# SYLLABUS ComS 170 Data Analysis in Communication Research

Spring 2023 Dr. Fred Molitor
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Office Hours: Tuesdays & Thursdays 8:45-9:30 Office: MND 5038

**Course Description**: Introduction to the application of data analysis to the study of communication processes.

#### **Course Objectives:**

- Understand the assumptions, uses, advantages, and limitations of statistical analysis tests.
- Acquire the knowledge and skills necessary for conducting advanced statistical analyses and interpretation of statistical output.
- Continue to develop critical thinking skills.

**Required Materials**: A calculator. There is no required textbook for this class. All content necessary to do well on the homework assignments and exams will be presented in class lectures or posted on Canvas.

Course Requirements and Evaluations: There will be four examinations and eight homework assignments. Exams may be taken other than when scheduled only if we make prior arrangements or in cases of unforeseen emergencies. You must contact me by email as soon as possible (12 hours after the exam at the latest) if you miss an exam. Makeup exams will not be the same as the scheduled exams. Homework assignments are due before 7:30 AM on the specified due dates; late homework is not accepted! Homework assignment can be submitted through Canvas or in class. For online submissions, Adobe PDF versions of your assignment must be uploaded onto Canvas and labeled with your last name, assignment number, and page numbers, if applicable (e.g., Molitor HW2 Page 2). Ideally you have access to a copier or printer that can be used to scan and PDF your homework assignments. Alternatively, but not ideal, you can use the Adobe Scan app on your phone. Late homework assignments or those sent as email attachments will not be accepted. The weight of each exam is 15% and all homework assignments are 40% toward your final grade. An ungraded but required Syllabus Assignment is due by 7:30 AM on January 31.

In cases when one homework is submitted by two (or more) students, both students will receive a "0" on the assignment and each student will be reported to the Office of Student Conduct. If you submit answers from an exam other than assigned to you, or alter your graded exam after it is returned, you will fail the class and be reported to the Office of Student Conduct.

Homework assignments, statistical tables, SPSS statistical output, tables from published studies, and required readings will be posted on Canvas. It is your responsibility to access these required documents. It is also your responsibility to read all announcements posted on Canvas.

I communicate with students using their @csus.edu email addresses. I only use Canvas for emails when I reply to students who send me an email through Canvas. **You need to check your @csus.edu email on a regular basis.** I also strongly suggest that you modify your Notifications settings in Canvas to be sure that you receive timely emails and announcements. The expectation in this class is that you participate in professional email communications. Emails sent using your personal email address (e.g., @gmail) do not represent professional email communications and I will not respond to emails from students using their personal email address. Professional email communications also include checking and responding to email messages in a timely manner, and acknowledging that you received a reply to a question that you asked.

Extra credit assignments are not offered in this class. Please don't ask.

Final grades will be based on A=94-100; A-=90-93; B+=87-89; B=84-86; B-=80-83; C+=77-79; C=74-76; C-=70-73; D=60-69; F=<60.

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## **Course Calendar:**

Date	Discussion/Event	Due
Jan. 24	Introduction to Course	
	Review from 100C: Levels of Measurement	
Jan. 26	Review from 100C: Measures of Central Tendency	
	Calculating Grand Mean	
Jan. 31	Percent and Percentage Point Change	Syllabus Assignment
Feb. 02	Measures of Variability	
Feb. 07	Confidence Interval for a Mean	Homework #1
Feb. 09	Confidence Interval for a Proportion	
Feb. 14	Crosstabs and Chi Square Statistic	Homework #2
Feb. 16	Crosstabs and Chi Square Statistic	
Feb. 21	Practice Exam 1	Homework #3
Feb. 23	Exam 1	
Feb. 28	Hypothesis Testing	
	Test of Difference Between Dependent Means	
Mar. 02	Test of Difference Between Dependent Means	
Mar. 07	Test of Difference Between Independent Means	Homework #4
Mar. 09	Mann-Whitney U Test	
Mar. 14	Mann-Whitney U Test	Homework #5
Mar. 16	One-Way Analysis of Variance Test	
Mar. 21	No Class	
Mar. 23	No Class	
Mar. 28	One-Way Analysis of Variance Test	
Mar. 30	One-Way Analysis of Variance Test	Homework #6
Apr. 04	Exam 2	
Apr. 06	Linear Correlation	
Apr. 11	Linear Correlation	
Apr. 13	Spearman Rank Correlation	Homework #7
Apr. 18	Spearman Rank Correlation	
Apr. 20	Criteria for Causality	Homework #8
	Partial Correlation	
Apr. 25	Partial Correlation	
Apr. 27	Exam 3	
May 02	Linear Regression Analysis	
May 04	Linear Regression Analysis	
May 09	Logistic Regression Analysis	
May 11	Logistic Regression Analysis	
TBD	Final Exam	

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## General Information and Grading the Required Homework Assignments

Homework assignments are designed to prepare you for the exams. Grading is generally not based on the number of correct answers, but on effort. Your work must appear on lined paper, not on Microsoft Excel spreadsheets or in the columns or back of the document with the homework problems.

Points will be assigned to homework assignments according to the following criteria:

- Work shown, legible, and most or all answers correct = 100 points
- Work shown, legible, and ≤ 50% of answers incorrect = 75 points
- Sloppy presentation of work or illegible work due to scanning or picture taking regardless of correct answers = 0 points
- Submitting your homework on Canvas as a non-PDF document = 0 points
- Work shown on printout with homework problems = 0 points
- No work shown = 0 points
- Partially completed homework = 0 points
- Late homework = 0 points
- No homework = 0 points
- Homework submitted as an email attachment = 0 points

Again, your work toward solving the problems must be completed on lined paper. Write your name and homework assignment number on the top of the first page. Clearly number each problem and circle your answers.

Graded homework assignments submitted through Canvas will not indicate which answers are incorrect Graded homework assignments will not include the correct answers; your graded homework assignments should be compared with the answer keys that will be posted on Canvas to see which answers you provided were incorrect. It is advisable that you make the effort to redo those problems to prepare you for the forthcoming exams.

#### General Information on Exams

Each exam is worth 100 percentage points regardless of the sum of the points for any exam.