# SYLLABUS ComS 100C Introduction to Scientific Methods in Communication Research

Spring 2019 Dr. Fred Molitor
Tuesdays 6:00-8:50 PM fred.molitor@csus.edu
Office Hours: T & R 10:30-Noon: T 5:00-6:00 PM Office: MND 5038

**Course Description**: Empirical methods commonly applied during communication research. An introduction to the concepts fundamental to the scientific study of communication, including conceptual and operational definitions, sampling, measurement, experimental design, independent and dependent variables, and quantitative data analysis.

#### **Course Objectives:**

- Understand the uses, advantages, and limitations of quantitative research methodologies.
- Learn the fundamental concepts of communication study.
- Review the basic concepts of probability theory and the assumptions, calculations, and interpretations of statistics commonly used in communication research.
- Develop critical thinking skills.

Required Reading: Documents and website content posted on or available through Canvas.

**Required Materials**: A stand-alone calculator that has a square root button. The calculator on your cell/smart phone or tablet/laptop cannot be used for exams.

Course Requirements and Evaluations: There will be four in-class examinations and three research article assignments. Exams will cover <u>all</u> assigned readings and in-class discussions, and will require short answers. In-class 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 <u>as soon as possible</u> (12 hours after the exam at the latest) if you cannot attend a class on which an exam is scheduled. If you miss an in-class exam and have a legitimate reason for doing so, the make-up exam will be offered during the next scheduled office hour (in MND 5038).

Research articles will be available through Canvas at 6:00 PM on the Tuesday before the scheduled in-class exams. The quizzes on these articles must be completed on Wednesday by noon on the day following the scheduled in-class exam. An ungraded but required Syllabus Assignment is due by 6:00 PM on January 29.

Study guides will be available through Canvas the Monday before the first three exams. The Canvas system can also be used to check the status of your grades. The keys to the exams will be posted through Canvas.

The weight of exams and assignments toward your final grade: Exam #1 = 20%, Research Article Assignment #1 = 5%; Exam #2 = 20%, Research Article Assignment #2 = 5%; Exam #3 = 20%, Research Article Assignment #3 = 5%; Exam #4 = 25%.

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#### **Other Important Information**:

- Don't hesitate to ask me any question, either in or out of class. TAKE ADVANTAGE OF OFFICE HOURS!
- Any talking between students during an exam or alteration of a graded exam will be considered cheating. Students who cheat fail this class.
- Use my email address for correspondence. **DO NOT** leave a message at the Department office or on the CSUS voice mail system.
- There is no reason to let me know if you plan to miss a non-exam class. If you miss a class, you are responsible for obtaining discussion notes, handouts, or announcements from a fellow student.
- Extra credit assignments are not offered in this class. Please don't ask.
- Bring a calculator to every class.
- Not learning how to use your calculator and inadequate note-taking are the two main reasons for students failing this class. Don't fall into the habit of just writing down information presented on PowerPoint slides without making sure you understand the content. And of course, adequate notetaking requires showing up for class.
- I will bring graded exams to the class following the exam. From then on students will need to come to my office to retrieve their graded exams.
- If you believe I made a mistake in grading your exam, you need to bring a copy of the key and your graded exam to my office. You need to be prepared to discuss why the answer you provided is the same as the answer appearing on the key.
- You are not entitled to pass this class.

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### **Course Calendar**:

| Date            | Discussion/Event                                      |
|-----------------|---|
| Jan 22          | Introduction to Course                                |
| Jan. 29         | Primary vs. Secondary Sources                         |
|                 | Independent and Dependent Variables                   |
|                 | Research Question and Hypothesis                      |
|                 | Unit of Analysis                                      |
|                 | Probability Sampling                                  |
|                 |   |
| Feb. 05         | Due: Syllabus Assignment Nonprobability Sampling      |
|                 | Sampling Error and 95% Confidence Interval            |
|                 |   |
|                 | Surveys, Questionnaires, and Response Rates           |
| Feb. 12         | Sampling Error and 95% Confidence Interval            |
|                 | Surveys, Questionnaires, and Response Rates           |
|                 | Sections of a Quantitative Research Article           |
| Feb. 19         | Research Articles Available @ 6:00 PM                 |
| Feb. 19         | In-Class Exam 1                                       |
|                 | Research Article Quiz #1 Available @ 6:00 PM & Due    |
| Esh 26          | Wednesday, February 20 by Noon                        |
| Feb. 26         | Experimental Designs                                  |
|                 | Conceptualization and Operationalization of Variables |
| M 05            | Reliability and Validity                              |
| Mar. 05         | Experimental Designs Ethics                           |
|                 |   |
|                 | Evaluation Research                                   |
| Mar. 12         | Research Articles Available @ 6:00 PM                 |
| Mar. 12         | In-Class Exam 2                                       |
|                 | Research Article Quiz #2 Available @ 6:00 PM & Due    |
| Mar. 19         | Wednesday, March 13 by Noon No Class                  |
| Mar. 26 Apr. 02 | Levels of Measurement                                 |
|                 |   |
|                 | Measures of Central Tendency                          |
|                 | Levels of Measurement                                 |
|                 | Content Analysis                                      |
| A 00            | Research Articles Available @ 6:00 PM                 |
| Apr. 16         | In-Class Exam 3                                       |
|                 | Research Article Quiz #3 Available @ 6:00 PM& Due     |
|                 | Wednesday, April 10 by Noon                           |
|                 | Frequency Distributions                               |
|                 | Measures of Variability                               |
| Apr. 23         | Measures of Variability                               |
|                 | Tests of Relationship                                 |
| Apr. 30         | Tests of Relationship                                 |
|                 | Tests of Difference                                   |
| May 07          | Review for Final Exam                                 |
| May 14          | Final Exam  |