

SOCIAL WORK STATISTICS

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| Course #: SW 318 (Social Work Statistics) | Unique #: 61100 |
| Semester: Fall 2016 | Instructor: Deborah Cohen, PhD, MSW |
| Meeting Day/Time: Tues. & Thurs, 2:30-4pm | Contact: dacohen@austin.utexas.edu |
| Class Location: SW Room 1.212 | Office Hours: by Appt. |

Quantitative Reasoning *This course carries the Quantitative Reasoning flag. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.*

Course Description

This course is one of the two courses in research for undergraduate social work majors. Completion of the liberal arts math requirement is a prerequisite for this course. This course provides a basic introduction to the conceptual and quantitative tools used to describe and interpret data in the conduct of social work practice and research. Students will learn how to select, calculate, and interpret appropriate statistics applicable to common data analysis situations related to direct practice, administration and planning, and policy-making. The course provides students with the opportunity to acquire personal computer skills in Excel to calculate statistics and present results. Students are required to complete SW318 prior to entering the major. Students majoring in social work must earn a grade of C or better in this course.

Course Objectives

By the end of the course, the students should be able to:

1. Explain the logic of the research process and its relationship to social work knowledge and practice;
2. Explain, calculate, and interpret descriptive statistics including: basic terminology, scales, notations, frequency distributions, measures of central tendency, measures of dispersion, and the normal distribution;
3. Read and analyze basic charts and graphs, contingency tables, and R output results;
4. Explain the logic of hypothesis testing in inferential statistics;
5. Explain, calculate, and interpret inferential statistics including t-tests, chi-square, ANOVA, correlation, and regression;
6. Identify and apply the correct statistical technique to the research question;
7. Use computer technology to compute descriptive and inferential statistics; and
8. State several examples of how statistics are used as a tool in the "real world" by social service agencies to analyze client outcomes.

Teaching Methods

This course will follow a lecture and lab format. Monday sessions will be primarily devoted to

lectures, and Wednesday will be devoted to wrapping up the lecture and completing the lab. You will have until 5pm on the lab day to submit the lab on canvas. Students will be expected to have completed the assigned reading before class, to actively participate in class, and to collaborate with one another. Excel is the software package to be used in class and in assignments.

Required Text

Salkind, N.J. (2016) *Statistics for People who (Think They) Hate Statistics: Using Microsoft Excel 2016*, Sage. ISBN-13: 978-1483374086

Salkind, N. (2016). *Excel Statistics: A Quick Guide*, Sage. ISBN-13: 978-1483374048


Recommended

Listen to a *fivethirtyeight* or *ThePollsters* Podcasts to learn about real-world application of these concepts.

Software

You will need Microsoft Excel on your laptop plus the Excel data analysis add-on. Unfortunately if you are a Mac user and do not have Microsoft 2016, you will have to purchase a workaround.

Windows:

1. Start Excel
2. Click the Microsoft Office Button  and then click Excel Options.
3. Click Add-Ins, and then in the Manage box, select Excel Add-ins.
4. Click Go.
5. In the Add-Ins available box, select the Analysis ToolPak check box, and then click OK.

Mac:

If you have Excel 2016:

1. Start Excel.
2. Click Tools, and then click Add-Ins.
3. Click the Data Analysis ToolPak and Solver option to enable it. Then, click OK.
4. Locate Data Analysis ToolPak and Solver on the Data tab.

If you have Excel 2011 you will actually have to purchase a work around:

1. Go to Stats Plus Mac
2. <https://www.analystsoft.com/en/products/statplusmac/buy.phtml>
3. Purchase a student license. To make it cheaper, purchase it with 3 other friends in class.

Computer Requirements

Students will need a laptop computer to complete homework assignments, exams, and in-class exercises. If you do not have a laptop, you may borrow one from the School of Social Work's Learning Resource Center (LRC). Computers are available from the LRC desk on a "first come / first served" basis, so plan ahead. **In order to use the computers in campus computer labs you need your UT EID and password.** Details about UT EID accounts, including how to obtain one are available at the web address: https://utdirect.utexas.edu/nlogon/eid_suite/general/.

If borrowing a computer you will need to make these arrangements before class begins.

Canvas

Canvas will be used extensively in this course. On Canvas, you will find most materials needed for this course. Use Canvas to find:

- Labs to be submitted online;
- Datasets to be used in assignments and exams;
- Course materials (syllabus, course presentations, announcements);
- Access to e-mail addresses to ask questions about assignments.

While the University has invested significant resources in support of Canvas, there are still periodic outages and slow-downs. **If you wait until the last minute to complete assignments on Canvas, you may encounter difficulties.**

Grading and Course Requirements

Accumulated points and grading scale

94.0 and above A

90.0 to 93.999 A-

87.0 to 89.999 B+

84.0 to 86.999 B

80.0 to 83.999 B-

77.0 to 79.999 C+

74.0 to 76.999 C

70.0 to 73.999 C-

67.0 to 69.999 D+

64.0 to 66.999 D

60.0 to 63.999 D-

Below 60.0 F

Grades will NOT be rounded up.

Course requirements and grade assignment: The final grade will be computed from grades on in-class/homework labs (50%) and two exam (50%).

Make-ups are permitted only for documented absences owing to observance of a religious holiday or University-sponsored activity at which your attendance is mandatory. A University sponsored event or activity is one that the University endorses by supporting it financially, or by sending students to participate in it as official representatives of the University. You must notify your instructor in writing during the first week of class of planned absences due to a religious holiday or University-sponsored activity, such as intercollegiate sports or artistic performances. Notification must include proper authorization from an appropriate administrator, such as a dean, department chair, or director of an administrative unit, or their delegate.

Lab assignments (50% of grade)

There are 10 scheduled lab assignments. All labs will go live Wednesday at 12:00PM and you will be provided time during Wednesday class to work on the lab. All labs will be submitted on Canvas by Wednesday 5pm (10 pt. each). The purposes of the lab assignments are to allow you to review conceptual content and to provide you with opportunities to practice solving statistical problems using Excel. Failure to submit homework during the assigned period will result in a "zero" as your score for the assignment. ***In the case of an emergency or illness documentation must be provided to turn in a late lab.***

Exam (50% of grade)

There will be two exams that will cover all material assigned for and discussed in class. Questions on the tests will include conceptual questions from the text and lectures as well as computing or interpreting statistical problems. Exams are to be taken at the scheduled time. Only in the case of emergencies and then only with instructor approval will make-up exam be offered. Please notify the instructor of the situation as soon as it is reasonably possible. The date and time for the makeup exam will be scheduled at a time that is mutually convenient to the student and the instructor.

The University Of Texas Honor Code. The core values of the University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

Professional Conduct And Civility In The Classroom. The professor expects students to act as professionals in class. This means students should arrive on time for class, be prepared to participate in the class discussion, and show respect for one another's opinions. A course brings together a group of diverse individuals with various backgrounds. Students are influenced and shaped by such factors as ethnicity, gender, sex, physical abilities, religious and political beliefs, national origins, and sexual orientations, among others. We expect to learn from each other in an atmosphere of positive engagement and mutual respect. Social work also deals with complex and controversial issues. These issues may be challenging and uncomfortable, and it would be impossible to offer a substantive classroom experience that did not include potentially difficult conversations relating to challenging issues. In this environment we will be exposed to diverse ideas and opinions, and sometimes we will not agree with the ideas expressed by others. Nevertheless, the professor requires that students engage one another with civility, respect, and professionalism.

Unanticipated Distress. Students may experience unexpected and/or distressing reactions to course readings, videos, conversations, and assignments. If so, students are encouraged to inform the professor. The professor can be responsive and supportive regarding students' participation in course assignments and activities, but students are responsible for communicating clearly what kind of support is desired. If counseling is needed, students may contact a service provider of their choosing, including the UT counseling center at 512-471-3515 or online at www.utexas.edu/student/cmhc/.

Policy On Social Media And Professional Communication. Public social networks are not private. Even when open only to approved or invited members, users cannot be certain that privacy will exist among the general membership of sites. If social work students choose to participate in such forums, please assume that anything posted can be seen, read, and critiqued. What is said, posted, linked to, commented on, uploaded, subscribed to, etc., can be accessed and archived, posing potential harm to professional reputations and prospective careers.

Social work students who use social media (i.e. Facebook, Twitter, etc.) And other forms of electronic communication (i.e. blogs, etc.) Must be mindful of how their communication may be perceived by clients, colleagues, faculty, and others. Social work students are expected to make every effort to minimize material which could be considered inappropriate for a professional social worker in training. Because of this, social work students are advised to manage security settings at their most private levels and avoid posting information/photos or using any language that could jeopardize their professional image.

Students are asked to consider the amount of personal information posted on these sites and are obliged to block any client access to involvement in the students' social networks. Client material should not be referred to in any form of electronic media, including *any* information that might lead to the identification of a client or compromise client confidentiality in *any* way. Additionally, students must critically evaluate any material that is posted regarding community agencies and professional relationships, as certain material could violate the standards set by the school of social work, the Texas code of conduct for social workers, and/or the NASW code of ethics.

Social work students should consider that they will be representing professional social work practice as well as the University of Texas at Austin school of social work program while in the classroom, the university community, and the broader area communities.

Policy On Scholastic Dishonesty. Students who violate university rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the university. Since such dishonesty harms the individual, all students, and the integrity of the university, policies on scholastic dishonesty will be strictly enforced. For further information, the student may refer to the web site of the student judicial services, office of the dean of students (<http://deanofstudents.utexas.edu/sjs/>).

Use Of Course Materials. The materials used in this course, including, but not limited to exams, quizzes, and homework assignments, are copyright protected works. Any unauthorized duplication of the course materials is a violation of federal law and may result in disciplinary action being taken against the student. Additionally, the sharing of course materials without the specific, express approval of the professor may be a violation of the university's student honor code and an act of academic dishonesty, which could result in further disciplinary action. This sharing includes, among other things, uploading class materials to websites for the purpose of distributing those materials to other current or future students.

Documented Disability Statement. Any student who requires special accommodations must obtain a letter that documents the disability from the services for students with disabilities area of the division of diversity and community engagement (471- 6259 voice or 471-4641 TTY for users who are deaf or hard of hearing). A student should present the letter to the professor at the beginning of the semester so that needed accommodations can be discussed and followed. The student should remind the professor of any testing accommodations no later than five business days before an exam. For more information, visit <http://www.utexas.edu/diversity/ddce/ssd/>.

Religious Holidays. By UT Austin policy, students must notify the professor of a pending absence at least fourteen days prior to the date of observance of a religious holy day. If the student must miss a class, examination, work assignment, or project in order to observe a religious holy day, the professor will give the student an opportunity to complete the missed work within a reasonable time after the absence.

Title IX Reporting. In Accordance with Title IX Of The Education Amendments of 1972, The University Of Texas at Austin is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. Faculty, instructors, staff, and/or teaching assistants in their supervisory roles are mandated reporters of incidents of sex discrimination, sexual harassment, sexual violence, or sexual misconduct. Students who report such incidents will be informed of university resources. Incidents will be reported to the university's title ix coordinator and/or the title ix deputy for the SSW, Professor Tanya Voss. Students, faculty and staff may contact Professor Voss to report incidents or to obtain

information. Further information, including student resources related to title ix, may also be found at <http://socialwork.utexas.edu/dl/files/academic-programs/other/qrg-sexualharassment.pdf>.

Campus Carry Policy. The University's policy on concealed fire arms may be found here: <https://campuscarry.utexas.edu>. You also may find this information by accessing the quick links menu on the school's website.

Classroom Confidentiality. Information shared in class about agencies, clients, and personal matters is considered confidential per the NASW code of ethics on educational supervision and is protected by regulations of the family educational rights and privacy act (FERPA) as well. As such, sharing this information with individuals outside of the educational context is not permitted. Violations of confidentiality could result in actions taken according to the policies and procedure for review of academic performance located in sections 3.0, 3.1, and 3.2 of the standards for social work education.

Use Of E-Mail For Official Correspondence To Students. Email is recognized as an official mode of university correspondence; therefore, students are responsible for reading their email for university and course-related information and announcements. Students are responsible for keeping the university informed about a change of e-mail address. Students should check their e-mail regularly and frequently—daily, but at minimum twice a week—to stay current with university-related communications, some of which may be time-sensitive. Students can find UT Austin's policies and instructions for updating their e-mail address at <http://www.utexas.edu/its/policies/emailnotify.php>.

Safety. As part of professional social work education, students may have assignments that involve working in agency settings and/or the community. As such, these assignments may present some risks. Sound choices and caution may lower risks inherent to the profession. It is the student's responsibility to be aware of and adhere to policies and practices related to agency and/or community safety. Students should notify the professor regarding any safety concerns.

Behavior Concerns Advice Line (BCAL). If students are worried about someone who is acting differently, they may use the behavior concerns advice line to discuss by phone their concerns about another individual's behavior. This service is provided through a partnership between the office of the Dean of Students, the counseling and mental health center (CMHC), the employee assistance program (EAP), and the University of Texas at Austin police department (UTPD). Call 512-232-5050 or visit <http://www.utexas.edu/safety/bcal>.

Emergency Evacuation Policy. Occupants of buildings on the UT Austin campus are required to evacuate and assemble outside when a fire alarm is activated or an announcement is made. Please be aware of the following policies regarding evacuation:

Do not re-enter a building unless you are given instructions by the Austin Fire Department, the UT Austin Police Department, or the fire prevention services office.

Course Schedule (subject to change)

| Date | Day | Content | Reading |
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| Aug 24 | W | Course Introduction | Ch. 1 Salkind |
| Aug 29 | M | Collecting Data and Hypothesis testing | On Canvas Healy Ch. 1, Ch. 7 Salkind |
| Aug 31 | W | Lab #1 | |
| Sept 5 | M | Memorial Day | |
| Sept 7 | W | Central Tendencies | Ch. 2 Salkind |
| Sept 12 | M | Variability | Ch. 3 Salkind |
| Sept 14 | W | Lab #2 | |
| Sept 19 | M | Graphing & Reliability and Validity | On Canvas Healy Ch. 2, Ch 4.& 6 Salkind |
| Sept 21 | W | No class/out of class Lab #3 | Since we do not have class, you will have until Sept 28 at 5pm to finish this lab. |
| Sept 26 | M | Normal curve | Ch. 8 Salkind |
| Sept 28 | W | Lab #4 | |
| Oct 3 | M | Significance testing and z tests | Ch. 9 & 10 Salkind |
| Oct 5 | W | Lab #5 | |
| Oct 10 | M | Independent t-test/ Dependent t-tests | Ch. 11 & 12 Salkind |
| Oct 12 | W | Lab #6 | |
| Oct 17 | M | t-test continued/ Review | Ch. 11 & 12 Salkind |
| Oct 19 | W | Exam 1 | |
| Oct 24 | M | ANOVA | Ch. 13 Salkind |
| Oct 26 | W | Lab #7 | |
| Oct 31 | M | Crosstabs/Chi Square | Ch. 17 Salkind, On Canvas Linneman Ch. 4 |
| Nov 2 | W | Lab #8 | |
| Nov 7 | M | Chi Square test of independence | On Canvas Healy Ch. 11 & Linneman Ch. 4 |
| Nov 9 | W | Lab #9 | |
| Nov 14 | M | Intro to Correlation | Ch. 5 Salkind |
| Nov 16 | W | Lab # 10 | |
| Nov 21 | M | Correlation | Ch. 15 Salkind |
| Nov 23 | W | No Class | |
| Nov 28 | M | Slope/Regression | Ch. 16 Salkind |
| Nov 30 | W | Review | |
| Dec 5 | M | Exam 2 | |