MMC 6936: Experimental Design & Analysis

Wednesdays, 11:45am-2:45pm Weimer 3024

Office Hours: Wednesdays, 10:40am-11:40am; Thursdays, 3:00pm-4:00pm

PROFESSOR

OFFICE

Frank Waddell, Ph.D.

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3067 Weimer Hall

REQUIRED RESOURCES/READINGS

All readings will be posted to Canvas or available via UF library access

COURSE DESCRIPTION

Experimental design and analysis (MMC 6936) summarizes the fundamentals of experimental methods in communication science. Topics to be covered include the basics of experimental design, internal validity, external validity, causation, confounds, factorial design and statistical analysis of experimental data, among others. Examples of experimental design from different topic areas in communication science will be reviewed.

COURSE OBJECTIVES

Course objectives include (1) familiarity with key concepts related to experimental design, (2) the ability to design and critique experimental research, and (3) the ability to analyze data collected using experimental methods.

GRADING

Class Attendance/Participation: 20%

Midterm exam: 20%

Final exam: 20%

Experiment Proposal: 40%

Grading scale: A, 100-93; A-, 92-90; B+, 89-87; B, 86-84; B-, 83-80; C+, 79-77; C, 76-74; C-, 73-70; D+, 69-67; D, 66-64; D-, 63-60; E, 59 and below

Information on current UF grading policies can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

ASSIGNMENTS

Class attendance/participation (20%): Students are required to come to class each week for the full class session. Grading for class attendance/participation will be based on arriving to class on time each week, attending the entire class session and participating in class discussion (e.g., asking questions, answering questions, completing assigned readings, etc.). If you need to miss class for illness or an emergency, please contact me in advance to ensure the absence is excused. Absences without a valid excuse, arriving to class late, leaving class early or not participating during class discussions will lead to a lower grade for class attendance/participation.

Exams (40%): Two exams will be completed during the semester: one midterm exam and one final exam. Each exam is worth 20% of your final grade. The exams will cover key course content covered during lecture and from class readings. Questions will be a mix of short answers and multiple choice. The format and timing of the exam will be summarized during the semester.

Experiment proposal (40%): Students will conceptualize a factorial experiment based on a topic of their choosing. By the end of the semester, it will be expected that students have identified research questions and hypotheses for their experiment along with experimental stimuli, pre and post exposure questionnaires, consent form and analysis plan. The project should be adequately prepared to submit to the institutional review board by the end of the semester. Students will give multiple presentations to update the class on their project and solicit feedback (scheduling for these presentations to be determined).

LATE WORK POLICY

One letter grade (-10 points) will be deducted per day for work submitted past the assignment's deadline. If an exam is missed, official documentation must be provided for the absence, with a makeup test scheduled within one week of the original examination. If students anticipate that they will be unable to meet a deadline due to university documented issues (e.g., health condition, death in family), please contact me as soon as possible to arrange an extension. In general, I am quite willing to work with students when issues arise that prevent you from submitting work on time.

HONOR CODE POLICY

This class strictly adheres to the UF honor code. Any prohibited behavior such as plagiarism, data fabrication, or cheating will result in a failing grade for the assignment in question and

referral to the honor court, who may administer additional penalties such as a failing grade for the course or dismissal from the college. More information about the university honor code is available online at the following link: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

AI POLICY

You may not turn in work that is not your own, including work generated by Chat GPT and other AI programs. If you have any questions about the use of AI in this course, please contact your instructor before submitting the work in question. Use of AI in the course will result in a failing grade for the assignment in question and referral to the honor court, who may administer additional penalties such as a failing grade for the course or dismissal from the college. More information about the university honor code is available online at the following link: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

STUDENTS REQUIRING ACCOMODATIONS

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, **www.dso.ufl.edu/drc/**) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

COUNSELING AND WELLNESS

Contact information for the Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

COURSE EVALUATION

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

Schedule

Week 1 (1/16): Course Overview

Week 2 (1/23): Fundamentals of Experimental Design, Part 1

Week 3 (1/30): Fundamentals of Experimental Design, Part 2

Week 4 (2/6): Fundamentals of Experimental Design, Part 3

Week 5 (2/13): Project update presentations, Part 1

Week 6 (2/20): Evaluating Experimental Research, Part 1

Week 7 (2/27): Evaluating Experimental Research, Part 2

Week 8 (3/6): Project Update Presentations, Part 2

Week 9 (3/13): Midterm exam

Week 10 (3/20): Spring break; no class

Week 11 (3/27): Statistical analysis of Experimental Data

Week 12 (4/3): Ethical Issues for Experimental Design

Week 13 (4/10): Project Update Presentations, Part 3

Week 14 (4/17): Final Exam

Week 15 (4/24): Reading day; no class