THE UNIVERSITY OF TEXAS
STEVE HICKS SCHOOL OF SOCIAL WORK

Course Number: SW 318   **Instructor: Yong Ju Cho, MSW**
Unique Number: 59720   **Office: SSW 3.112**
Semester: Spring 2019   **E-mail: yongcho@utexas.edu**
Meeting Time: M W 2:30-4:00 pm   **Office Hours: M 1:00 -2:30 pm**
Meeting Place: SSW 1.212   **(Other times by appointment)**

SOCIAL WORK STATISTICS

I.   STANDARDIZED 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. The course provides students with the opportunity to acquire personal computer skills in R statistical software 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.

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.

II.   STANDARDIZED COURSE OBJECTIVES

Upon completion of this course, the students should be able to:

1. Understand and 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, graphs, and contingency tables;
4. Explain the logic of hypothesis testing in inferential statistics;
5. Explain, calculate, and interpret inferential statistics including t-tests, ANOVA, correlation, regression, and chi-square;
6. Identify and apply the correct statistical technique to the research question;
7. Understand that statistics are value neutral, but can be used to support discriminatory and prejudicial value positions contrary to the values of social work, especially against special populations (e.g., women, people of color, people with disabilities, gays and lesbians);

8. Use computer technology to compute descriptive and inferential statistics; and
9. State several examples of how statistics are used as a tool in the "real world" by social service agencies to analyze client outcomes.

III.   TEACHING METHODS

The primary means of instruction will be interactive lectures where students are able to build their construct knowledge in statistics. Students are encouraged to address their statistical misconceptions through discussions and assessments in class. To help students' understanding, the instructor will use hands-on-activities such as working with R software, case studies, and small group exercises in class. For successful completion of the course, students are expected to complete readings and homework assigned for each week. Class attendance and participation are also required throughout the semester.

IV.   REQUIRED TEXT AND MATERIALS

Required Text

Frankfort-Nachmias, C., & Leon-Guerrero, A. (2018). *Social statistics for a diverse society (8th Ed)*. Thousand Oaks, CA: Sage Publications.

Recommended text

Van de Sande, A., & Byvelds, C. (2015). *Statistics for social justice: A structural perspective*. Halifax, NS: Fernwood Publishing.

Software

R is free software for statistical computing ad graphics. We will use R for the entire semester. You need to install both R and R Commander on your computer. R Studio is optional.

You can down R from: http://cran.r-project.org/

   R Commander from: http://socserv.mcmaster.ca/jfox/Misc/Rcmdr/
   R Studio from: http://www.rstudio.com/ide/download/

Computer Requirements

During the semester, students will need a laptop computer to complete homework assignments, exams, and in-class lab exercise. 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 and make arrangements before class begins. Your UT EID and password are required in the process of checking out a laptop.

Canvas

Canvas will be used extensively in this course and most materials will be uploaded on Canvas. Use Canvas to find:
- Homework assignments;
- Datasets to be used in homework assignments, in-class exercises, and exams;
- Course materials such as the syllabus and readings;
- Powerpoint presentations;
- All course announcements;
- Contact information;
- Grades

There will be times when Canvas will have periodic outages and slow-downs. Please do not wait until the last minute to complete and submit assignments on Canvas.

V.   COURSE REQUIREMENTS

The final grade will be computed from grade on homework (35%), exams (50%), a 2-page-paper (5%), and students' attendance, preparation, and participation in class (10%). More detail instructions and expectations are described as below.

1. **Class attendance, Preparation, and Participation (10% of total grade)**
    Students are expected to attend all classes on time, to complete assigned readings and homework, and to actively participate in class by asking questions and having discussions regarding on readings, homework, lectures, and other in-class activities.

    In terms of attendance, coming late and/or leaving early by more than 10 minutes will be counted as an absence. Only three permitted absences are allowed in the event of unexpected emergencies, medical appointments, university-sanctioned events, or religious holidays. When missing a class for any reasons, you are required to email the instructor before the class begins. Starting from the fourth absence, 2% of the total grade per class will be deducted from your final grade. However, those students who have perfect attendance will have an extra 2% added to their final grade.

    In the event a class must be cancelled, students will be provided an assignment to help them practice the material for that day. The completion of such assignments will count as attendance for that class.

2. **Homework Assignments (35% of total grade)**
    The homework assignments will help students to decrease their high levels of statistics anxiety, which create barriers to applying statistical concepts and skills to the social work profession. Thirteen homework assignments will be assigned through Canvas to help you reviewing concepts and to provide you with opportunities to practicing solving statistical problems. Among thirteen homework assignments, one homework assignment with the lowest score you received will be automatically dropped from the grade. Please note that Canvas does not save your answers until you submit your homework assignments. All homework assignments must be submitted prior to the exam (by the day before the exam). They will not be accessible after the due date.

    Each student's homework assignments will be drawn randomly from a test bank of questions. Therefore, your question set will not be identical to your classmate's. The homework assignments can be redone as many times as you wish. Each time you redo your assignment, you will be given a different selection of questions and your grade will be based on your highest score achieved. For any assignments working with R software, questions will not be randomly drawn. In that case, the instructor will provide two versions of the assignments and will record only the highest grade earned.

    Students are expected to complete their homework assignments individually. Since many exam questions will be similar to what you will have in homework assignments, doing your own work will help you improving your exam scores. If you have any difficulties solving problems in the assignments, you are strongly encouraged to

schedule a meeting with the instructor to address the issues.

3. **Tests (50% of total grade)**
   There will be four tests, each time-limited to 75 minutes. Test will cover all material assigned for and discussed in class. Questions on the tests include conceptual questions from the text and lectures as well as statistical problems to solve using a computer and R software. Although each test will focus mainly on the content since the last test, the content is inevitably cumulative. Given this, students are encouraged to prepare for tests by focusing on the content since the last test and reviewing the material from the entire semester. Review and Q&A sessions will be provided before each test.

   Tests are not open-book. Materials other than R software program should not be used during the exam. Especially, the use of e-mail or other types of communication is not permitted. Computer activity during the tests will be monitored and any violation will result in a grade of zero for that exam.

   Exams are expected to be taken at the scheduled time. Makeup exams will only be offered when there are exigent reasons. Students should notify the instructor about their situations as soon as possible to schedule a new date and time for the makeup exam.

4. **Paper (5% of total grade)**
   Students will have an opportunity to write a 2-page double-spaced paper. The paper should be about any specified statistic concepts and techniques (i.e., frequency distributions, measures of central tendency, measures of dispersion, the normal distribution, t-test, chi-square, analysis of variance (ANOVA)) that can be applied to the field of social work practice. You will explain how the particular statistic method and skill can assist social work professionals who work with special populations (e.g., women, people of color, people with disabilities, gays and lesbians). Students should turn in their papers at the beginning of the class on 11/18. More detail instructions will be provided in class.

VI. GRADES

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

VII. CLASS POLICIES

Use of Canvas in Class. This class uses Canvas as the primary means of communicating with students. The instructor will post all the course materials as well as announcements on site. You

will be responsible for checking the Canvas course site regularly for any resources and new announcements. Students can find supports from the ITS Help Desk by calling 475-9400 between 8AM and 6PM on Monday through Friday.

Classroom Etiquette on Electronic Gadgets. Cell phones must be put away during class and computers turned off except when used for approved class activities. Especially when taking exams, computers should be used for the stats software only. Students who violate this policy will be asked to leave the classroom and will get 0 grade for the exam.

Late Assignment Policies. Late assignments will be accepted only with prior permission from the instructor. Except in the case of extreme emergencies, students should contact the instructor at least 48 hours prior to the due date to negotiate another deadline. If not, students will lose 3 points per day for their late assignments.

Course Evaluations. The instructor will encourage students to provide informal mid-semester feedback to make sure what she's doing supports students' learning. Again at the end of the semester, students are expected to complete the standard Course Instructor Survey (CIS) provided by the University of Texas at Austin. This formal feedback that students provide in the evaluation will help the instructor to plan the course better in the future.

VIII. UNIVERSITY POLICIES

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 https://cmhc.utexas.edu/.

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 Steve Hicks 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 Steve Hicks 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://diversity.utexas.edu/disability/.

Campus Carry. Information on The University's policy on concealed firearms (Campus Carry) may be found here: **https://campuscarry.utexas.edu/**

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, agency-based field 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 Liaison for the SHSSW, 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.

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 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:

- Familiarize yourself with all exit doors in the classroom and the building. Remember that the nearest exit door may not be the one you used when entering the building.
- If you require assistance to evacuate, inform the professor in writing during the first week of class.
- In the event of an evacuation, follow the professor's instructions.
- 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

IX. COURSE SCHEDULE

Please note that the instructor may make modifications to the syllabus during the semester. Any revised versions of the syllabus will be uploaded on Canvas.

Date	Content	Readings	Homework
Class1 W, 8/28	Overview of the course Why statistics are important	Readings from CANVAS	
Class 2 M, 9/2	Labor Day		
Class 3 W, 9/4	Lecture on Chapter 1	Ch1. The What and the Why of Statistics	Homework 1 (due on 9/22)
Class 4 M, 9/9	Lecture on Chapter 2	Ch 2. The Organization and Graphic Presentation of Data	Homework 2 (due on 9/22)
Class 5 W, 9/11	Lecture on Chapter 3	Ch 3. Measures of Central Tendency	Homework 3 (due on 9/22)
Class 6 M, 9/16	Lecture on Chapter 4	Ch 4. Measures of Variability	Homework 4 (due on 9/22)
Class 7 W, 9/18	Review for Exam 1	Ch. 1-4	
Class 8 M, 9/23	**Exam 1**		
Class 9 W, 9/25	Review Exam 1 **Lab exercise**		
Class 10 M, 9/30	Lecture on Chapter 5	Ch. 5 The Normal Distribution	Homework 5 (due on 10/15)
Class 11 W, 10/2	Lecture on Chapter 6	Ch. 6 Sampling and Sampling Distribution	Homework 6 (due on 10/15)
Class 12 M, 10/7	Lecture on Chapter 7	Ch. 7 Estimation	
Class 13 W, 10/9	Continue Lecture on Chapter 7 **Lab exercise**	Ch. 7 Estimation	Homework 7 (due on 10/15)
Class 14 M, 10/14	Review for Exam 2	Ch. 5-7	

Class 15 W, 10/16	**Exam 2**		
Class 16 M, 10/21	Review Exam 2 Lecture on Chapter 8	Ch. 8 Testing Hypothesis	Homework 8 (due on 11/5)
Class 17 W, 10/23	Continue Lecture on Chapter 8 **Lab exercise**	Ch. 8 Testing Hypothesis	
Class 18 M, 10/28	Lecture on Chapter 9 Lecture on Chapter 10	Ch. 9 Bivariate Tables Ch. 10 The Chi-square Test and Measures of Association	Homework 9 (due on 11/5)
Class 19 W, 10/30	Continue Lecture on Chapter 10 **Lab exercise**	Ch. 10 The Chi-square Test and Measures of Association	Homework 10 (due on 11/5)
Class 20 M, 11/4	Review for Exam 3	Ch. 8-10	
Class 21 W, 11/6	**Exam 3**		
Class 22 M, 11/11	Review Exam 3 Lecture on Chapter 11	Ch. 11 Analysis of Variance	Homework 11 (due on 12/3)
Class 23 W, 11/13	Continue Lecture on Chapter 11 **Lab exercise**	Ch. 11 Analysis of Variance	
Class 24 M, 11/18	Lecture on Chapter 12	Ch. 12 Regression and Correlation	Homework 12 (due on 12/3) ***Paper due**
Class 25 W, 11/20	Continue to Lecture on Chapter 12 **Lab exercise**	Ch. 12 Regression and Correlation	
Class 26 M, 11/25	Continue to Lecture on Chapter 12	Ch. 12 Regression and Correlation Readings from CANVAS	Homework 13 (due on 12/3)
Class 27 W, 11/27	Happy Thanksgiving!		
Class 28 M, 12/2	Review for Exam 4		
Class 29 W, 12/4	**Exam 4**		
Class 30 M, 12/9	Review Exam 4 Wrap-up: Last Class Celebration & Evaluation		

X. BIBLIOGRAPHY

Frankfort-Nachmias, C., & Leon-Guerrero, A. (2018). *Social statistics for a diverse society (8th Ed)*. Thousand Oaks, CA: Sage Publications.

Van de Sande, A., & Byvelds, C. (2015). *Statistics for social justice: A structural perspective*. Halifax, NS: Fernwood Publishing.