Intermediate Statistical Methods in Social Work
SOCW 6347
Course Outline and Syllabus
Fall 2017

Instructor: Courtney Cronley, PhD

Office Number: SOCW Building A208E

School of Social Work Telephone Number: 817-272-3181

Email Addresses: cronley@uta.edu

Faculty Profile: https://www.uta.edu/profiles/courtney-cronley

Office Hours: Tues. 2:00 PM – 3:30 PM; Thurs., 1:30 PM – 2:30 PM, or by appointment

Section Information: SOCW 6347

Time and Place of Class Meetings: Thursdays, 8:00 AM – 10:50 AM; SOCW Building A114

Description of Course Content:

This course is the first in a series of three statistics courses required for the Ph.D. degree in Social Work. The overall purpose is to enhance student's skills in performing research and statistical analyses in social science.

Student Learning Objectives:

1. To increase the student's understanding of the role of statistics in social work practice, theory construction, and policy formation;
2. To increase the student's ability to interpret, utilize and analyze statistical outcomes presented in empirical studies in social science;
3. To increase the ability of students to match appropriate statistical procedures to type of data, and research questions;
4. To increase the student's ability to perform univariate and bivariate statistical analyses using Statistical Package for the Social Sciences (SPSS) software; and
5. To increase the ability of students to interpret research outcomes based on their statistical results.

Required Textbooks and Other Course Materials:

- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics: And Sex and Drugs and Rock 'n Roll* (4th Ed.). Sage Publications, Ltd.: London.
- Calculator or Computing Software (e.g., Microsoft Excel)
- SPSS (student version, one-year license, available for a discount: http://www-03.ibm.com/software/products/en/spss-stats-gradpack)

Course Schedule and Outline

This focus of this class will be on the implementation, understanding, and interpretation of statistics used in social science research. SPSS will be demonstrated on many occasions in class, including an introductory overview, data manipulation and management. Students entirely unfamiliar with SPSS may consider consulting the following resource:

The Office of Information Technology at UTA offers an Introduction to SPSS course, free to UTA students at http://www.uta.edu/oit/cs/training/classes/statistics.php.

Descriptions of major assignments and examinations:

Weekly Quizzes: will cover the reading and class material for the preceding week. Students should complete the quizzes BEFORE coming to class the following week. For example, Quiz 1 will cover the material in Session 1 on Aug. 24. Students should complete the quiz before 8 AM on Aug. 31.

All quizzes will be available on Blackboard for seven (7) days. Once you access the quiz, though, you must complete it within one-hour (60 minutes). You cannot re-open the quiz after you have opened it once.

Weekly Homework: will be assigned at the end of each class and due at the beginning of the next class. For example, the homework for Session 2, on Aug. 31, will be due by Sept. 7 at 8 AM. Homework assignments will be available on Blackboard. Students will be responsible for downloading the assignments from Blackboard each week. Students will submit the assignments via Blackboard as a Word or SPSS document. Written copies of homework assignments will not be accepted, and no credit will be given for late assignments. Weekly assignments are pass/fail.

Final Exam: will be administered online on Nov. 16 from 8 AM – 12 PM. Students will complete the exam online on a computer with a reliable and high-speed Internet connection. If you cannot ensure such access, the instructor will provide access.

Attendance: As the instructor of this PhD-level course, I expect perfect attendance, and any student who misses more than (2) scheduled classes will receive an "F" in the class. In the event of extenuating circumstances, please notify me ahead of time to the degree possible.

Grading:

Weekly assignments	20%
Weekly quizzes	40%
Final Exam	40%

Grading Scale:
90 – 100 = A
80 – 89 = B
70 – 79 = C
60 – 69= D
< 60 = F

Session Date	Main Topics	Readings	Assignments Due
Session 1 Aug. 24	Introduction to Course Research Foundations for Statistics Writing Results	Review Field Ch. 1-4 Cumming (2014) Parker & Drummond (2006)	
Session 2 Aug. 31	Pre-screening data Missing data Sample Power	Field Ch. 5, The beast of bias Cohen (1992) Mayr, Buchner, Erdfelder, & Faul (2007) van der Heijden, Donders, Stijnen, & Moons (2006) Eekhout, de Boer, Twisk de Vet, & Heymans (2012) Saunders, Morrow-Howell, Spitznagel, Dore, Proctor, & Pescarino (2006)	Homework 1 Quiz 1
Session 3 Sept. 7	Measuring Associations	Field Ch. 7, Correlation Cleverly & Kidd (2011)	Homework 2 Quiz 2
Session 4 Sept. 14	Bivariate Linear Regression	Field Ch. 8, Regression (through p. 325, 8.1-8.4.4) Cronley, Cimino, Hohn, & Davis (2016)	Homework 3 Quiz 3
Session 5 Sept. 21	Bivariate Linear Regression, cont.	Field Ch. 8, Regression (through p. 325, 8.1-8.4.4)	Homework 4 Quiz 4
Session 6 Sept. 28	Comparing Two Means	Field Ch. 9, Comparing two means (GLM 1) Lander et al. (2015)	Homework 5 Quiz 5
Session 7 Oct. 5	Comparing Several Means	Field Ch. 11 Comparing several means: ANOVA (GLM 2) Nettles (1990)	Homework 6 Quiz 6
Session 8 Oct. 12	Analysis of Covariance, ANCOVA	Field 12 Analysis of Covariance: ANCOVA	Homework 7 Quiz 7
Session 9 Oct. 19	Factorial ANOVA: Testing hypotheses about three or more means	Field Ch. 13, Factorial ANOVA (GLM 3)	Homework 7 Quiz 7
Session 10 Oct. 26	Repeated-measures Designs	Field Ch. 14 Repeated-measures designs (GLM4) Bender et al. (2015)	Homework 8 Quiz 8
Session 11 Nov. 2	Categorical Data	Field Ch. 18, Categorical data Jordan, Everett, Ge, & McElroy (2015)	Homework 9 Quiz 9
Session 12 Nov. 9	Non-parametric Models Sample Power	Field Ch. 6, Non-parametric models Tsai, Link, Rosenheck, &	Homework 10 Quiz 10

Session 13 Nov. 16	Final Exam Review	Homework 11 Quiz 11
	NO CLASS - THANKSGIVING	
Session 14 Nov. 30	Final Exam	
Session 15 Dec. 7	Individual meetings upon request	

Please note: The class schedule may change based on needs of the class.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA),* and *Section 504 of the Rehabilitation Act.* All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of **a letter certified** by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD), www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

Counseling and Psychological Services, (CAPS)   www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.*

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with

Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit* www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

> *I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at https://www.uta.edu/conduct/.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

Student Feedback Survey: At the end of each term, students enrolled in face-to-face and online classes categorized as "lecture," "seminar," or "laboratory" are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback via the SFS database is aggregated with that of other students enrolled in the course. Students' anonymity will be protected to the extent that the law allows. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit http://www.uta.edu/sfs.

Final Review Week: for semester-long courses**,** a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week,

there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located at the end of the hallway on the south side of the building. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Student Support Services Available: The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 or resources@uta.edu for more information and appropriate referrals. You can also visit the website, www.uta.edu/resources.

References

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