

Sociology 3220-003
Introduction to Social Statistics
Fall 2018
T, Th: 1:00pm – 2:15pm, STATE 0128

Instructor: Professor Jeffrey Kentor, 2233 FAB, Office Hours: T, Th: 2:30-3:30pm
jeffrey.kentor@wayne.edu, 313-577-8131

Teaching Assistant: Gerald Nowak. Office Hours: 2260 FAB, T, Th: 11:15-12:45pm
gerald.nowak@wayne.edu

Texts

No required texts.

Software:

This course requires the use of SPSS Statistical Software. Students may obtain a free rental copy of SPSS that you can install on your personal computer. You can obtain your copy at <https://commerce.wayne.edu/clearinghouse/> (click student software). Please contact me ASAP if you are having trouble getting access to SPSS.

Calculator

A calculator that can compute square roots is required and should be brought to each course meeting. You should be able to get an acceptable calculator for less than \$20. If you do not know how to operate your calculator, please ask me for guidance. **You may not use your phone as your course calculator.**

Course Summary

The goal of this course is to enable you to both calculate and interpret statistical analyses within the context of social science research. This course introduces you to the basic concepts of statistical analysis, both in theory (lectures) and practice (labs). We begin with a discussion of descriptive statistics, including frequency distributions, graphs, and measures of central tendency and variability. Next, we examine relationships between variables and measures of association, including multiple regression and correlations. The course concludes with an introduction to inferential statistics.

Course Requirements and Grading

Regular attendance is especially important in this type of class, where each week's work builds on the prior week's content. Failure to attend the lectures or labs will result in a lower grade. To encourage you to keep up with the work, there will be several unannounced quizzes during the semester. These quizzes MAY NOT be made up. However, I will drop your lowest quiz. Prior approval is necessary to miss an exam, and will only be permitted in *extreme cases*. You will be graded on your homework assignments, lab performance, class participation, quizzes, and exams. Please be sure to contact the teaching assistant, or me immediately if you are having difficulty with any aspect of the course. Don't wait until the day before a test to ask for help – it may be too late!

Your grade will be calculated as follows:

Exams	50%
Quizzes	20%
Homework	15%
Labs	15%

93-100%	A
90-92%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+
74-76%	C
70-73%	C-
60-69%	D
<60%	F

Student Learning Outcomes:

- Students will understand the basics of data organization.
- Students will understand univariate statistical techniques used to describe individual variables and when these techniques are appropriate.
- Students will be able to compute descriptive statistics by hand and using SPSS.
- Students will understand statistical inference and how probability theory informs inferential techniques.
- Students will be able to test univariate hypotheses using inferential statistical techniques
- Students will understand basic bivariate statistical techniques and know when these techniques are appropriate.
- Students will be able to carry out bivariate techniques by hand and using SPSS and interpret results.
- Students will understand how multivariate statistical techniques can improve upon bivariate statistical techniques.
- Students will understand how statistics can be used to answer research questions and test hypotheses.

General Course Policies

Attendance: Attendance is required. It will be exceptionally difficult to succeed in this course without attending. Attendance and participation grades will be assessed through in class activities and/or short quizzes administered at random and on lab days. Students who miss class meetings where in-class assignments are completed **cannot** make-up these assignments. Students who consistently arrive late to class, do not bring a calculator or are otherwise unengaged will not be eligible for full participation points.

Homework Assignments: Assignments are due at the beginning of class in the week following the session in which the material was discussed. Homework will not be graded, but turning it in each week is required, as it is a way for you to practice your statistics skills.

Reading: Students should read all course materials by the time class begins and notify the instructor if you have difficulty completing required reading. Please ask questions if you are confused by the course readings.

Office Hours: Office hours are designed to answer specific questions or assist with specific aspects of an assignment. Please come to office hours with questions ready and attempt to complete assignments independently prior to coming to office hours. If you think you will need more than 20 minutes of time, please schedule an appointment.

Final Grades: Final grades submitted by the instructor are **final**. If you believe that there has been a clerical error or other mistake you may inquire for an accounting of your grade. However, grades are based solely on your scores on course assignments and **will not be arbitrarily adjusted** at the end of the term. Students who aspire for a specific grade should ask me early in the semester about whether they are on track and work proactively to achieve their desired goals.

Registration. Students may drop this class through September 12th. Classes that are dropped do not appear on the transcript. Beginning the fifth week of class students are no longer allowed to drop but must withdraw from classes. It is the student's responsibility to request the withdrawal through the registrar's office. Failure to do so will result in a grade of F. Students must be passing at the time of the request to get a 'WP.' **After November 11th, you cannot withdraw from the course and you will receive a letter grade.** Incomplete 'I' grades are given in very limited circumstances to students who are passing the course and cannot complete final assignments due to extraordinary circumstances. Students who get a grade of incomplete must complete all assignments within one year.

Religious holidays: Because of the extraordinary variety of religious affiliations of the University student body and staff, the Academic Calendar makes no provisions for religious holidays. However, it is University policy to respect the faith and religious obligations of the individual. Students with classes or examinations that conflict with their religious observances are expected to notify their instructors well in advance so that mutually agreeable alternatives may be worked out.

Disability: If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. The SDS telephone number is 313-577-1851 or 313-202-4216 for videophone use. Once you have met with your disability specialist, I will be glad to meet with you privately during my office hours to discuss your accommodations. Student Disability Services' mission is to assist the university in creating an accessible community where students with disabilities have an equal opportunity to fully participate in their educational experience at Wayne State University. You can learn more about the disability office at www.studentdisability.wayne.edu.

To register with Student Disability Services, complete the online registration form at: https://wayne-accommodate.symphlicity.com/public_accommodation/

Counseling and Psychological Services (CAPS): It is quite common for college students to experience mental health challenges, such as stress, anxiety and depression, that interfere with academic performance and negatively impact daily life. Help is available for any currently enrolled WSU student who is struggling with a mental health difficulty, at WSU Counseling and Psychological Services (caps.wayne.edu; 313 577-3398). Other options, for students and nonstudents, include the Counseling and Testing Center, and the Counseling Psychology Training Clinic, in the WSU College of Education (coe.wayne.edu/tbf/counseling/center-index.php). Services at all three clinics are free and confidential. Remember that *getting help, before stress reaches a crisis point, is a smart and courageous thing to do* – for yourself, and for those you care about. Also, know that the WSU Police Department (313 577-2222) has personnel trained to respond sensitively to mental health emergencies at all hours.

Academic Dishonesty -- Plagiarism and Cheating: Academic misconduct is any activity that tends to compromise the academic integrity of the institution or undermine the education process. Examples of academic misconduct include:

Plagiarism: To take and use another's words or ideas as your own without appropriate referencing or citation.

Cheating: Intentionally using or attempting to use or intentionally providing unauthorized materials, information or assistance in any academic exercise. This includes copying from another student's test paper, allowing another student to copy from your test, using unauthorized material during an exam and submitting a term paper for a current class that has been submitted in a past class without appropriate permission.

Fabrication: Intentional or unauthorized falsification or invention of any information or citation, such as knowingly attributing citations to the wrong source or listing a fake reference in the paper or bibliography.

Other: Selling, buying or stealing all or part of a test or term paper, unauthorized use of resources, enlisting in the assistance of a substitute when taking exams, destroying another's work, threatening or exploiting students or instructors, or any other violation of course rules as contained in the course syllabus or other written information.

Such activity may result in failure of a specific assignment, an entire course, or, if flagrant, dismissal from Wayne State University. <https://dosowayne.edu/conduct/academic-misconduct>

Student Services:

The Academic Success Center (1600 Undergraduate Library) assists students with content in select courses and in strengthening study skills. Visit www.success.wayne.edu for schedules and information on study skills workshops, tutoring and supplemental instruction (primarily in 1000 and 2000 level courses).

The Writing Research and Technology Zone is located on the 2nd floor of the Undergraduate Library and provides individual tutoring consultations free of charge. Visit <http://clasweb.clas.wayne.edu/writing> to obtain information on tutors, appointments, and the type of help they can provide.

Library research assistance: Working on a research assignment, paper or project? Trying to figure out how to collect, organize and cite your sources? Wayne State librarians provide oncampus or online personalized help. Contact them at: https://library.wayne.edu/forms/consultation_request.php

Class recordings: Students need prior written permission from the instructor before recording any portion of this class. If permission is granted, the audio and/or video recording is to be used only for the student's personal instructional use. Such recordings are not intended for a wider public audience, such as postings to the internet or sharing with others. Students registered with Student Disabilities Services (SDS) who wish to record class materials must present their specific accommodation to the instructor, who will subsequently comply with the request unless there is some specific reason why s/he cannot, such as discussion of confidential or protected information.

Course Outline and Readings: Please note that this outline is tentative. Chapter discussions and test dates may change.

August

30 Course Introduction

September

04 What are Statistics

06 Collecting and organizing data

11 Central tendencies

13 Variability

18 Lab 1 (LAB A, First Floor, Room 1140)

20 **Test # 1**

25 Relationships between two variables

27 Relationships between two variables, con't

October

02 Measures of association for nominal and ordinal variables

04 Measures of association for nominal and ordinal variables, con't

09 Regression and correlation

11 Regression, con't

16 The Normal Distribution

18 Sampling and Sampling Distributions

23 Sampling and Sampling Distributions, con't

25 Review

30 Lab 2 (LAB A, First Floor 1140)

November

01 **Test # 2**

06 Estimation

08 Testing Hypotheses about Two Samples

13 Testing Hypotheses about Two Samples, con't

15 Chi-Square Test

20 Review

22 NO CLASS

27 Analysis of Variance (ANOVA)

29 Lab 3 (LAB A, First Floor, Room 1140)

December

04 Review

06 **Test #3**