Tendency and Dispersion from Grouped Data	3.3	
		Measures of Dispersion and Outliers	3.4	
		The Five-Number Summary Boxplots	3.5	
		Review: Exam 1		**F: June 14**
		Exam 1 (1.1-1.6, 2.1-2.4, 3.1-3.5)		
		Least Squares Regression	4.1/4.2	Su: June 16
		Quiz 2 (4.1-4.2) – SLO 7		
		Probability Rules	5.1	
		The Addition Rule and Complements	5.2	
		Independence and the Multiplication Rule	5.3	
		*Box Plot Discussion-**original post due Friday 6/14 and two responses due Sunday 6/16***		
3	June 17 – 23 Holiday: 6/19	Conditional Probability and the General Multiplication Rule	5.4	W: June 19
		Counting Techniques	5.5	
		Quiz 3 (5.1-5.5) – SLO 3 and 4		
		Discrete Random Variables	6.1	
		The Binomial Probability Distribution	6.2	
		Review: Exam 2		**F:June 21**
		Exam 2 (4.1-4.3,5.1-5.5, 6.1, 6.2)		
		Properties of Normal Distribution	7.1	Su:June 23
		Applications of Normal Distribution	7.2	
		Quiz 4 (6.1, 6.2, 7.1, 7.2) – SLO 5		
		Distribution of the Sample Mean	8.1	
		Distribution of the Sample Proportion	8.2	
		*Probability Discussion-**original post due Friday 6/21 and two responses due Sunday 6/23***		

4	June 24 – 30	Estimating a Population Proportion	9.1	
		Estimating a Population Mean	9.2	T: June 25
		Quiz 5 (9.1, 9.2) – SLO 6		
		Review: Exam 3		**Th: June 27**
		Exam 3 (7.1, 7.2, 8.1, 8.2, 9.1, 9.2)		
		The Language of Hypothesis Testing	10.1	
		Hypothesis Tests for a Population Proportion	10.2	
		Hypothesis Tests for a Population Mean	10.3	Su: June 30
		Inference about 2 Population Proportions	11.1	
		Inference about 2 Means: Dependent Samples	11.2	
5	July 1 – 7 Holiday: 7/4	**Quiz 6** (10.1-10.3, 11.1-11.3) – SLO 8		
		Review: Exam 4		**T: July 2**
		Exam 4 (10.1-10.3, 11.1-11.3, 4.1, 4.2)		
		Review: Final Exam		**W: July 3**
		Final Exam (comprehensive)		

Census Date: June 6th
Drop Date: July 1st

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, 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 5-week session is July 1. The last date to withdraw from the 10-week session is July 30. The last date to withdraw for the 2nd 5-week session is August 2.

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.