Syllabus Research Methods Spring 2021

Professor:	Scott Frankowski, Ph.D.	Course #:	PSYC 4703
Office:	118 O'Donohoe	Time:	2PM – 3:30PM TR
Phone:	940-397-4347	Location:	PY 101
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	(please contact me through email)	Hours:	MW work best

Office hours: Due to the ongoing pandemic, I won't have in-person office hours this semester. I will be able to meet via Zoom, though. Just contact me to make an appointment. The best time for these meetings are between 2-5pm on Monday or Wednesday.

Mask policy: Please make sure that while the COVID-19 pandemic is ongoing that you wear a mask at all times in the classroom. Anyone who does not follow this policy will be asked to leave and will be dropped from the course.

Contacting me: When you email me please use my msutexas.edu email. Please do not email me through D2L as I don't get any notification of those messages and miss them sometimes. When you email me, please include the course in the subject line. I try to respond to emails within 24 hours. I typically won't respond to emails on the weekend. If you miss class, it's your responsibility to get notes from a classmate or set up an appointment with me.

Prerequisites: 12 hours of psychology including PSYC 3303 and 3313. This course assumes an understanding basic psychological concepts, introductory statistics, and writing in APA format.

Description: An introduction to descriptive and experimental designs used in the study of behavior. Course content emphasizes the evaluation of research, developing research questions and hypotheses, research ethics, psychological measurement, basic data analysis, and research report writing.

Course objectives:

- 1. Successful students will develop an understanding of different experimental designs including the ability to identify independent and dependent variables, operationally define them, and to control for potential confounds.
- 2. Students will learn about ethical guidelines in research design including relevant historical violations and subsequent changes in the field to ensure similar violations do not occur (i.e., ethics training [CITI training], IRB review process, etc.).
- 3. Students will learn about important considerations in research measurements (reliability, validity, sampling techniques, etc.)
- 4. Students will become familiar with the strengths and limitations associated with different types of research design including the appropriate use of control techniques to improve the quality of research.
- 5. Students will get hands-on experience working with data in JASP within our lab component.

- 6. Students will reinforce a working understanding of APA formatting and development of a scientific research proposal idea that adheres to these guidelines, incorporates relevant research from the field, and establishes a sound, quantifiable research hypotheses.
- 7. Students will become critical consumers of information and learn how to effectively communicate complex concepts through writing and speech.

Required text

Morling, B. (2020). Research Methods in Psychology: Evaluating a World of Information (4th ed.). W.W. Norton & Company: New York, NY. ISBN: 9780393617542

Recommended text

APA Manual, 7th edition.

Required software

JASP (current version). This is statistical software similar to SPSS. It is open-source and free. You can download it on your personal computer at jasp-stats.org and it is also installed on the psych lab computers.

Course content and activities

Exams (50%)

There will be a midterm and a final exam that will mostly be in a multiple-choice format but may also include short answer and/or essay questions. Note that during pandemic times, these will be completed online. While you can use your notes and book, these exams are not collaborative (i.e. don't work with others on it). D2L makes it real easy for me to tell if there was collusion. If I find out anyone colluded with others on exams, I will take appropriate action under the academic dishonesty section of this syllabus.

"Research" Projects (30%)

In groups or 4 you will design a theory-driven 2x2 factorial experiment (two IVs). After I approve of the experiment, I will provide you a data-set for you to test your hypotheses. (Note, these will be made up data). You will conduct a data analysis and write up the results of the experiment. The end product will be an APA research paper that consists of a title page, abstract, introduction (i.e. literature review and hypotheses), methods, results, and discussion (including future directions). You will also include an acknowledgements section in which you detail which group member was responsible for what part of the project. I will provide a rubric for the paper and it will be due the week before finals week.

Article critiques (10% of grade)

Over the course of the semester, you will be assigned a few articles to read. For each of these, you will upload a two-page article critique to D2L. These critiques should be no more than 500 words and they must be in APA format. You should include the following:

- The research design
- The sample characteristics
- A sentence or two about the findings
- An idea to address a limitation of the study or a follow-up study based on the authors' findings and their theoretical framework. Note that just saying that you would increase the sample size or collect data from a different sample is pretty weak and will be graded accordingly (i.e. a poor grade)

Data assignments (10%)

There will be a few data assignments over the course of the semester in which you are given a data set and asked to analyze it and write up the results.

Midterm progress:

In order to help students keep track of their progress toward course objectives, I will provide a Midterm Progress Report through each student's WebWorld account for students who are at risk of not passing the course. Students who are below a C will receive a midterm progress report between weeks 5-8 of the semester. Midterm grades will not be reported on the students' transcript; nor will they be calculated in the cumulative GPA. They simply give students an idea of where they stand at the midpoint of the semester. Students earning below a C at the midway point should schedule a meeting with me.

Disability:

Please let me know how I can make the course more accessible. In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to <u>Disability Support Services</u>.

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of

crediting, or the submission for credit of work not the individual's to whom credit is given). Any academic dishonesty will result in an F and I will file a report with the Dean. Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

Tentative schedule:

Week	Dates	Topic/Reading
Week 1	Week of 1/11	Chapter 1
Week 2	Week of 1/18	Chapter 10 - Experiments
Week 3	Week of 1/25	Chapter 10 - Experiments
Week 4	Week of 2/8	Chapter 6 – Surveys
Week 5	Week of 2/15	Chapter 7 - Sampling
Week 6	Week of 2/22	Chapter 8 – Correlational research
Week 7	Week of 3/1	Chapter 8 – Correlational research
Week 8	Week of 3/8	Chapter 9 – Multivariate correlational research – Exam 1
Week 9	Week of 3/15	
Week 10	Week of 3/22	Chapter 9 – Multivariate correlational research
Week 11	Week of 3/29	
Week 12	Week of 4/5	Chapter 12 – multivariate experiments
Week 13	Week of 4/12	Chapter 12 – multivariate experiments
Week 14	Week of 4/19	Chapter 13 – Quasi and small N experiments – Papers Due
Week 15	Week of 4/26	Finals week – Final Exam