UNIVERSITY of **HOUSTON**
GRADUATE COLLEGE of SOCIAL WORK

COURSE TITLE/SECTION: SOCW 8397/24142 – Selected Topics in Data Software and Analysis

TIME: M 9:00-11:45

FACULTY: Kristin Cotter Mena, PhD

OFFICE HOURS: Monday 11:45 or by appointment (schedule during class if staying to talk)

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I. **Course**

   A. **Catalog Description**
   Credit (3.0). Pre-requisite: SOCW 8425
   This course will focus on how to utilize SPSS computer software for research in social work and social sciences

   B. **Purpose**
   This course will offer an applied approach to research design and data analysis in social science research. Specifically, students will *work hands on* with statistical software and data sets, progressing from initial data cleaning/coding to final analysis and reporting.

II. **Course Objectives**
   Upon completion of this course, students will be able to:

   1. Demonstrate competency in using statistical software programs (i.e., SPSS) in social science research.
   2. Understand the relationship between study design, measurement instruments, code books, and data analysis.
   3. Setup databases, enter or import data into statistical software programs, and export data to other software programs.
   4. Independently conduct statistical analyses, from data cleaning to final analysis.
   5. Interpret output and present written results.
   6. Integrate output and data with presentation software (e.g., Excel, PowerPoint).

III. **Course Content**
   This course will introduce students to utilizing multiple software programs (SPSS, MS Access and MS Excel) in order to structure and clean data sets. Data sets and their origins, structure, content and utilization will be discussed. Students will gain an understanding and confidence regarding how to handle

raw data sets, how to construct data sets, how to clean data and how to best analyze data.

IV.   Course Structure
This course will consist of lectures, applied assignments, multimedia demonstrations, and in-class activities. All students are expected to participate and contribute to all course activities to gain the full impact of the material presented.

V.   Textbooks

Required Texts/Software

Microsoft (2016). Microsoft Office Professional (including Powerpoint, Excel and Access).

Field, A. (2013). Discovering Statistics Using IBM SPSS Statistics (4th ed.). Sage Publications

SPSS, Inc. (2016). SPSS 23 for windows graduate pack version, Version 23. Chicago, IL: (IBM) (or the latest version)**See me if you have another version.

Tabachnick. B.G. & Fidell. L. S. (2012). Using multivariate statistics (6th edition), Pearson

Recommended Texts
HIGHLY Suggested if you do not have something like it:

Grimm, L., & Yarnold, P. (Eds.). (1995). Reading and understanding multivariate statistics. Washington, D.C.: American Psychological Association.

Grimm, L., & Yarnold, P. (Eds.). (2000). Reading and understanding more multivariate statistics. Washington, D.C.: American Psychological Association.

Nicol, A. And Pexman, P. (1999). Presenting your findings: A practical guide for creating tables. Washington, D.C.: American Psychological Association.

Shadish, W., Cook, T., & Campbell, D. (2001). Experimental and Quasi-experimental Designs for Generalized Causal Inference (2nd Ed). Cengage.

Suggested (more up to date versions may be available, these are the classics):

American Psychological Association. (2001). Publication manual of the American Psychological Association (5th ed.). Washington, DC: Author.

Allison, Paul D. (1999). <u>Multiple regression: A primer.</u> Thousand Oaks, CA: Pine Forge Press.

Beck-Lewis, Michael S. (1980). <u>Applied regression: An introduction.</u> Beverly Hills, CA: Sage Publications.

Berry, William D. & Feldman, Stanley (1985). <u>Multiple regression in practice.</u> Beverly Hills, CA: Sage Publications.

Bray, James H. & Maxwell, Scott E. (1985). <u>Multivariate analysis of variance.</u> Beverly Hills, CA: Sage Publications.

Iversen, Gudmund R. & Norpoth, Helmut (1976). <u>Analysis of variance.</u> Beverly Hills, CA: Sage Publications.

Wildt, Albert R. & Ahtola, Olli T. (1978). <u>Analysis of covariance.</u> Beverly Hills, CA: Sage Publications.

**There are many introductory type books for Excel and Access. I find the HELP function in the programs, as well as online blogs to be the most help!!

VI. Course Requirements

	Assignment	Due Date	Points
#1	Getting your feet wet: Excel	2/6/2017	10
#2	Jumping in: Access	2/20/2017	10
#3	Discover and describe: Your Data	2/27/2017	10
#4	Hopping on: SPSS	3/6/2017	10
#5	Imagine It: Propose your project	3/20/2017, rewrite due 4/3/2017 if applicable	10
#6	The Real Deal: Final Project	4/24/2017	50

VII. Evaluation and Grading

The following standard grading scale has been adopted for all courses taught in the college.

A = 96-100% of the points   C+ = 76-79.9%
A- = 92-95.9%   C = 72-75.9%
B+= 88-91.9%   C- = 68-71.9%
B = 84-87.9%   D = 64-67.9%
B- = 80-83.9%   F = Below 64%

VIII. Policy on grades of I (Incomplete):

The grade of "I" (Incomplete) is a conditional and temporary grade given when students are either **(a)** passing a course or **(b)** still have a reasonable chance of passing in the judgment of the instructor but, for non-academic reasons beyond their control have not completed a relatively small part of all requirements. Students are responsible for informing the instructor immediately of the reasons for not submitting an assignment on time or not taking an examination. Students must contact the instructor of the course in which they receive an "I" grade to make arrangements to complete the course requirements. Students should be instructed not to re-register for the same course in a following semester in order to complete the incomplete requirements.

The grade of "I" must be changed by fulfillment of course requirements within one year of the date awarded or it will be changed automatically to an "F" (or to a "U" [Unsatisfactory] in S/U graded courses). The instructor may require a time period of less than one year to fulfill course requirements, and the grade may be changed by the instructor at any time to reflect work completed in the course. The grade of "I" may not be changed to a grade of **W**.

IX. Policy on academic dishonesty and plagiarism

Please click the link below for the full explanation of the Academic Honesty policy and procedure
Policy: http://www.uh.edu/provost/policies/honesty/_documents-honesty/academic-honesty-policy.pdf
Definitions:

"Academic dishonesty" means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at the University of Houston or by a course instructor to fulfill any and all academic requirements. Academic dishonesty includes but is not limited to, the following:

Plagiarism
   a. Representing as one's own work the work of another without acknowledging the source (plagiarism). Plagiarism includes copying verbatim text from the literature, whether printed or electronic, in all assignments including field.

Cheating and Unauthorized Group Work
   b. Openly cheating in an examination, as copying from another's paper; c. Being able to view during an examination, quiz or any in-class assignment an electronic device that allows communication with another person, access to unauthorized material, access to the internet, or the ability to capture an image, unless expressly permitted by the instructor;
   d. Using and/or possessing "crib notes," as unauthorized use of notes or the like to aid in answering questions during an examination;

e. Giving or receiving unauthorized aid during an examination, such as trading examinations, whispering answers, and passing notes, and using electronic devices to transmit or receive information;

f. Securing another to take a test in the student's place. Both the student taking the test for another and the student registered in the course are at fault;

Fabrication, Falsification, and Misrepresentation

g. Changing answers or grades on a test that has been returned to a student in an attempt to claim instructor error;

h. Using another's laboratory results as one's own, whether with or without the permission of the owner;

i. Falsifying results in laboratory experiments;

j. Misrepresenting academic records or achievements as they pertain to course prerequisites or corequisites for the purpose of enrolling or remaining in a course for which one is not eligible;

k. Representing oneself as a person who has earned a degree without having earned that particular degree

Stealing and Abuse of Academic Materials

l. Stealing, as theft of tests or grade books, from faculty offices or elsewhere, or knowingly using stolen tests or materials in satisfaction of exams, papers, or other assignments; this includes the removal of items posted for use by the students;

m. Mutilating or stealing library materimaterials; misshelving materials with the intent to reduce accessibility to other students;

Complicity in Academic Dishonesty

n. Failing to report to the instructor or departmental hearing officer an incident which the student believes to be a violation of the academic honesty policy;

Academic Misconduct

o. Any other conduct which a reasonable person in the same or similar circumstances would recognize as dishonest or improper in an academic setting.

Process:

Students shall have the responsibility of reporting incidents of alleged academic dishonesty to the instructor of record involved or to the appropriate authority if the alleged act is not associated with a specific class within 5 class days of the incident. Faculty or instructor of record shall have the responsibility of reporting incidents of alleged academic dishonesty through their college hearing officer within 5 class days of the incident. The faculty should include the recommended sanction in the report. The college hearing officer will notify the student of the report and recommended sanction. The student can accept the sanction and waive a hearing or request a college hearing. A hearing shall be set within 10 days and would be consist of two faculty and three students chosen by the hearing officer.

X.   Course Schedule and Reading Assignments

Date	Topics***	Assignment progress	Fields	T&F
23-Jan	Review Syllabus, Data types, data and reality, review topics		Ch 1-3	Ch 1-4
30-Jan	Setting Up data sets, entering, importing data sets; Relational Data, using Microsoft Suite	Look for your data set; Review T&F Ch 17 (will look at this over the course of the semester	Ch 1-3	Ch 1-4 and 17
6-Feb	Data Dictionary and Code Books, Missing data, data errors, More on Excel and Access	Assignment 1 Due; T&F Appendix B	Ch 1-3	Ch 1-4 and 17 and Appendix B
13-Feb	Review of Univariate and Bivariate Statistics; Issues in Statistical Assumptions, Data in SPSS, frequencies, discriptives, means, chi-square, correlation		4	17
20-Feb	Regression I and SPSS	Assignment 2 DUE	5	5
27-Feb	Regression II and SPSS	Assignment 3 DUE	6	12
6-Mar	Comparing Means, Intro to ANOVA and SPSS	Assignment 4 is DUE	7 browse 8	4 & 15
13-Mar	No Class: Spring Break			
20-Mar	ANOVA and ANCOVA and SPSS	Assignment 5 is DUE	9	15
27-Mar	Factorial ANOVA, Repeated Measures GLM, Mixed Designs in SPSS		10	
3-Apr	Factorial ANOVA, Repeated Measures GLM, Mixed Designs in SPSS	Re-write of Assignment 5 DUE	11 & 12	
10-Apr	No Class: Work on your data			
17-Apr	Non Parametric Design		13	
24-Apr	Qualitative (will fit in when guest can come)	Assignment 6 DUE		
1-May				

** Topics may be adjusted after spring break depending upon student interests

XI.   Americans with Disabilities Statement

The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students with a disability. In accordance with Section 504 and ADA guidelines, each University within the System strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact the UH Center for Disabilities at 713-743-5400.

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