Course Syllabus: PSYC/SOCL 3313
(Section 101: TR 9:30-10:50; PY-101)
(Section 102: TR 12:30-1:50, PY-101)
Statistics for the Social and Behavioral Sciences
Fall, 2024

Instructor: George M. Diekhoff, Ph.D.
Office: O'Donohoe 218
Office phone: (940) 397-4348
E-mail: george.diekhoff@msutexas.edu

REQUIRED TEXT AND MATERIALS

- Diekhoff, G. M. *Basic Statistics for the Social and Behavioral Sciences*. Zip Reprint, originally published by Prentice-Hall. Available in campus bookstore.

- Battery-operated hand calculator with the following functions: +, -, x, /, X^2, square root, and memory.

OFFICE HOURS FOR FALL 2024

MSU faculty are expected to keep at least five hours free each week for student conferences. These office hours are to include at least three days each week. My office hours for fall 2024 are MWF 10-12.

Please email me in advance to schedule appointments during these hours to make sure I don't have a scheduling conflict.

LEARNING OBJECTIVES

In this course you will be exposed to the full range of basic statistics as they are used by researchers in the social and behavioral sciences. The course begins with descriptive statistics--methods by which we can best describe individual cases, samples consisting of multiple cases, and whole populations. Univariate significant difference tests come next, where you will learn how to determine if a difference that is observed between a sample and a population or between multiple samples is a difference that is large enough to be considered reliable and replicable. Bivariate correlational statistics help us to determine which variables co-vary, or "move together," and give us ways of measuring the strength and reliability of those relationships. Finally, bivariate regression analysis allows us to use an established correlation between two variables to predict a case's score on one variable when provided with a score on the other variable. Throughout the semester the emphasis

will be on applications of statistical procedures. However, this is not a "cookbook" statistics course. You will learn how statistical analyses work in addition to learning how to use them.

ATTENDANCE POLICY

This class will be taught in a face-to-face format and regular attendance is expected, with exceptions for excused absences (as defined below). Students are allowed 4 unexcused absences in this class. Each additional unexcused absence beyond these 4 will result in a lowering of the course grade by one-half letter grade (5 points deducted from your test score average).

Students who miss the calling of the roll at the beginning of the class will be counted as absent for that day unless you alert me to your presence at the end of the class period to let me know that you were only tardy. Each tardy counts as one-half an unexcused absence. It is each student's responsibility to respond to roll call in a voice that is loud enough for me to hear. Please speak up.

There will be no grade penalty on exams missed because of an excused absence. There will be a one letter grade penalty on each lecture exam missed because of an unexcused absence.

Absences are excused only under the following circumstances:

1. the student provides a written excuse from a medical practitioner or MSU official stating that the student was unable to attend class on the day(s) of the absence;
2. the student provides a written excuse from a medical practitioner or MSU official stating that the student's dependent child was ill on the day(s) of the absence;
3. the student provides a written excuse from an MSU official stating that the student was in attendance at a mandatory university function on the day(s) of the absence.

In order for an absence to be excused, the written documentation for the excused absence should be provided to me within one week of the absence. If this is not possible, it is the student's responsibility to contact me within a week of the absence to let me know when documentation for the excused absence will be provided. Take responsibility for attending class regularly and promptly documenting excused absences.

There are many good reasons to miss class that are not considered by university policy to be excused absences. Funerals, employment-related absences, illnesses not requiring medical attention, job interviews, family emergencies, automobile malfunctions, court appearances, etc. do not constitute excused absences. Please reserve your 4 allowed absences to cover these situations.

GRADING

There will be four tests during the semester, each worth 100 points. Course grades will be based solely on your average across these four tests, except that each unexcused absence beyond the four that are allowed will result in a lowering of the course grade by one-half letter grade, and grades on exams taken late because of an unexcused absence will be lowered by one letter grade.

Course letter grades will then be assigned on the following scale:

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = lower than 60

MIDTERM PROGRESS REPORT

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. Only students who are identified as being at risk for earning grades of D or F will be notified in this manner. Midterm grades will not be reported on the student' 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 midterm should consider seeking tutoring or modifying their learning strategies in some other manner.

DISABILITIES

Individuals requiring special accommodations according to the Americans with Disabilities Act should present the instructor with a special Accommodation Request Form from the MSU Disability Support Services center.

ADDITIONAL EXPECTATIONS

1. Learning requires mental activity on your part. Learning about statistics will be facilitated by taking notes, thinking of examples, paraphrasing ideas that you hear in class, and so on. Please stay busy and mentally involved during class.

2. Leaving the classroom while class is in session is distracting, inappropriate, and is disruptive to the training process. Please come to class having already taken care of your restroom needs and social obligations so that you will be prepared to stay in the classroom for the duration of our sessions. Please do not leave the classroom while we are in session unless you have a true emergency, and then be prepared to explain to me later why you left. If you have a medical condition

that requires you to leave the classroom on a frequent basis, please work with the Disabilities Office to document your need for a special accommodation.

3. Unless you expect to receive an emergency call or text, please turn off cell phones in class. Do not use cell phones in class. Do not use your cell phone as a calculator in class; bring a true handheld calculator for use during lectures and tests. If you bring a laptop, use it only for taking notes. In general, you'll find that handwritten notes are much more effective than trying to type notes in this or any math class.

4. Don't cheat. Cheating on exams will result in a grade of F for the course.

COURSE TOPICS AND READING ASSIGNMENTS

Introduction and Summation Notation—Chapter 1, Appendix A

Data distributions: Tables and graphs—Chapter 2

Descriptive statistics—Chapter 3

EXAM 1*

Probability and the normal distribution—Chapter 4

Sampling distributions and interval estimation—Chapter 5

EXAM 2*

Significant difference tests: one- and two-sample tests; one-way ANOVA; factorial ANOVA—Chapters 6, 7, 8, 9

EXAM 3*

Correlation and regression—Chapters 10, 11

EXAM 4*
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* Lecture exam dates will be announced in class at least one week prior to each exam.

Makeup exams will all be administered during final exam week as follows:.
For Section 101 (the 9:30-10:50 class)—Tuesday, Dec. 10, 8:00 in PY101.
For Section 102 (the 12:30-1:50 class)—Thursday, Dec. 12, 10:30 in PY101.