



COURSE TITLE/SECTION: SOWC 8322/14632 Quantitative Methods

TIME: Mondays 9:00 -12:00pm, Room 425

FACULTY: Dr. Patrick Bordnick

OFFICE HOURS: W: 1-2 or by appt.

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I. Course

A. Catalog Description

Prerequisite: SOCW 8300, 8301, 8302, and 8303 or consent of instructor. Examines selected approaches to measurement in clinical research emphasizing psychometric issues related to reliability and validity.

B. Purpose

This course will examine selected approaches to research design, measurement and analysis in clinical research. In addition to understanding research design, instrument theory, construction, and evaluation will be emphasized and statistical techniques for reliability, validity and factor analysis will be presented.

II. Course Objectives

Upon completion of this course, students will be able to demonstrate the following competencies:

1. understand research design and measurement theory and its application to clinical research;
2. distinguish the best use of measurement and statistical tests for use in research studies with individuals and groups;
3. demonstrate the ability to perform tests of reliability and validity of measurement instruments;
4. evaluate the strengths and limitations of a variety of types of research designs;
5. evaluate the use of instruments and research methodology in the social work literature; and
6. understand issues of culturally diverse groups in relationship to instrumentation construction, measurement and design.

III. 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.

IV. Textbooks

Research Methods for Social Work, 8th Edition

ISBN-10: 1285173465 **ISBN-13:** 978-1285173467

V. Course Requirements

Proposed Schedule

Date	Class	Chapters/Readings
January 26	1	<p>Class overview, Assignments, requirements</p> <p>Why do Research?</p>
February 2	<p>2 *** (begin articles)</p>	<p>Rubin & Babbie, Chapters 1-2</p> <p>Scientific Inquiry</p> <p>Book Chapter: Thyer, B. A. (1997) <i>Controversial Issues in Social Work Practice</i>. Boston: MA. Allyn & Bacon, Preface and Forward.</p> <p>Grant: Ideas</p>
February 9	3	<p>Rubin & Babbie Chapters 3, 4, & 5</p> <p>Ethics, Cultural context of Research</p> <p>Journal Article Myers, L.L. & Thyer, B.A. (1997). Should social work clients have the right to effective treatment? <u><i>Social Work</i></u>, <u>42</u>, 288-298</p> <p><u>Video and Discussion</u></p>
February 16	4	<p>Rubin & Babbie Chapter 6</p> <p>Problem Formulation, literature review</p>

		<p>Literature review resources:</p> <p>https://owl.english.purdue.edu/owl/resource/666/01/</p> <p>http://psych.ku.edu/dennisk/How%20to%20Write%20a%20Paper%20for%20the%20Social%20Sciences.pdf</p> <p><u>Galvan, J. L. (2012). Writing literature reviews: A guide for students of the social and behavioral sciences. Pyczak Publishing, pages 186.</u></p> <p><u>Grant: Background & Significance</u></p>
0-February 23	5	<p>Rubin & Babbie, Chapter 7</p> <p>Conceptualizations, variables, operational definitions</p> <p>Assessment instruments and computer based assessment tools</p> <p><u>Grant: Specific Aims</u> <u>Methods</u></p>
March 2	6	<p>Rubin & Babbie, Chapter 8</p> <p>Measurement</p> <p>Journal Article King, M. E. & Bordnick, P. S. (2001). Alcohol use: A social workers guide to clinical assessment.</p>
March 9	7*** (Lit Review)	<p>Rubin & Babbie, Chapter 9</p> <p>Instrumentation</p> <p><u>Grant: Measures & Assessment</u></p>
March 16-20	Spring Break	
March 23	9	<p>Rubin & Babbie Chapter 10</p> <p>Research Designs Overview</p> <p><u>Grant: Research Design I</u></p>

March 30	10	Rubin & Babbie Chapter 11 Quasi-experimental research designs
April 6	11*** (Research Questions/Specific Aims Due)	Rubin & Babbie Chapters 12 & 13 Single system designs
April 13	12	Rubin & Babbie Chapter 20 Analysis of Quantitative Data <u>Grant: Research Design II</u>
April 20	13	Rubin & Babbie Chapter 23 Publishing your findings and writing research proposals
April 27	Presentations	Student presentations
May 4	Last day of classes	Student presentations

****Some material may be added or modified based on class interests and learning style.**

VI. Evaluation and Grading

Assignments

There will be 5 assignments for this course. Handouts will be provided detailing specific tasks for each assignment.

1. Present a research article to class and lead discussion 20 minutes maximum.
2. Select a research topic of interest and develop a 3-5 page (10-15 Journal

articles) annotated literature review.

3. Develop 3-6 research questions or specific aims page based on your topic.
4. Research presentations should be 20 minutes in length. Presentation materials (i.e. slides, etc.) will only be accepted in hard copy format (no email versions or faxes). Students are encouraged to create a backup copy of their presentation. Presentations are to be proof read including grammar & spell check prior to class presentation and submission. Presentations with excessive errors will not be accepted.
5. In addition to the assignments, students are expected to review the material in the textbook chapters, present a summary, and be prepared for class discussion.

Grading

<u>Grading</u>	<u>Points</u>
Research article	10
SSRD Graph	10
Literature review Assignment	25
Final Presentation	45
Attendance/Participation/	10
<hr/> Total	<hr/> 100

Determination of Grade

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%

VII. Attendance

Students are expected to attend the full length of each class session, to be familiar with that week's assigned readings, and to be prepared to constructively contribute to class discussion. More than 2 absences will result in lowering your

end of term grade (A to B, B to C, etc.).

VIII. Bibliography

ONLINE Resources:

Evaluation Resources <http://gsociology.icaap.org/methods/>

Community Assessment: <http://guide.helpingamericasyouth.gov/assessment.htm>

Community health: <http://www.cdc.gov/nccdphp/dach/>

WHO Clinical Assessment for Psychopathology <http://gdp.ggz.edu/scandocs/>

Assessment tools <http://www.compactclinicals.com/>

PTSD Assessment <http://www.ncptsd.va.gov/ncmain/assessment/>

Cultural Competence http://www.hogg.utexas.edu/programs_cai_tools.html

NIAAA – Assessing Alcohol Problems – PDF
<http://pubs.niaaa.nih.gov/publications/Assesing%20Alcohol/index.htm>

Geriatric Assessment Wizard <http://www.contextio.com/Info%20GAW.htm>

Drug and Alcohol Assessment Tools <http://lib.adai.washington.edu/instruments/>

IX. 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**.

X. Policy on academic dishonesty and plagiarism

Students are expected to demonstrate and maintain a professional standard of writing in all courses, do one's own work, give credit for the ideas of others, and provide proper citation of source materials. Any student who plagiarizes any part of a paper or assignment or engages in any form of academic dishonesty will receive an "I" for the class with a recommendation that a grade of F be assigned, subsequent to a College hearing, in accordance with the University policy on academic dishonesty. Other actions may also be recommended and/or taken by the College to suspend or expel a student who engages in academic dishonesty.

All papers and written assignments must be fully and properly referenced using APA style format (or as approved by the instructor), with credit given to the authors whose ideas you have used. If you are using direct quotes from a specific author (or authors), you must set the quote in quotation marks or use an indented quotation form. For all direct quotes, you must include the page number(s) in your text or references. Any time that you use more than four or five consecutive words taken from another author, you must clearly indicate that this is a direct quotation. Please consult the current APA manual for further information.

Academic dishonesty includes using any other person's work and representing it as your own. This includes (but is not limited to) using graded papers from students who have previously taken this course as the basis for your work. It also includes, but is not limited to submitting the same paper to more than one class. If you have any specific questions about plagiarism or academic dishonesty, please raise these questions in class or make an appointment to see instructor. This statement is consistent with the University Policy on Academic Dishonesty that can be found in your UH Student Handbook.

- XI. Addendum:** Whenever possible, and in accordance with 504/ADA guidelines, the University of Houston will attempt to provide reasonable academic accommodations to students who request and require them. Please call 713-743-5400 for more assistance.

Research Presentation

Research presentations should be 20 minutes in length. Presentation materials (i.e. slides, etc.) will only be accepted in hard copy format (no email versions or faxes). Students are encouraged to create a backup copy of their presentation. Presentations are to be proof read including grammar & spell check prior to class presentation and submission. Presentations with excessive errors will not be accepted.

Presentation instructions

Final presentation and submission of materials. All students are required to turn in a printout of the PowerPoint presentation. Materials turned in late will not be accepted or graded. The presentation materials (slides) are to be submitted after your final presentation.

Presentations will be in PowerPoint format. Presentations will not be accepted in other formats other than the above unless approved by the instructor.

Presentation format & Sections:

Presentation Sections:

Literature Review: Summary of current knowledge and research.

Hypothesis: Describe your hypothesis and purpose of research (why is this significant to SW practice).

Methods: Describe what you measured including the measurement instrument/s, and the intervention utilized. Discuss the psychometric properties of the instruments/s. Describe the intervention/treatment program.

Procedures: Describe how you measured the problem and delivered intervention/treatment. Describe: Time intervals, administration procedures, training, and any other events that occurred.

Results: Describe how you summarized and analyzed your data. Include graphs, charts, and or tables.

Interpretation/Discussion: Describe what you measured and what was found. List **any limitations** of what you did. **Summarize conclusions** based on what you found. Describe any positive or negative experiences, and **how to improve** your methods in the future.

References: APA format

Tables, Graphs and References: APA format. References for presentation can be submitted as a PowerPoint slide or in a word processor format. .

Materials to be handed in with presentation include:

- 1. Printout of slide presentation from PowerPoint**
- 2. References as a slide or word processor format**