

Syllabus
Psychological Tests and Evaluations
Fall 2023

Professor:	Nicholas Maxwell, PhD	Course #:	PSYC 4503, Sec. 101
Office:	OD 118	Time:	9:30am – 10:50am; TR
email:	nicholas.maxwell@msutexas.edu	Location:	PY101
		Office Hours:	2:00pm – 4:30pm; TR

Required Texts:

Psychometrics: An Introduction (3rd Edition) by R. Michael Furr

Course Objectives:

This class is designed to provide an introduction to concepts, theories, and methods regarding psychological testing and measurement. We will focus on areas such as psychometric principles (e.g., validity and reliability), test and item analysis, test construction, and applications of psychological testing in a wide variety of settings (such as industry and education). The primary objectives of this class are as follows:

1. Provide you with a fundamental understanding of the core issues in psychological testing
2. Give you the necessary skills to interpret and report psychometric properties of tests and scores
3. Understand the basics of test development, including item selection and validation of scales

Attendance:

Class attendance is ***required***. If you do miss class, you will be responsible for the material you missed when absent. No make-up exams will be given **except in the case of an emergency**, such as a serious illness, a serious accident, or a death in the family. *You must verify your emergency with documentation.* **You must contact me via email no later than 24 hours after the missed exam.** If you miss an exam without a valid excuse, you will receive a zero for the assignment. Students with more than four absences will be dropped from the course with a failing grade.

Course Requirements:

1. **Exams:** Students will complete **three** exams during the semester. Each exam will be worth 100 points for a total of 300 points (~45% of your final grade).
2. **Psychometric Project:** Over the course of the semester, you will be tasked with designing and implementing your own psychometric instrument. In doing so, you will be required to pick a topic for your instrument (i.e., measuring a certain attitude, personality trait, attitude, etc.) and apply your knowledge of the course materials to accurately assess what you believe to be the most important constructs of your topic.

This project has ***three*** major components:

1. **Development of a Psychometrically Valid Instrument:** You will develop an original instrument assessing a behavior, trait, or attitude. This instrument will need to contain at least ***18 unique items*** which assess at least three separate constructs that represent your topic. For example, if your measure assesses “depression”, you might have 6 items assessing “feelings of worthlessness”, 6 items assessing “lack of energy”, and 6 items assessing suicidal tendencies (And since I used it as an example, depression is ***NOT*** an acceptable topic!). You will also need to decide what type of scale you will use to measure your constructs. (70 points towards your project grade). You will then have an opportunity in class to collect data.

*****Submissions will lose 10% of their total point value per day they are late*****

2. **Presentation of Results:** You will create a 5 – 7-minute PowerPoint presentation which 1) Introduces your topic, 2) provides an overview of your questionnaire, including sample items, your scale, etc., and 3) summarizes your results and communicates key findings. (100 points towards your project grade).

Presentations will occur during the last three days of the semester (see the course schedule below). ***Missing your assigned presentation date will automatically result in a zero for your presentation grade, unless you have a verifiable emergency.*** You will have the opportunity to sign-up for your presentation day, so make sure to plan ahead!

3. **Peer Feedback:** For each presentation, you will complete a peer feedback sheet. Peer feedback will count for 30 points towards your project grade.

More information about this assignment will be announced in class. Additionally, a rubric will be posted on D2L. Your presentation

Thus, all three components of the Psychometric Project are worth a combined 200 points towards your final course grade (~30% of your final grade).

3. **Labs:** Most Thursdays will be lab days. On lab days, you will be expected to complete a hands-on activity which ties into the previous class’s lecture. For each lab, you will also need to submit a lab report (see the template on D2L). These reports we will require you to briefly summarize the in-lab activity and have you explain how key concepts are relate back to topics covered in class. Each lab report is worth 15 points, for a total of 105 points towards your final grade (15% of your final grade)

If you miss a lab day, ***you must contact me within 24 hours to receive a make-up assignment.*** If you know you are going to miss a lab day due to a university activity, etc., please let me know ASAP. *****Late lab reports will lose 10% of their total point value per day they are late*****

4. **Class participation:** Students get the most out of their college experience when they show up to class and actively participate. To facilitate class participation, we will randomly complete

activities and/or discussions in class. Your participation grade will be based on your ***participation in class discussions, general attendance, and completion of in-class activities***. Course participation is worth ***95*** points towards your final grade (~15% of your final grade)

Grades:

Your final grade in the course will be calculated based on ***700*** total points.

700-630:	A
629-560:	B
559-410:	C
419-340	D
< 340:	F

Email Policy:

You are required to use your MSU Texas email accounts for this class. I will not send emails to any other email accounts. I will also not send out class information to any other email address other than your university email account. **Before emailing me about your question, make sure that your question has not been answered/addressed in the syllabus or elsewhere!** When emailing me, please put the course number (PSYC 4503) AND section number (Sec. 101) in the subject line. This will immediately let me know which class you are in so I can respond faster.

I will try my best to get back to you within 24-hours (during the week) or within 3 days (weekends, holidays, if you decide to email me at 10:00pm on Friday...). ***If you email me with no context, I will not respond***

Cell Phones:

Unless you anticipate that you might receive an emergency communication, please turn off your cell phones in class. If you receive an **emergency** phone call or text in class, please excuse yourself and quietly leave the classroom to take the message.

Cheating Policy:

Cheating will not be tolerated. Any evidence of cheating on exams or written assignments will result in dismissal from this class with a grade of "F" and referral to the Dean of Students. Cheating includes, but is not limited to, using unauthorized notes of any kind during an exam, looking on another's exam, allowing another student to look on your exam, plagiarism, and self-plagiarism.

Desire-to-Learn (D2L):

This course utilizes the MSU D2L program for assignment submission. Relevant course materials will also be posted on D2L. Each student is expected to be familiar with this program as it provides a primary source of communication regarding general course information. You can log into [D2L](#) through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program.

Disability Services:

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make necessary arrangements. Students must present appropriate verification from Disability Support Services (DSS) during the instructor's

office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from DSS has been provided.

Midterm Grade Reports:

In order to help students keep track of their progress toward course objectives, the instructor for this class will provide a Midterm Progress Report through each student's WebWorld account. **Midterm progress reports will only be provided for students with a grade of C or less in the course.** Midterm grades will not be reported on the students' transcripts, 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.

Change of Schedule:

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a 100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

Important Dates

Last day for Fall 23 schedule changes: **8/31**

Deadline to file for **DECEMBER** graduation: **9/25**

Deadline to file for **MAY** graduation: **10/2**

Last Day to drop with a grade of "W": **10/30**

Refer to: [Drops, Withdrawals & Void](#)

Course Schedule

A note on the schedule: This schedule represents an ideal outline of what we'll cover in the course. That being said, we may occasionally get behind (or ahead!) of it. If that happens, I will modify the schedule and any exam content accordingly. Updated schedules may be periodically posted on D2L. I will try to send out announcements, but it's important that you regularly attend class!

The Current Schedule

Week of	Date	Topic	Reading	Notes
8/28 – 9/1	8/29	Course Overview/What is Psychometrics?	Ch. 1	
	8/31	Lab 1: Overview		
9/4 – 9/8	9/5	Scaling	Ch. 2	Lab Report 1 due 9/5 in class
	9/7	Lab 2: Descriptive Statistics in SPSS (Refresher)		
9/11 – 9/15	9/12	Individual Differences & Correlations	Ch. 3	Lab Report 2 due 9/12 in class

	9/14	Lab 3: Correlations (SPSS)		
9/18 – 9/22	9/17	Test Dimensionality	Ch. 4 (up to pg. 82)	Lab Report 3 due 9/17 in class
	9/19	Exam 1		Chs. 1, 2, 3, & 4
9/25 – 9/29	9/26	Reliability (part 1)	Ch. 6	
	9/28	Lab 4: Reliability (part 1)		
10/2 – 10/6	10/3	Reliability (Part 2)	Ch. 6	Lab Report 4 due 10/3 in class
	10/5	Lab 5: Reliability & Validity (SPSS)		
10/9 – 10/13	10/10	Validity (Part 1)	Ch. 9	Lab Report 5 due 10/10 in class **Psychometric Project: Questionnaires Due 10/10 @ 11:59pm – Submit via D2L**
	10/12	Validity (Part 2)	Ch. 9	No lab 10/12!
10/16 – 10/20	10/17	Exam 2		Chs. 5-6, 8-9
	10/19	Response Bias	Ch. 10	
10/23 – 10/27	10/24	Test Bias	Ch. 11	
	10/26	Lab 6: Identifying Bias		
10/30 – 11/3	10/31	Data collection/Instrument Feedback		Lab Report 6 due 10/31 in class
	11/2	Exploratory Factor Analysis (Part 1)	Ch. 4 (past pg. 82)	No Lab 11/2
11/6 – 11/10	11/7	Exploratory Factor Analysis (Part 2)	Ch. 4 (past pg. 82)	
	11/9	Lab 7: EFA in SPSS		
11/13 – 11/17	11/14	Confirmatory Factor Analysis	Ch. 12	
	11/16	No Class! (Maxwell Gone to Conference)		
11/20 – 11/24	11/21	Exam 3		Chs. 4 (past pg. 82), 10-12; Lab Report 7 due 11/14 in class

	11/23	No Class! (Thanksgiving Break!)		
11/27 – 12/1		No Class! (Work on Presentations)		
		Presentations!		
12/4 – 12/8		Presentations!		
		Presentations!		
Final	No Final 			