

Syllabus
Tests and Evaluations
Fall 2020

Professor:	Scott Frankowski, Ph.D.	Course #:	PSYC 4503-101
Office:	118 O'Donohoe	Time (in-person):	2:00 – 3:20PM TTH
Phone:	940-397-4347	Location:	PY 101
e-mail:	scott.frankowski@msutexas.edu	Student Meeting Hours:	Virtual by appointment only – best time to schedule would be Mon or Wed 2pm-4:30pm

Face masks: Face masks will be required of all students at all times. There will be no exceptions to this policy and students who do not wear a face mask will be asked to leave. I'll reserve the right to drop students from class who are not wearing a face mask.

Contacting me: Please contact me through email. Please include the class you're emailing me about in the subject. I will try my best to respond within 24 hours M-F. Emails received on Friday or over the weekend will be responded to on Monday. Note that if you miss class, it will be your responsibility to get notes and caught up with someone else in class (i.e. please don't email asking if you "missed anything in class" – you need to get that information from someone in class).

Attendance: I won't be formally taking attendance, but do your best to make it to class meetings. If you miss, you'll be responsible for getting notes from a classmate.

Office hours: Unfortunately, this semester, there will be no in person office hours. This is to protect myself and my students. I will be available for Zoom meetings, however. Please email me to schedule a meeting time.

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 basic psychometric concepts. This course will cover two different aspects of psychometrics – the creation of measures that we can implement on human participants, and the statistical concepts underlying those measures. Students will also construct and collect data on their own theory-driven measures and will present their findings in class, and possibly at the end of semester Celebration of Scholarship.

Course objectives:

1. Successful students will gain an understanding of how to correctly write measures for psychological research.
2. Students will gain experience conducting psychometric research.
3. Students will learn about important considerations in research measurements (reliability, validity, sampling techniques, etc.)

4. Students will get hands-on experience working with JASP – statistical analysis software
5. Students will get exposure to open-science practices in regards to psychometrics
6. Students will learn how to assess the validity, reliability, and structure of psychological measures
7. Students will acquire 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.
8. Successful students will demonstrate the ability to be critical consumers of information and learn how to effectively communicate complex concepts through writing and speech.

Required text

Furr, R. M. (2017). Psychometrics: an introduction. 3rd edition. Sage Publications.

Recommended text

APA Manual, 7th edition.

Course content and activities

CITI Training.

All students in the psychometrics course will be required to complete CITI Ethics training. Some of you have probably already done this. If you have completed this in the last two years, you do not have to do this again. This training allows you to conduct human-subjects research.

Everyone, however, needs to upload their certificate of completion to D2L. **DUE Friday Sept 4th.** This is a course requirement and anyone who does not complete and upload their cert by the deadline may be dropped from the course.

Article critiques (20% of grade)

Over the course of the semester, you will be assigned four journal articles* to read. (*for one assignment, you might be writing about a recent podcast I found related to the course content). 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 sample characteristics (who did the researchers gather data from?)
- A critique of the measures used or created
- An idea for how you would use the measures in a research project. Creativity will get you full credit here. It's not interesting to see e.g. how college students differ from others on the measure unless there is a great theoretical reason to test that.

Exams (40%)

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.

Data assignments (20%)

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.

Late assignments:

Late assignments can be turned in up to one day after a due date (including weekends/holidays) for up to 50% of their original point value. After one day late, I won't accept it.

Psychometrics Projects (10%)

In this class – in groups of 3-4, you will propose, write, and test a novel psychological measure. In testing the convergent and/or discriminant validity of measures, you'll also have to choose one or two measures that your newly created measure should (or should not) correlate with. As a class, we'll collect data using either the 1103 participant pool, or I will set up an MTurk sample, depending on the time we have in the class.

- All projects will follow Open Science guidelines that I will go over in class. You will upload all project materials and register all hypotheses, study design, materials, etc. on the Open Science Framework.
- A group research paper will be due the last week of class. This will be written as a standard research article: Abstract, Intro, Methods, Discussion.
- If group members alert me to fellow group members not contributing, I'll dock points on that individual's score on this as I see appropriate.
- I'm playing it by ear, but you might also be assigned to do a short class presentation on these papers – depending on how the semester goes. If this is the case, I'll adjust the point value and probably make the presentation worth 5% of your total score (taken from one of the other areas).

Misc. (10%)

There may be reading quizzes or points assigned to in-class activities. If I find that people don't read assigned articles, I'll allocate more points to reading quizzes.

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 [Disability Support Services](#).

Grades:

Your final grade in the course will be calculated using the standard grading scale.

90 or above	A
80 or above	B
70 or above	C
60 or above	D
Below a 60	F

Tentative schedule. I might switch out the response bias and test bias chapters for some of the advanced psychometrics chapters.

Week	Topic/Reading	Notes	Additional Info
Class	Dates		
Week 1	8/24-8/28	Chapter 1	Groups assigned
Week 2	8/31– 9/4	Chapter 2	CITI training due
Week 3	9/7 – 9/11	Chapter 3	Data assignment 1
Week 4	9/14 – 9/18	Chapter 4	Article critique 1 due
Week 5	9/21 – 9/25	Chapter 5	Group project proposal due
Week 6	9/28 – 10/2	Chapter 6	Data assignment 2
Week 7	10/5 – 10-9		Article critique 2 due Begin Data collection
Week 8	10/12 – 10/16	Exam 1	
Week 9	10/19 – 10/23	Chapter 7	Article critique 3 due
Week 10	10/26 – 10/30	Chapter 8	Data assignment 3
Week 11	11/2 – 11/6	Chapter 9	NO CLASS 4/9
Week 12	11/9 - 11/13	Chapter 10	Data assignment 4
Week 13	11/16 – 11/20	Chapter 11	Article critique 4 due
Week 14	11/23 – 11/27	Final Exam	Thanksgiving break
Week 15	11/30 – 12/4	Papers due	
Week 16	Finals Week		