

**MMC 6936: Experimental Design & Analysis**  
**Spring 2026**  
*(Course Information Available on CANVAS)*

**Instructor:** Yuan Sun, PhD  
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**Office Hours:** Wednesdays & Fridays 3:00pm – 4:00pm  
To sign up for office hours: [Office Hours](#)  
E-Mail for Appointments outside of office hours

**Class Times:** Thursdays 12:50pm – 3:50pm

**Meeting Location:** WEIM 1092

**Course Description:**

This course introduces students to the logic, methods, and practice of experimental research in communication and related fields. Students will learn how to design, execute, and interpret controlled experiments that test theoretical propositions and explain social phenomena.

**Course Objectives:**

- (1) Explain the logic of the scientific method and its application to experimental research in communication, information, and technology contexts.
- (2) Identify and describe key concepts in theory development, hypothesis testing, and experimental design.
- (3) Critically evaluate published experimental studies, recognizing potential threats to validity and methodological limitations.
- (4) Design and conduct an original experimental study, including developing research questions, selecting methods, analyzing data, and reporting findings in a professional, publication-ready format.

**Texts & Readings:** The textbooks for the course are *Explication* by Steven H. Chaffee and *Research Methods for Communication Science* by James H. Watt and Sjef A. van den Berg. Both books are out of print, but links to online versions of both will be provided in CANVAS. In addition, students are required to download journal articles assigned for this course. These articles are available on CANVAS. Also required for this course is a guide titled *Writing Empirical Research Reports: A Basic Guide for Students of the Social*

*and Behavioral Sciences (8<sup>th</sup> ed.)* by Fred Pyrczak and Randall R. Bruce, available at the campus bookstore. Specific readings from the textbooks as well as the journal articles are assigned for each class meeting. Since all submissions for this class should conform to APA style, it is recommended that students have ready access to a copy of the *Publication Manual of the American Psychological Association (7<sup>th</sup> ed.)*.

**Exams:** There will be a midterm and a final as scheduled in the syllabus and the university timetable. Both exams are designed to test your mastery of methodological concepts and principles learned in class. The midterm counts for 20 percent while the final accounts for 25 percent of the course grade. The exams will include multiple-choice, short answer and related types of questions. A pool of short-answer questions will be released 24 hours prior to the exam. Please note that you will NOT be allowed to talk with your classmates about the exam after the pool is released. If you have questions about any of this, please contact the instructor.

**Assignments:** To provide experiential learning, students will be conducting a number of research tasks throughout the semester. Many of these tasks are folded into the research project requirement described below. However, one assignment, which involves a comprehensive explication of a communication concept and the development of measures for that concept, will be graded separately and accounts for 15 percent of the course grade.

**Critiques:** Starting from Jan 29, students will take turns presenting critiques of communication research articles (downloaded from electronic reserves) during each class meeting. The student responsible for a given article is expected to distribute a handout and make a ten-minute PowerPoint presentation of the article in the class, followed by five minutes of questions from the instructor and fellow students. Please upload your handout on CANVAS AT LEAST 24 HOURS BEFORE YOUR SCHEDULED PRESENTATION. This exercise will count for 5 percent of the final grade in the course. Each critique will be graded on a ten-point scale as follows: One point each for correct identification of concepts and statement of research question, three points for description of methods used, two for interpretation of results (including interpretation of a chart or table), and three points for a detailed methodological critique, not criticism, of the study (which includes coming up with creative alternative explanations and discussion points for the class to think about as a way to expand/redesign). Each student will be required to complete ONE paper critique during the semester, but students going early on in the semester may have the option of bettering their score by electing to summarize/critique a second article, subject to availability. The average score across the two critiques will be used to compute the overall "critique score" for the semester.

**Critique Participation:** Another 5 percent of the course grade is devoted to the quality of your participation in other students' paper critiques. That is, when they critique their

article in class, it is important for you to have read the assigned article ahead of time and come prepared with questions, probes, suggestions, and especially alternative explanations for findings reported in the article. The caliber of your comments following each paper critique will be graded, and an overall score of critique participation will be computed at the end of the semester, accounting for 5 percent of the course grade.

**Class Participation:** Yet another 5 percent of the total grade is devoted to active participation in class—asking questions, responding to questions posed by instructor, integrating readings and contributing meaningfully to classroom discussions. The instructor will keep an ongoing record of students' participation in each class meeting.

**Research Project:** Students will be formed to groups (2-3 students for each group) facilitate peer learning and collective brainstorming through the research process. Each group will discuss relevant methodological issues during class meetings and conduct a research project by the end of the semester. Details on the Research Project will be spelled out as the semester progresses. Performance on this project accounts for the remaining 25 percent of the final grade.

### Grading Policy

Midterm Exam:	20% of grade
Final Exam:	25%
Assignments:	15%
Critiques:	5%
Critique Participation:	5%
Class Participation:	5%
Research Project:	25%

### Policies & Procedures

- **University academic policies and student resources:** <https://go.ufl.edu/syllabuspolicies>. Course policies in this syllabus are consistent with these university guidelines.
- **In-Person Course:** Our course is an in-person course. Lecture, discussion, activities and exams will occur in the classroom. You are responsible for getting notes from a classmate if you are unable to attend class.
- **AI Policy: Acceptable Use:**
  - You may use AI tools for preliminary idea generation or language refinement *only* when explicitly permitted for an assignment.
  - When AI is used, you must clearly disclose it in a short note at the end of your submission (e.g., *"ChatGPT was used to rephrase paragraph 2 and to check for grammar."*).

- All arguments, interpretations, and analyses must reflect your own understanding and reasoning. Simply rewording AI output does not constitute original work.

**Prohibited Use:**

- Submitting AI-generated work (text, data analysis or graphics) as your own without disclosure.
- Using AI to fabricate data, references, or results.
- Using AI to complete assignments, exams, or writing tasks that explicitly prohibit it.

**Detection and Enforcement:**

This course employs AI-detection and text-analysis tools as part of the academic integrity review process. Submissions showing clear signs of unacknowledged AI use will be treated as academic misconduct under university policy.

- **Course Preparedness:** To maximize your learning, come to class and participate in class discussions. Further, complete readings before the class in which they are discussed. Finally, check email and Canvas frequently for the latest class information and updates.
- **Technology/Paying Attention:** I prefer that you close all other programs and windows to avoid distraction. When we're distracted rather than engaged, we can't learn effectively. To maximize learning, don't multitask while listening to lectures or doing readings. Give them your full, undivided attention.
- **Exam Absences:** Missing an exam without permission results in a zero. You can make up an exam if:
  - You had an unexpected and unpreventable emergency or illness **and**
  - You can provide written documentation of the emergency or illness (doctor's note, accident report) **and**
  - You (or someone at your request) contacts me or the advertising office prior to the exam. You can contact me by email (yuan.sun@ufl.edu) or call the Advertising Department (352-392-4046).

For all who miss the exam for an excused absence, as defined above, you may schedule a make-up exam with Dr. Sun.

- **Honor Code:** Please review the UF Student Honor Code and Student Conduct Code, which can be found at: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>. Any violation of the codes will be reported to the proper University administrators and may result in other sanctions.

- **Cheating During Exams:** Our exams are closed book and closed notes, which means that you should draw from only your memory during the exam. Do not use any other materials, and do not share any answers with your classmates. See the Honor Code section on cheating for more information.
- **Plagiarism:** Original writing is essential to ethical communication. Cheating is any action that violates University norms or an instructor's guidelines for the preparation and submission of assignments. Such actions may include using or providing unauthorized assistance or materials on course assignments or possessing unauthorized materials during an exam.

Plagiarism involves the representation of another's work as your own, for example: (a) Submitting as one's own any material that is copied from published or unpublished sources such as the Internet, print sources, or video programs without proper acknowledgement that it is someone else's. (b) Paraphrasing another's views, opinions or insights without proper acknowledgement or copying of any source in whole or in part with only minor changes in wording or syntax even with acknowledgement. (c) Submitting as one's own work a report, examination, paper, computer file, lab report or other assignment which has been prepared by someone else. (d) Presenting work created for another course as original work in this class.

UF requires faculty who find evidence of plagiarism to submit a report to Student Conduct and Conflict Resolution. Please read the UF Student Honor Code for more information.

- **Grade Challenges:** Grades will not be discussed via email, the telephone or in class. If you disagree with a grade given on any assignment, you must appeal the grade during my office hours or in an appointment with me. In this appeal, you must clearly state the problem and give a clear, concise explanation as to why you feel the grade is inaccurate. You must appeal assigned grades within two weeks of your receiving that particular grade. After two weeks, all grades are final.
- **Respect for Others' Ideas:** Appropriate and professional classroom conduct is expected at all times. Respect and common courtesy toward your classmates and your professor are required. Effective communication relies on the ability to recognize and embrace diversity in all its forms, including viewpoints. Be respectful of the diverse range of opinions of everyone in the class, and help make this an inclusive environment. See the CJC diversity statement for more information: <https://www.jou.ufl.edu/home/about/diversity-statement/>.

- **E-mail Policy:** As e-mail has become a favored way to communicate in academia and industry, you must learn to use it appropriately. Thus, when e-mailing me, address me formally. I will generally return it within 24 hours of receiving it on weekdays or by Monday evening if I receive it on the weekend. If you need to discuss something in length, please visit my office hours.
- **Students with Disabilities:** Students with disabilities can receive accommodations. The first step is to contact the Disability Resource Center (352-329-8565; [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)). Once you receive your accommodation letter, provide a copy to the professor as early as possible in the semester.
- **Counseling and Wellness Center:** Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.
- **Course Evaluations:** Students are expected to provide professional and constructive feedback on the quality of instruction via the online course evaluation system, GatorEvals. You will be notified when the evaluation period begins, and you can find GatorEvals through your Canvas course menu.
- **Recording the Professor:** Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture **does not** include lab sessions, student presentations, clinical presentations such as patient history, academic exercises

involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

- **Tentative Nature of the Syllabus:** I reserve the right to change deadlines throughout the semester. Furthermore, I reserve the right to change and or move around scheduled lectures in order to facilitate for potential unplanned events. If changes in the schedule are necessary, students will be held responsible for such changes, which will be announced in class ahead of time.

## SCHEDULE

Students are expected to have completed the assigned readings BEFORE coming to class. This will help you participate more effectively in class meetings.

Jan.15	INTRODUCTION & OVERVIEW NATURE OF SCIENTIFIC INQUIRY Chaffee Ch. 1; Watt & Berg Ch. 1	
Jan.22 <i>out</i>	CONCEPTUALIZATION Chaffee Ch. 2-12; Watt & Berg Ch. 2; Pyrczak & Bruce Ch. 5, 6 & 7 (Finish IRB Training and Certification at home)	<i>Explication assignment handed out</i>
Jan. 29	OPERATIONALIZATION Watt & Berg Ch. 3, 4 & 13; Pyrczak & Bruce Ch. 1, 2, 3 & 4 Beniger	

Feb.5	MEASUREMENT Watt & Berg Ch. 7; Ch. 18	
Feb.12 <i>due</i>	SAMPLING Watt & Berg Ch. 5 & 6	<i>Explication outline</i>
Feb.19	MIDTERM REVIEW Watt & Berg Ch. 16; Ch. 17; Ch. 18	
Feb.26	MIDTERM EXAM	
Mar.05	EXPERIMENTAL RESEARCH Watt & Berg Ch. 14 & 15	<i>Explication assignment due</i>
Mar.12	GROUP PROJECT WORKSHOP	<i>Group Project Study Design Due</i>
Mar.14-21 <i>Collection</i>	<b><i>NO CLASS - SPRING BREAK</i></b>	<i>Questionnaire &amp; Data</i>
Mar.26	GROUP PROJECT DATA READY	
April.2	DESCRIPTIVE & INFERRENTIAL STATISTICS Watt & Berg Ch. 11 & 12 <i>* Laptop required</i>	
April.9	GROUP PROJECT WORKDAY	<i>Group Project Data Analysis</i>
April.16	FINAL EXAM	
April.23-24	<b><i>NO CLASS- READING DAYS</i></b>	
April 30 <i>Due</i>	Group Project Presentations	<i>Group Project Final Paper</i>