

The University of Texas at Austin
School of Social Work
Quantitative Data Analysis I

Course Number: SW 388R	Faculty: Yuri Jang, Ph.D.
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Semester: Fall 2017	Office Phone: 512-471-1702
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I. Course Description

This course is designed to introduce students to fundamental concepts and statistical procedures used in social work research. It also introduces students to computer applications for data analysis and helps to develop basic skills in data file construction, management, and statistical analysis. The primary focus of the course is on developing a conceptual and mathematical understanding of statistics needed for advanced work in research design, model development, model fitting and estimation, hypothesis testing, multivariate techniques, and interpretation of data.

II. Course Objectives

By the end of the semester students will:

1. Develop basic proficiency with computer data analysis including construction of data files, SPSS for data analysis, and development of an analysis plan;
2. Understand fundamental concepts of statistical analysis;
3. Develop basic skills necessary to organize, present, and interpret data;
4. Develop the ability to evaluate and interpret the results of statistical analysis;
5. Understand the relationship between research design and statistical methods.

II. Teaching Methods

Course content will be covered using class lecture, focused discussions, computer demonstration, practice and weekly homework assignments. Students are expected to ask questions, share experiences, and actively participate in class discussions.

IV. Recommended Texts and Materials

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*, Seventh Edition. Pearson.

Tabachnick, B. & Fidell, L. (2012). *Using multivariate statistics*, Sixth Edition. Harper Collins College Division.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*, Third Edition. Lawrence Erlbaum.

Other reading materials will be posted on UT Canvas.

In addition, you will need access to SPSS. Your options include:

- Purchasing a copy of *SPSS Grad Pack* at the Campus Computer Store in the Flawn Academic Center
- Using SPSS in the Social Work Computer Lab in the Learning Resource Center

V. Course Requirements

Course requirements will consist of 10 homework assignments, measurement introduction activity, and two exams. In addition, regular class attendance is expected and students should come to class prepared to actively participate in the class.

10 Homework assignments (4 points each)	40 points
Measurement introduction	5 points
Midterm exam	25 points
Final exam	30 points

Final grades for this course will be assigned using the following 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

VI. Class 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 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://diversity.utexas.edu/disability/>.

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 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.

VII. Schedule

The following schedule is the weekly sequence of topics for the semester. The instructor reserves the right to make adjustments to the topic sequence if deemed necessary. Any changes will be made prior to the date of the class.

	Date	Topic	Homework Assignment	Measurement Introduction
1	08/30	Introduction		
2	09/06	Basics in data management	Homework 1	
3	09/13	Descriptive statistics	Homework 2	
4	09/20	Inferential statistics 1	Homework 3	
5	09/27	Inferential statistics 2	Homework 4	
6	10/04	Bivariate correlation	Homework 5	
7	10/11	Midterm exam		
8	10/18	Factor analysis	Homework 6	
9	10/25	Multiple regression 1	Homework 7	
10	11/01	Multiple regression 2	Homework 8	
11	11/08	Multiple regression 3	Homework 9	
12	11/15	Multiple regression 4	Homework 10	
13	11/22	No class_Thanksgiving Break		
14	11/29	Review session		
15	12/06	Final exam		