## Syllabus Statistics for the Behavioral Sciences Fall 2025

Professor: Nicholas Maxwell, PhD Course #: PSYC 3313, Sec. 102
Office: OD 113 Time: 11am-11:50am; MWF

email: nicholas.maxwell@msutexas.edu Location: PY 101

Office Hours: MWF: 9am – 10 am; F 2PM – 4PM

## **Required Texts:**

Understanding Statistics with SPSS, 6th Edition by Andy Field

#### **Course Objectives:**

This course covers foundational statistical methods and how they apply to social science research. By the end of this course, you should be able to:

- 1. Understand and apply descriptive statistics, including measures of central tendency and dispersion.
- **2.** Perform and interpret statistical inference, including hypothesis testing via various statistical techniques (e.g., *t*-tests, ANOVAs, correlation, regression).
- **3.** Use SPSS to organize data, run analyses, and interpret output.

#### **Attendance:**

\*Class attendance is required\*. It is expected that you will be present for all class meetings unless you have a verifiable emergency (e.g., illness, serious accident, death of a family member, etc.) or valid university excuse (e.g., athletics). If you miss class, you will be responsible for the material you missed when absent.

#### Missing Exams, Assignments or other Class Work:

<u>Exams</u>: If you miss an exam, you will have the opportunity to make it up during finals week. All make-up exams will take place on Monday 12/8 at 10:30am. No other opportunities will be provided for make-up exams. If you miss a make-up exam, you will not be given another opportunity (there are no make-ups for the make-up!).

<u>Assignments</u>: All papers or other out-of-class assignments will incur a 5% per day late penalty. This is nonnegotiable.

<u>Excessive Absences</u>: Students with more than five unexcused absences may be dropped from this course at the instructor's discretion.

#### **Course Requirements:**

1. **In class exams:** Students will complete **three** exams during the semester. Each exam will be worth 100 points for a total of 300 points (~66% of your final grade). These exams will be a mix of multiple-choice and free-response questions assessing your mastery of core course concepts. Calculators will be allowed on exams; however, phone calculators will not be permitted.

- 2. **Labs:** Most Fridays 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. Labs will be held in the computer lab during our regularly scheduled class time (OD 126). Lab assignments will be related to the take-home portion of each exam, so it is strongly recommended that you attend each lab!
  - \*If you miss a lab day, you must contact me within 24 hours to receive a make-up assignment. Make up labs must be completed on your own time!\* If you know you are going to miss a lab day due to a university activity, etc., please let me know ASAP. \*Attendance and completion of stats lab assignments will be 50% of your overall course participation grade.\*
- 3. **SPSS homework assignments:** Students will complete 10 out of class SPSS assignments. These will be based on the in-class labs and are designed to reenforce the concepts being learned on lab days. Homework assignments will always be due the Wednesday following a lab (see the course schedule for due dates)

Important! These assignments will require you to use SPSS to complete them. All students have access to SPSS through computer labs on campus. The computer lab in OD 126 will be available to you anytime it is not being used for a class. You can also **optionally** purchase an SPSS license or download a free trial using this link: <a href="https://www.ibm.com/products/spss-statistics/gradpack#vendors">https://www.ibm.com/products/spss-statistics/gradpack#vendors</a>

SPSS homework assignments will count 100 points towards your overall course grade. (~22%).

4. **Participation:** Researchers consistently shows that students retain more information when they are an active participant in their own learning. Throughout the semester, students will complete various in class activities and will be expected to contribute to meaningfully to classroom discussions. Your course participation grade will be a combination of attendance, willingness to speak in class, and completion of labs and in class assignments. Participation will contribute 50 points to your final course grade (~11%)

#### **Grades:**

Your final grade in the course will be calculated based on \*450\* total points.

450-405: A 404-360: B 359-315: C 314-270 D < 270: 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 3313) AND section number (Sec. 102) in the subject line. This will immediately let me know which class you are in so I can respond faster. \*If you email me with no context, I will not respond.\* I also \*DO NOT\* respond to any emails during finals week asking for extra credit, additional opportunities to make up missed assignments, or additional points towards your final grade. Please keep this in mind as you go through the semester.

For all other emails, will try my best to get back to you within 48-hours (during the week) or within 3 business days (weekends, holidays, etc.).

#### **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/self-plagiarism, and the use of LLM models such as ChatGPT to generate your assignments.

#### 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 <u>D2L</u> 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.

#### **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.

## **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	Dates	Topic	Reading	Notes
1	8/25 — 8/29	Course Overview/Introduction to Statistics	Chapter 1	
2	9/1 – 9/5	Introduction to Statistics	Chapter 1	No Class Monday 9/1!
3	9/8 – 9/12	The SPINE of Statistics	Chapter 2	
4	9/15 — 9/19	z-scores, Outliers, and Bias	Chapters 4 and 6	
5	9/22 – 9/26	z-scores, Outliers, and Bias	Chapters 4 and 6	Exam 1: In class Friday, 9/26
6	9/29 – 10/3	Comparing two Means	Chapter 10	
7	10/6 – 10/10	Comparing two Means	Chapter 10	
8	10/13 – 10/17	Comparing Several Independent Means	Chapter 12	

9	10/20 – 10/24	Comparing Several Independent Means/Repeated Measures ANOVA	Chapters 12 and 15	
10	10/27 – 10/31	Repeated Measures ANOVA	Chapter 15	Exam 2: In Class 10/31
11	11/3 – 11/7	Correlation	Chapter 8	
12	11/10 — 11/14	The Linear Model (Regression)	Chapter 9	
13	11/17 – 11/21	Exploratory Factor Analysis	Chapter 18	No Class 11/19 or 11/21
14	11/24 – 11/28	Exploratory Factor Analysis	Chapter 18	No Class 11/26 or 11/18
15	12/1 – 12/5	Categorical Outcomes: Chi- Square	Chapter 19	Exam 3: In Class 12/5
Finals Week	12/8 @ 10:30am	Make-up Exams		

# **Lab Schedule**

Most Fridays will be lab days. On lab days, class will be held in the **Psych Computer Lab (OD 126).** Below is the current lab schedule for the semester. Any changes to this schedule will be announced on D2L. **There will be no labs during exam weeks!** 

Week	Dates	Lab Topic	Reading	Notes
1	8/29	No Lab!		
2	9/5	Lab 1: Getting Started with SPSS	Chapter 4	
3	9/12	Lab 2: Descriptive Statistics and Data Visualization	Chapters 2 and 5	
4	9/19	Lab 3: Z-Scores and the Normal Distribution	Chapter 6	
5	9/26	No Lab! (Exam Week)		
6	10/3	Lab 4: Independent <i>t</i> -tests	Chapter 10	
7	10/10	Lab 5: Dependent <i>t</i> -tests	Chapter 10	
8	10/17	Lab 6: Independent ANOVA	Chapter 12	
9	10/24	Lab 7: Repeated Measures ANOVA	Chapter 15	

10	10/31	Exam Week (No Lab!)		
11	11/7	Lab 8: Correlation	Chapter 8	
12	11/14	Lab 9: Linear Regression	Chapter 9	
13	11/21	No Lab! (Conference)		
14	<b>MONDAY</b> 11/24	Lab 10: Factor Analysis	Chapter 18	
	11/24	(Monday, 11/24!)		
15	12/5	Exam Week (No Lab!)		
Finals		No Lab!		
Week				