COURSE OUTLINE

Course Overview

The course is intended to augment and fine tune what students already know about the design, development and execution of sound scientific practices. Emphasis will be placed in the areas of sampling, measurement, and proposal writing. Topics will include practical sampling design, question formation, questionnaire/interview construction and format, scaling, critiquing proposals, budget development, budget justification, timelines, etc. In addition, special topics to be covered will be randomized clinical trials (RCTs), fidelity assessment, treatment manuals, metaanalysis and systematic reviews, evidence based practice, comparative effectiveness, translational & implementation science, community based participatory research, qualitative methods, and mixed methodology. Class discussion will involve critiquing students' own research proposals, NIH funded research proposals, and published literature in peer reviewed journals. The class will focus on the application of research methodology to increase the student's understanding of the tradeoffs and limitations of various designs within the parameters of naturalistic settings. The importance of balancing rigorous scientific methods with ethics, practicality and feasibility to answer important questions for social work practice and social welfare policy will be emphasized. This course will be conducted as a seminar format (not a lecture) where each student is expected to discuss the topic for the week. One student will take responsibility for leading the discussion on the topics for a given class.

Educational Objectives

Students are to:

- 1. Demonstrate an increased understanding and ability to apply the scientific method and ethical principles of research to the design of a feasible and practical research study.
- 2. Demonstrate an appreciation of the importance of theory to all aspects of the research process
- 3. Demonstrate an ability to move easily from conceptualization to operationalization, employing measures that are both valid and reliable
- 4. Demonstrate an ability to formulate questions, and to construct and format questionnaires/interviews and to develop scales
- 5. Demonstrate an ability to make practical sampling decisions consistent with the selected research design
- 6. Demonstrate an ability to evaluate sound research designs from poor ones
- 7. Understand how to conduct RCTs, meta-analytic/ systematic reviews and their relation to evidence based practice
- 8. Prepare a well-conceived research proposal, with specifications of how to handle methodological weaknesses
- 9. Demonstrate an understanding of the diversity of qualitative approaches and methods

10. Demonstrate ability to do budgets, budget justifications, and timelines; describe facilities and assess need for resources for carrying out a proposed research study

Required Readings

- 1. Daniel, J. (2012). Sampling Essentials. Los Angeles, Sage.
- 2. Fowler, F. (1995). *Improving survey questions*, Thousand Oakes, Sage Publications
- 3. DeVellis, R. (2017). Scale development. 4th Edition, Newbury Park, Sage Publications
- 4. Spector, P. (1992). Summated rating scale construction, Newbury Park, Sage Publications
- 5. Thyer, B. (2008). *Preparing research articles*, New York, Oxford University Press.
- 6. Solomon, P., Cavanaugh, M., & Draine, J. (2009). Randomized controlled trials: Design and implementation for community-based psychosocial interventions, New York, Oxford University Press.
- 7. Thyer, B. (ed.) (2010). *The Handbook of Social Work Research Methods*, Sage Publications, Thousand Oaks. (readings from this are on Canvas)
- 8. Bulk pack of required readings articles, manuscripts, and research proposals on Canvas

Course Requirements and Grading

Students are expected to attend all classes, do all written assignments on time, read assigned material, do all discussion assignments and be prepared to discuss both the readings and the discussion assignments in class; take the lead on assigned topics, and present proposal to the class. In an emergency if a student will be late for class or unable to attend the class, he/she is expected to inform and /or discuss this in advance with the professor.

Students are also expected to conduct themselves consistent with the University of Pennsylvania's Code of Academic Integrity, which presents standards regarding plagiarism, multiple submissions and other actions. Students are expected to be familiar with the Code, which can be found at http://www.vpul.upenn.edu/osl/acadint.html

Students are required to use APA reference style –

American Psychological Assn. (2012). *Publication Manual of the American Psychological Association*. 6th Ed. Washington DC: Author

1. Critically discuss in class the assigned readings and discussion assignments and presentations.

15% of grade

2. Write critical reviews of research proposals on Canvas). These reviews will be the basis for class discussion.

40% of grade (each assignment is 10%)

3. Revise your research proposal from last semester based on assigned readings, in-class discussions of assigned material, discussion of your proposal in class and instructor's feedback, or you may select a new topic. If selecting a new topic, please start by submitting a concept paper to the instructor. Your final proposal will need to include an abstract, budget, budget justification, environmental resource assessment, and a more detailed human subject section.

45% of grade

Schedule of Topics and Required Readings Research 855

Jan. 23 <u>Introduction, Overview, Expectations of the course and overview of EBP</u>

Read Chapter 2 Rubin & Babbie

Jan. 30 <u>Discuss Practical Sampling</u>

Class Facilitator: Solomon

Assignment for week:

Read Daniel, Sampling Essentials, entire book

Read Cohen; Polit & Sherman; McClelland articles

Sampling discussion assignment - Consider how you would revise your sampling for your proposal based on the readings. If you would not revise it indicate why not. In one or two of the research studies you employed for your proposal, assess the strengths and weaknesses of their sampling procedures. If the sampling needs revision, how you would revise it.

Feb. 6 Discuss Issues & Means of Question formulation of Questionnaires & Interviews/cultural sensitivity issues

Class Facilitator: Solomon

Assignment for week:

Read Fowler, entire book; Rogler article; Kazdin, arbitrary metric

Two assignments for discussion purposes only

Formulating questions assignment - Bring into class poorly (e.g., loaded, leading, threatening, unclear, etc.) formulated questions (about 4 or 5), indicate the problem with the question and how you would change them.

Questionnaire & Interview Format assignment - Think about how you would lay out the questionnaire, interview, or data collection form for your proposed study. What would be the order, how you would structure it, etc. Bring to class your comments, thoughts and suggestions for discussion.

Feb.13 Discuss Scale Development/ Student Proposal Presentation (1)

Class Facilitator: Solomon

Student Proposal:

Assignment for week:

Read Devellis, Chapters 1-6

Read Spector entire book

Read Tavakol & Dennick (Cronbach's alpha)

Scale formation assignment - Take one of your concepts in your proposal and indicate how you would develop a psychometrically sound measure for that concept.

Feb. 20 Continue to discuss scales including IRT/Student Proposal Presentation (1)

Class Facilitator:

Student Proposal:

Assignment for week:

Read Devellis, Chapter 7 & 8

Read Unick & Stone article

Handbook of Clinical Research – Chapters 48 & 49

Feb. 27 Discuss RCTs/ Student Proposal Presentations (1)

Class Facilitator: Solomon

Student Proposal:

Assignment for week:

Read Solomon, et al entire book

Mar. 6 SPRING BREAK

Mar. 13 Fidelity Assessment, & Treatment Manuals; ITT Analysis; Comparative Effectiveness

Class Facilitator: Solomon

Assignment for week

Psychiatric Rehabilitation Tool Kits – one on fidelity measurement & one on programs & workbooks – on Canvas

Social Work Research and Comparative Effectiveness Research (CER): A Research

Symposium to Strengthen the Connection

Armijo-Olivo, Warren & Magee (2009)

Sox & Greenfield (2009)

Glasgow & Steiner (2012)

Mar. 20 Discuss mediating & moderating variables/ Student Proposal Presentation (1)

Class Facilitator:

Student Proposal:

Assignment for week:

Read Barron & Kenny; Frazier, Barron, & Tix; MacKinnon articles

Mar. 27 <u>Discuss Proposal Writing and writing for publication/ Abstracts, Budgeting, timeline, facilities/ Reporting guidelines for research studies/ Factorial surveys/ Feasiblity studies</u>

Class Facilitator: Solomon

Assignment for week:

Prepare to Critique and discuss an article

Read Thyer entire book

Read Kazdin article

Read Taylor

Read Lukens, Solomon & Sorenson

A guide for writing scholarly articles or reviews for Educational Research Review Read material on CONSORT, QUORUM, STROBE, Development of guidelines for social and psychological intervention trials

Bowen, Kreuter, et al 2009

April 3 <u>Discuss Critique of Assigned Proposal/ Translational & Implementation Science</u>

Class Facilitator:

Assignment for week:

Read proposals, Petros proposal

Special Issue of Research on Social Work Practice vol 19, no. 5, Sept 2009 – read

Brekke, et al p. 592 & Fixsen et al p. 531 (get these from Penn library)

Colditz (2012), Rabin & Brownson (2012)

Ringle, Read, Edmunds...Beidas (2015)

April 10 <u>Discuss Critique of Assigned Proposal/ Community Based Participatory Research/ Mixed Methods</u>

Class Facilitator:

Assignment for next week:

Read: Schepens proposal

Leykum, Pugh, Lanham, Harmon & McDaniel (2009)

Kumpfer, Pinyuchon, Teixeira de Melo, Whiteside (2008)

Community –Base Participatory Research Conference summary (AHRQ)

Thyer, B. (2010) Participatory Action Research chapter

Wallerstein & Duran, 2010

Small (2011)

Johnson, Onwuegbuzie, & Turner (2007)

Minkler & Salvatore (2012)

Apr. 17 <u>Discuss Critique of Assigned Proposal/Discuss Qualitative Methods</u>

Class Facilitator: Deb Padgett

Assignment for week:

Read; Feder proposal

Read Part II Qualitative Approaches (entire section except 16 & 17) in Thyer, B. (ed.) The Handbook of Social Work Research Methods, Sage Publications, Inc., (2010).

Sandelowski, M (2000).

April 24 <u>Discuss Critique of Assigned Proposal/Meta-analysis/Systematic Reviews/</u> Qualitative Meta Synthesis

Class Facilitator: Jacqueline Corcoran –10:15-11:30

Your Proposal is due this week

Assignment for week:

Read proposals, Bressi, Physical Services utilization by Persons with SMI and Wong, Community Integration of SMI's in Supportive Housing and write critique

Thyer, B. (2010) Chap. 16 & 17 Shadish article Sandelowski, Docherty & Emden (1997) Barnett-Page & Thomas, (2009)

May 1 NO CLASS

Individual meetings to be arranged