



Math 1342-032IN
Introduction to Statistics
Summer 2021, 6/7/2021 – 8/13/2021

Important Note: This course uses COM email and Blackboard in addition to MyMathLab (MML), so please check them regularly.

Instructor Information: Sheri Aajul saajul@com.edu (You can leave a message at the math office at 409-933-8244, but I suggest that you send me an email.) *Please write subject line as “statistics question” when emailing.*

Student hours: Office hours are to be held virtually, usually via zoom link posted in Blackboard.
Days/Times: Wednesday from 12:15 - 12:45 pm & 8:00 – 8:30 pm, or by appointment. If you want to schedule an appointment, please send question(s) and some days/times that you are available to meet.

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, III

Edition: 5

Copyright: 2017

Publisher: Pearson

2. A computer/laptop and internet service are required to gain access to the required assignments. *Some devices like iPads/tablets and cellphones present problems with gaining access to quizzes/tests, so they are not acceptable devices for this class.* If you do not have your own internet access, you can get access on campus in the Innovations Computer Lab, TVB 1324, the Library and the Tutoring Center, TVB 1310.

3. *MyMathLab* access code is required for this class. Your homework, quizzes, and tests will be located at www.mymathlab.com **Our MyMathLab course ID is aajul57116, and our MyMathLab course name is Math 1342-032IN Su 2021 Elementary Statistical Methods.**

-Make sure you use your COM email when registering for MyMathLab.

-You can gain a two-week temporary access to *MyMathLab*, but you must purchase permanent access in *MyMathLab* immediately once this has ended, using the same account, for you to be able complete any assignments after the temporary access ends. *Due dates will not be extended for losing access after the temporary access has ended. Please make sure you have the funds for MyMathLab within the two-week temporary access.*

-Go to your Blackboard (BB) math course and register for MML. Look for Pearson: MyMathLab link in the left hand toolbar of BB.

4. A TI-83 or TI-84 calculator is needed for this course. A TI 89 or higher (or any internet access calculator) cannot be used in this course; thus, cell phones may not be used.

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. Homework may be printed. Although there are due dates on each homework assignment, you can continue working until the associated exam due date, with only the late problems counting at 80% credit and those submitted by the due date at 100% credit. Within its period of availability, you have an unlimited number of attempts on each homework problem.

Quizzes & Exams:

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

-You can retake each topic quiz just once to improve your score; the higher score will be the one that counts.

-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.

Submitting Exam Scratch Work:

- Some exam questions (no more than one per exam) require you to submit work. The question on your exam will indicate that the work must be demonstrated. If you do not turn in work, do not identify your work by problem number, or turn in work that does not support your answer, then you may not receive credit for your answer. The rest of the problems *MyMathLab* will grade on a correct or incorrect basis.

- If, at some time, you need to submit an image or document illustrating your work, it should be no more than 6 pages with a deadline of 15-minutes after completing the exam. Put your name on the document, exam number (1-4, or Final) and date, and please make sure each problem and page is numbered and uploaded in numeric order. It is probably best to send work as an email attachment to your instructor, but you can also upload to Blackboard or even directly into MML.

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 instruction 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.

Determination of Course Grade/Detailed Grading Formula:

- **Homework:** Homework assignments (exam reviews are included in this) will count as 10% of your final grade. Your four lowest homework scores are dropped (as some individuals will not need to complete exam reviews.)
- **Quizzes:** Cumulatively, the six unit quizzes and four pretest quizzes will count as 10% of your final grade.
- **Unit Exams:** Each test will count as 16% of your grade. Your lowest exam score is replaced with your final exam score, if it is higher.
- **Final Exam:** The comprehensive final exam will count as 16% of your grade.

$$\text{Final Average} = .64(\text{Exam Average}) + .16(\text{Final Exam}) + .10(\text{Homework}) + .10(\text{Quizzes})$$

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:

-Due Dates – Most of the assignments are due on Sundays by 11:59PM, but there are exceptions, so please see the detailed schedule given later in this syllabus.

-Due dates for homework WILL NOT be extended. Homework worked after the due date will receive a 20% deduction on all problems worked after the due date. You'll be able to work on homework until its associated exam closes.

-As a general rule, there are no make-up exams since you are allowed multiple days to take exams. In addition, there is an extension of one day with a 20% penalty except for the final exam. 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 20% penalty day to be considered for a make-up exam. Only extenuating circumstances of a serious nature that are documented will be considered. 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. There are no retakes. All other missed chapter tests will be assigned a zero, and the zero(s) will be used to calculate final grade in course.

Extra credit bonus points on exams (for a max score of 100%) are available by posting to certain discussions in Blackboard. The discussions are open during the time the material covered by the relevant exam is open, with the closing date posted in the discussion. Bonus points on the final exam may be obtained by submitting a course evaluation.

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.

Student Learner Outcomes/ Core Objectives

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: Students must do their own work and, in particular, no unauthorized help is allowed on exams. You may use your notes, book, and approved calculator (which does not access the internet or contain other than original stored programs) on exams. Sharing quiz and exam information is prohibited. 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.

Course outline:

Week	Assignment	Due Date (by 11:59PM)
1 June 7- 13	<i>MyLab Math Orientation – 90% required to gain access to homework.</i> 1.1 Introduction to the Practice of Statistics 1.2 Observational Studies versus Designed Experiments 1.3 Simple Random Sampling 1.4 Other Effective Sampling Methods 1.5 Bias in Sampling 1.6 The Design of Experiments Note: Census Day June 14th	June 13 th
2 June 14-20	2.1 Organizing Qualitative Data 2.2 Organizing Quantitative Data: The Popular Displays 2.3 Additional Displays of Quantitative Data 2.4 Graphical Misrepresentations of Data Quiz 1 (1.1-1.6, 2.1-2.4) – SLO 1 and 2	June 20 th
3 June 21-27	3.1 Measure of Central Tendency 3.2 Measures of Dispersion 3.3 Measures of Central Tendency and Dispersion from Grouped Data 3.4 Measures of Dispersion and Outliers 3.5 The Five-Number Summary Boxplots	June 27 th
4 June 28-July 4	Review for Exam 1 homework Exam 1 (1.1-1.6, 2.1-2.4, 3.1-3.5) 4.1 Scatter Diagrams, Correlation, and the Coefficient of Determination 4.2 Least Squares Regression Quiz 2 (4.1, 4.2) – SLO 7	July 5 th
5 July 5-11	5.1 Probability Rules 5.2 The Addition Rule and Complements 5.3 Independence and the Multiplication Rule 5.4 Conditional Probability and the General Multiplication Rule 5.5 Counting Techniques Quiz 3 (5.1-5.5) – SLO 3 and 4	July 11 th

6 July 12-18	6.1 Discrete Random Variables 6.2 The Binomial Probability Distribution Review for Exam 2 homework Exam 2 (4.1, 4.2, 5.1-5.5, 6.1, 6.2)	July 18 th
7 July 19-25	7.1 Properties of Normal Distribution 7.2 Applications of Normal Distribution Quiz 4 (6.1, 6.2, 7.1, 7.2) – SLO 5 8.1 Distribution of the Sample Mean 8.2 Distribution of the Sample Proportion	July 25 th
8 July 26 – Aug. 1	9.1 Estimating a Population Proportion 9.2 Estimating a Population Mean Quiz 5 (9.1, 9.2) – SLO 6 Review for Exam 3 homework Exam 3 (7.1, 7.2, 8.1, 8.2, 9.1, 9.2) 10.1 The Language of Hypothesis Testing 10.2 Hypothesis Tests for a Population Proportion Note: August 2nd is the last day to withdraw.	August 1 st
9 Aug. 2-8	10.3 Hypothesis Tests for a Population Mean 11.1 Inference about Two Population Proportions 11.2 Inference about Two Means: Dependent Samples 11.3 Inference about Two Means: Independent Samples Quiz 6 (10.1-10.3, 11.1-11.3) – SLO 8 Review for Exam 4 homework Exam 4 (10.1-10.3, 11.1-11.3)	August 8 th
10 Aug. 9 - 13	Review for Final Exam homework Final Exam (comprehensive)	August 11 th

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://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.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.* https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

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 Holly Bankston at 409-933-8520 or hbankston@com.edu. The Office of Services for Students with Disabilities is located in the Student Success Center.

Counseling Statement: Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

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 is August 2, 2021.

F_N Grading: The F_N grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F_N 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 F_N grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F_N 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.

COVID-19 Statement: All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland’s Coronavirus Information site at www.com.edu/coronavirus. In compliance with Governor Abbott's May 18 Executive Order, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.