COURSE TITLE/SECTION: SOWC 8322/15092 Quantitative Methods

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

**FACULTY: Dr. Patrick Bordnick OFFICE HOURS:** M: 2:30-4 or by apt.

E-mail: Bordnick@uh.edu (Best way to reach me) Phone: 713-743 2086

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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;
- 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.

## 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

Research Methods for Social Work, 7th Edition ISBN-10: 0495811718 ISBN-13: 9780495811718

# VI Course Requirements Proposed Schedule\*\*

Date Class Chapters/Readings

January 14	1	Class overview, Assignments, requirements Why do Research?
January 28	2	Rubin & Babbie, Chapter 1-2  Book Chapter: Thyer, B. A. (1997) Controversial Issues in Social Work Practice. Boston: MA. Allyn & Bacon, Preface and Forward.
February 4	3 ***	Rubin & Babbie Ch 3, 4, & 5  Journal Article Myers, L.L. & Thyer, B.A. (1997). Should social work clients have the right to effective treatment? Social Work, 42, 288-298  Video and Discussion
February 11	4	Rubin & Babbie Ch 6 Problem Formulation

February 18	5	Rubin & Babbie, Ch 7  VAS scales, Basis -32 Assessment instruments
February 25	6	Rubin & Babbie, Ch 8  Measurement  Journal Article  King, M. E. & Bordnick, P. S. (2001). Alcohol use: A social workers guide to clinical assessment.
March 4	<b>7</b> ***	Rubin & Babbie, Ch 9 Instrumentation
March 11 – 15	Spring Break	
March 18	9	Rubin & Babbie Ch. 10  Research Designs Overview
March 25	10	Rubin & Babbie Ch. 11  Quasi-experimental research designs
April 1	11	Rubin & Babbie Ch. 12 Single system designs
April 8	12	Rubin & Babbie Ch. 20

		Analysis of Quantitative Data
April 15	13	Rubin & Babbie Ch. 23
		Publishing your findings and writing research proposals
April 22	Presentations	Student presentations
April 29	Last day of classes	Student presentations

<sup>\*\*</sup>Some material may be added or modified based on class interests and learning style.

## VII. Evaluation and Grading

### **Assignments**

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

- 1. Mini tasks (3) in order to reinforce classroom experiences, several work assignments will be required over the semester.
  - a. 1-2. Students choice: Present a research article to class and lead discussion
  - b. 3. Create and graph a Single Subject Design graph and present to class
- 2. Research presentations should be between 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. <a href="Presentations with excessive errors will not be accepted">Presentations with excessive errors will not be accepted</a>.
- 3. In addition to the assignments, students are expected to review the material in the textbook chapters and be prepared for class discussion.

## Grading

Grading	Points
3 Mini tasks (10 points each)	30
Final Presentation	60
Attendance/Participation/	10
Total	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%

## VIII. 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.).

# IX. Bibliography

#### **ONLINE Resources:**

Evaluation Resources <a href="http://gsociology.icaap.org/methods/">http://gsociology.icaap.org/methods/</a>

Community Assessment: <a href="http://guide.helpingamericasyouth.gov/assessment.htm">http://guide.helpingamericasyouth.gov/assessment.htm</a>

Community health: <a href="http://www.cdc.gov/nccdphp/dach/">http://www.cdc.gov/nccdphp/dach/</a>

WHO Clinical Assessment for Psychopathology <a href="http://gdp.ggz.edu/scandocs/">http://gdp.ggz.edu/scandocs/</a>

Assessment tools <a href="http://www.compactclinicals.com/">http://www.compactclinicals.com/</a>

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

Cultural Competence <a href="http://www.hogg.utexas.edu/programs\_cai\_tools.html">http://www.hogg.utexas.edu/programs\_cai\_tools.html</a>

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

Geriatric Assessment Wizard <a href="http://www.contexio.com/Info%20GAW.htm">http://www.contexio.com/Info%20GAW.htm</a>

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

## 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 <u>must</u> set the quote in quotation marks <u>or</u> 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 <u>clearly</u> indicate that this is a direct quotation. Please consult the current APA manual for further information.

Academic dishonesty includes using <u>any</u> 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**

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

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

### **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

<u>Tables, Graphs and References</u>: 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