Course Number & Title: SW 441 – Data Analysis for Social Workers

Instructor:

Contact Information:

Office Hours:

Day & Time:

Credits: 3 credits

Pre-Requisites SW 440 – Introduction to Social Work Research

Course Description: Concepts, principles, and procedures used in performing analyses of data collected in social work research, including an orientation to computer assisted data analyses.

This course introduces students to the concepts, principles, and procedures social work researchers and practitioners use to analyze, interpret, and present data. Emphasis is placed on developing the knowledge, values, and skills needed to analyze and interpret one’s own research data and to critically evaluate the research findings of others. Instruction in computer-assisted quantitative (SPSS) and qualitative (Microsoft Word) data analyses and presentation (PowerPoint) approaches is provided. Also included are data analysis concepts, practices, and principles as they apply to grant writing and program evaluation used in many social service agencies.

Course Linkages:
This is the second in a two course research sequence incorporated within the BSW curriculum. Building on the perspectives, concepts and skills presented in SW 440, SW 441 instructs students in both quantitative and qualitative data analyses and presentation strategies.

Relevant BSW Program Objectives:

- Apply critical thinking within the context of professional social work practice.
- Understand the value base of the profession and its ethical standards and principles and practice accordingly.
- Interact with clients and colleagues without discrimination and with respect, knowledge and skills related to age, class, color, culture, disability, ethnicity, family structure, gender, marital status, national origin, race, religion, sex, and sexual orientation.
- Understand the forms and mechanisms of oppression and discrimination as well as strategies of advocacy and social change that advance social and economic justice.
- Apply the knowledge and skills of generalist social work practice with systems of all sizes.
- Demonstrate a beginning knowledge of research as a social work practice tool.

Key BSW (Foundation) Program Competencies

2.1.1 Identify as a professional social worker and conduct oneself accordingly
2.1.2 Apply social work ethical principles to guide professional practice
2.1.3 Apply critical thinking to inform and communicate professional judgment
2.1.4 Engage diversity and difference in practice
2.1.5 Advance human rights and social and economic justice
2.1.6 Engage in research informed practice & practice informed research

Course Objectives/
Educational Outcomes: In successfully completing this course, students will be able to:

441.1 Articulate how data are used to inform social work practice, program, and policy decisions as evidenced by weekly assignments.
441.2 Articulate and address the ethical concerns confronted when conducting data analyses as evidenced by weekly assignments throughout the course.
441.3 Articulate how social structural, political, and cultural factors influence the collection, analysis, presentation, and interpretation of data, as evidenced by assignments #8 & 9, where data is presented, analyzed and interpreted.
441.4 Select appropriate data analysis strategies as measured by the quality of the mid-term and final exam question.
441.5 Analyze the role of data in eradicating, maintaining, and/or establishing structural oppression and inequality, as evidenced by weekly assignments.
441.6 Identify issues of power impacting the funding conceptualization and use of data.
441.7 Evaluate the effectiveness of practice interventions
441.8 Prepare data for analysis.
441.9 Use computer programs to assist in conducting basic data analyses.
441.10 Read, prepare, and interpret tables and graphs.
441.11 Interpret basic statistical tests of association & difference.
441.12 Apply thematic & content analyses approaches to analyze and interpret qualitative data.
441.13 Use empirically valid data (including practice experiences) to identify research questions relevant to practice.
441.14 Evaluate yours and others’ interventions.

Course Objectives

441.1 Assess & evaluate effectiveness of interventions in practice.
441.2 Articulate & address the ethical concerns confronted when conducting statistical analyses.
441.3 Select & conduct appropriate data analyses strategies.
441.4 Articulate how social, political, & cultural factors influence the collection, analysis, presentation, and interpretation of data.
441.5 Analyze the role of research in eradicating, maintaining, and/or establishing structural oppression & inequality.
441.6 Identify issues of power impacting the funding, conceptualization, & use of research.
441.7 Articulate how data can be used to inform social work practice, program, and policy decisions.
441.8 Prepare data for analysis and perform basic statistical tests.
441.9 Read, prepare, & interpret tables and graphs.
441.10 Interpret basic statistical tests of association & difference.
441.11 Use computer programs to conduct statistical procedures.
441.13 Interpret & evaluate analysis methods used in published empirical reports.

Required Textbooks:


*Listed on the Weekly Schedule for assigned readings as “W&G”

In addition, selected journal articles will be used throughout the semester. These materials are available on the WebCampus site for this course, under E-reserves tab.

Instruction Model

Lecture / discussions, and classroom activities will be used to clarify and augment the ideas introduced through the assigned readings. Students will be working with large and small data sets to learn the basics of data analysis from a hands-on perspective.

School of Social Work Attendance Policy:

Students are responsible for assisting in the creation of a learning environment that promotes professional socialization. To do so, students should assume responsibility for their own learning by being prepared for and participating in class-related activities, and by consulting with the instructor outside of class, as appropriate. Opportunities for make-up assignments will be determined at the discretion of the course instructor.

Additional Support:

The School of Social Work supports providing equal access for students with disabilities. If you have a disability and will be requiring accommodations, please contact me or UNR’s Disability Resource Center as soon as possible to arrange for appropriate accommodations. The Disability Resource Center is located in the Thomson Building, Suite 101 or can be reached by phone at 775.784-6000.

Homework Policies:

Timely submission of homework is particularly important given the cumulative nature of the subject matter. Please note that *late assignments will be accepted only at the discretion of the instructor,*
and if accepted, will be penalized by half a grade per day, unless the instructor approves alternative arrangements in advance.

Assignments & Points:

Lab assignments (10) (5 pts each) . . . . . . . 50 pts
Mid-Course Exam . . . . . . . . . . . . . . . . . . . . . . . . . 25 pts
Final Exam . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25 pts

TOTAL = 100 pts

Ten Assignments, worth 5 pts each. Please put them together into a portfolio and turn in weekly, as well as the full assortment of assignments at the end of the semester with corrections:

**Assignment #1:** Analyze a Journal Article; Build on Lit Review from SW 440
**Assignment #2:** Create data set & Analyze the classroom data
**Assignment #3:** Single Subject Design
**Assignment #4:** Analyze an Agency data set
**Assignment #5:** Analyze an National data set
**Assignment #6:** Use of the Logic Model in Evaluating Programs
**Assignment #7:** Use of Qualitative Data in Evaluating Programs
**Assignment #8:** Using data to support a grant proposal
**Assignment #9:** Presentation of Data – Creating graphs & charts
**Assignment #10:** Analyze a Journal Article

Grading Rubrics for Assignments:
Mid-Course Exam: This exam is worth a total of 25 points, and the format will be as follows:

Part 1: 5 questions – Overview of Statistics & Mis-use of Data (1 pt each = 5 pts)
Part 2: 1 essay question – Improving Client Outcomes: SSD (5 pts)
Part 3: 1 essay question – Working with Agency Data (5 pts)
Part 4: 1 essay questions – Working with National Data (5 pts)
Part 5: Evaluate a journal article using course concepts (5 pts)

Final Exam: This exam is worth a total of 25 points, and the format will be as follows:

Part 1: 5 questions – Use of statistical tests for different purposes (1 pt each = 5 pts)
Part 2: 1 essay question – Program Evaluation data (5 pts)
Part 3: 1 short essay question – Using data for grants (5 pts)
Part 4: 5 questions – Displaying data (1 pt each = 5 pts)
Part 5: Evaluate a journal article using course concepts (5 pts)

Grading Scale (total possible course points = 100):

A = 95 -100 pts  c- = 70 – 72 pts
A- = 90 - 94 pts  D+ = 67 - 69 pts
B+ = 87 - 89 pts  D = 63 – 66 pts
B = 83 - 86 pts  D- = 60 – 62 pts
B- = 80 - 82 pts  F = Below 60 pts
C+ = 77 - 79 pts
C = 73 -76 pts
# SAMPLE COURSE CALENDAR

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATES</th>
<th>LEARNING MODULES / TOPICS</th>
<th>READING ASSIGNMENTS</th>
<th>ITEMS DUE</th>
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| WK 1: | Feb 1   | * Course Introduction: Using Data to Be Informed  
* What’s the Question? (Overview of statistics; Qualitative and Quantitative data analysis) | * W&G – Chapter 1: Uses of Statistics **  
*W&G – Chapter 5: Hypothesis Testing ** | *Take 3 scales                |
|       | No LAB  | **                                                                                      |                              |                                               |
| WK 2: | Feb 8   | How to Read Journal Articles From Start to Finish                                        | Journal Articles             | Assign #1: Analyze a Journal Article; Build on Lit Review from SW 440 |
|       | LAB     | Obtain instruction in Lab about Data sets, Excel, SPSS                                    |                              |                                               |
| WK 3: | Feb 15  | Bad Data: Misuse, Misrepresentation, and Misunderstanding                                 | Journal Articles             | Assign #2: Create data set & Analyze the classroom data |
|       | LAB     | Analyze the classroom data                                                               |                              |                                               |
| WK 4: | Feb 22  | Using Data to Improve Client Outcomes: Single System Designs                              | *W&G – Chapter 12, p 259-265  
**W&G – Chapter 11 p. 265 - 273 Journal Article: SSD |                                               |
|       | LAB     | Create data set using SSD data                                                           |                              | *Assign #3: Single Subject Design              |
| WK 5: | Mar 1   | Understanding Clients Served: Working with Agency Data                                    | *W&G – Chapter 10  
**W&G – Chapter 8: The Chi-Square Test | *Assign #4: Analyze an |
<p>|       | LAB     | Analyze an agency data set                                                               |                              |                                               |</p>
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| WK 6: | Mar 8 | Understanding Clients Served: Using National Data & Evidence-Based Practices | *W&G – Chapter 8  
*W&G – Chapter 11  
**W&G – Chapter 9: Correlation  
**W&G – Chapter 7: t-Test & ANOVA | agency data set |
| | | *Extra Credit: Culture Conference Feb 25 & 26 | | |
| | LAB | Analyze a national data set | | *Assign #5: Analyze a National data set |
| Wk 7: | Mar 15 | Mid-Course Exam (on-line) – no physical class | | |
| | No LAB | | | |
| | | | | **Spring Break March: 18 – 24** |
| WK 8: | Mar 29 | Using Data to Evaluate Programs: The Logic Model (Part 1) | *W&G – Chapter 9  
**W&G – Chapter 10 Regression Analyses Journal Article: EBP | Assign #6: Use of the Logic Model in Evaluating Programs |
| | No LAB | | | |
| | | | | Assign #7: Use of Qualitative Data in Evaluating Programs |
| WK 9: | April 5 | Using Data to Evaluate Programs (Part 2) | *W&G – Chapter 12: p. 253-258  
**W&G – Chapter 11: p. 258 - 264 Report: Circles Initiative | |
| | No LAB | | | |
## All Schools Day: April 12 (9:00 – 3:30) – no class, but must attend the event

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<tr>
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<tbody>
<tr>
<td>WK 10:</td>
<td>Apr 19</td>
<td>Working with Data to Support a Grant Proposal</td>
<td>Journal Article / Grant Example</td>
<td><strong>Assign #8</strong>: Using data to support a grant proposal</td>
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<td>LAB Working with data to support a grant proposal</td>
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<td>WK 11:</td>
<td>Apr 26</td>
<td>How to Get Your Message Across</td>
<td><em>W&amp;G – Chapter 2: Frequency Distributions &amp; Graphs</em>*</td>
<td>Assign #9: Presentation of Data – Creating graphs &amp; charts</td>
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<td>LAB Presenting Data to Inform</td>
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<tr>
<td>WK 12:</td>
<td>May 3</td>
<td>How to Read Journal Articles From Start to Finish</td>
<td>Journal Articles</td>
<td>Assign #10: Analyze a Journal Article</td>
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<td>No LAB Review for the Final Exam</td>
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**Final Exam: May 6 – 12**

* W&G = Weinbach & Grinnell text (7th ed)
** W&G = Weinbach & Grinnell text (8th ed)

Assignments (10) (5 pts each) = 50
Mid-term = 25
Final Exam = 25
Selected Bibliography

**Data Analysis**


Assignment #1: Analyze a Journal Article; Build on Lit Review from SW 440

For this assignment, students need to refer back to their Literature Review project from SW 440 (last semester). Students will use the work they did last semester to fully understand how journal articles can better inform their literature reviews, when they understand the data analysis as well.

Steps:
1) Re-read your Literature Review assignment from SW 440
2) Select a new journal article (from a peer-reviewed journal) – not used in your previous literature review.
3) Use the classroom material to analyze the new journal article, including the statistical analysis.
4) In a 1-2 page writing, write about how the results of this new article inform your prior work on your literature review:
   a. Identify the statistics being used
   b. Identify the results indicated by these statistics
   c. Identify how these statistics support or detract support from your Literature Review findings
5) Include your Portfolio for Assignment #1:
   a. Your Literature Review from SW 440
   b. Your new journal article
   c. Your 1-2 page write-up as stated in (4) above
6) You will get feedback, and this feedback should be used to correct any discrepancies for your final submission of your portfolio at the end of the course.
Assignment #2: Create data set & Analyze the classroom data

For this assignment, students will take the three Death and Dying Scales, along with the demographic data information sheet. (This will be done in the first class session). The scales are:
1) Demographic data
2) Death Anxiety Questionnaire (Conte, Weiner, & Plutchik, 1982)
3) The Collett-Lester Fear of Death (Collett & Lester, 1990)
4) Lemming Fear of Death Scale (Lemming)

Students will take the data and do the following:

1) Create a code book for the questionnaires and demographic data
2) Create a data base in SPSS or Excel, to include all the data, coded for analysis
2) Determine a research question of interest based on the data collected
3) Determine a data analytic strategy to answer the question
4) Perform descriptive statistics
5) Perform the appropriate statistical test to answer the research question established.

Students should turn in the following to their portfolio:

1) the code book
2) the coded data set (in Excel or SPSS)
3) the research question
4) an outline of the data analytic strategy
5) the descriptive statistics
6) the results of the chosen statistical test
7) a written analysis of what the results indicate

Students will get feedback and can correct their work if needed for the final submission of their portfolio at the end of the course.
Assignment #3: Single Subject Design
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