University of Pennsylvania School of Social Policy & Practice

SWRK 804 Methods of Inquiry: Quantitative Research Methods Fall Term 2021

Phyllis Solomon, Ph.D. Phone (215) 898-5533 solomonp@sp2.upenn.edu Office C-13 Office Hours by Appointment solomonp@sp2.upenn.edu

COURSE OUTLINE

Course Overview

This course is designed to teach the basics of social work practice research, with an emphasis on intervention research. A particular focus will be placed on understanding evidence based practice and how to use it in one's own practice. The course will address building conceptual frameworks, research ethics, source credibility, formulating research questions and hypotheses, measurement and scale construction, surveys and interviews, sampling procedures, and research designs. Importance will be placed on the development of designing ethical, feasible, and practical research studies to answer questions of importance to social work practice, including evaluating social work interventions and the use of randomized designs. The course will demonstrate the significance and the means to constructing conceptual frameworks for purposes of developing interventions, curriculum, research proposal writing, and ultimately for publications.

Course Objectives

The specific objectives of the course are:

- Understanding the importance of the scientific method to building effective practice
- Being knowledgeable about all aspects of scientific research process from conceptualization to design, sampling, and measurement
- Being able to develop conceptual frameworks through the use of theory, practice, and empirical research for the purpose of research proposals, intervention and curriculum development, etc.
- Being able to design ethical, feasible and practical research studies relevant to issues of social work practice
- Considering diversity and inclusion in study sampling and cultural sensitive in terms of question formulation, sampling, measurement and design

- Being particularly skilled at designing studies of social work interventions, including developing and selecting manuals, assessing fidelity of interventions, and selecting appropriate outcome measures
- Being able to critique one's own and other's research for scientific rigor
- Being able to understand the development and use of evidence based practice
- Being able to use research to answer important practice questions
- Being capable of preparing a written research proposal relevant to social work practice

Required Texts

Rubin, A., & Babbie, E. (2017). *Research Methods for Social Work*. 9th Edition, Cengage Learning, Boston, MA.

Solomon, P., Cavanaugh, M., Draine, J. (2009). Randomized Controlled Trials: Design and Implementation for Community-Based Psychosocial Interventions. New York, Oxford University Press.

Canvas includes:

Berton Roueche Eleven Blue Men

Ethics material – Declaration of Helsinki, The Belmont Report, Code of Federal Regulations

Herrenkohl, T., Wooten, N., Fedina, C., et al. (2020). Editorial: Advancing our commitment to antiracist scholarship. *Journal of Society for Social Work and Research*, 11(3), 365-368.

Thyer, B. (2005). *Handbook of Social Work Research Methods*, LA, Sage Publications Inc. Chapters – Littel & Corcoran, Systematic Reviews & Corcoran & Little, Meta-analyses.

Solomon, P., Draine, J. (2010) An overview of quantitative research methods. In Thyer, B. (ed) *Social Work Research Methods* (2nd ed.), Thousand Oakes, Sage Publications Inc., ps. 26-36.

Fraser, M. & Galinsky, M. (2010). Steps in intervention research: designing and developing social programs. *Research on Social Work Practice*. 20(5), 459-466.

Galinski, M., Fraser, M., Day, S. & Richman, J. (2012). A primer for the design of practice manuals: Four stages of development. *Research on Social Work Practice*. 23(2), 219-228.

Mowbray, C., HOLTER, m., Teague, G. & Bybee, D. (2003). Fidelity criteria: Development, measurement, and validation. *American Journal of Evaluation*, 24(3), 315-340.

Martinez, K., & Wong, S. (2009). Using prompts to increase attendance at groups for survivors of domestic violence. *Research on Social Work Practice*. 19(4). 460-463.

Two toolkits for reference – fidelity assessment measure & psychosocial intervention manuals & workbooks

A Power Primer by Jacob Cohen

Course Grade

Class Participation 10% Assignment I 10% Assignment II 10% Assignment III 10% Research proposal 60%

Students are expected to read all assignments, participate in class discussions, complete written assignments at scheduled times, attend all classes and to be on time. If students are sick or some other extraordinary circumstance arises that precludes a student from attending class, the student is to contact the professor before class. Similarly, should an unforeseen situation arise and a student expects to be late, the professor is to be notified in advance of class. Assignments received after the due date will be graded down, unless other arrangements have been made.

Academic Integrity

Students are expected to adhere to the University's Code of Academic Integrity, available at https://catalog.upenn.edu/pennbook/code-of-academic-integrity/. Care should be taken to avoid academic integrity violations, including plagiarism, fabrication of information, and multiple submissions (see descriptions below).** Students who engage in any of these actions will be referred to the Office of Student Conduct, which investigates and decides on sanctions in cases of academic dishonesty.

- 1. Plagiarism: using the ideas, data, or language of another person or source without specific or proper acknowledgment. Example: copying, in part or in its entirety, another person's paper, article, or web-based material and submitting it for an assignment; using someone else's ideas without attribution; not using quotation marks where appropriate; etc.
- 2. Fabrication: submitting contrived or altered information in any academic exercise. Example: making up data or statistics, citing nonexistent articles, contriving sources, etc.

3. Multiple submissions: submitting, without prior permission, any work submitted to fulfill another academic requirement.

**It is students' responsibility to consult the instructor if they are unsure about whether something constitutes a violation of the Code of Academic Integrity.

Schedule of Topics and Required Reading

September 2

Topics

- 1. Introduction to course
- 2. What is the scientific method
- 3. Importance of the scientific method to social work practice & knowledge building

Assignments due for class

- 1. Read Eleven Blue Men
- 2. Rubin & Babbie, Chapters 1, 4

Sept 16

Topics

- 1. Defining evidence based practice as process & outcome
- 2. Evidence based practice (EBP) as process
- 3. Understanding how to designate a practice as an "EBP"
- 4. Advantages of EBP
- 5. Concerns & controversies of EBP, particularly regarding minorities & low income groups

Assignments due for class

- 1. Read Rubin & Babbie, Chapter 2
- 2. Be prepared to discuss EBP in your area of social work

Sept 23

Topics

- 1. What is theory
- 2. Developing conceptual frameworks
- 3. Importance of conceptual justification of research questions
- 4. Conceptual frameworks for social work intervention research
- 5. Importance of developing conceptualization for interventions, curriculum, proposal writing & for publication

Assignments due for class

- 1. Read Rubin & Babbie, Chapter 3
- 2. Solomon & Draine Chap An Overview of Quantitative Research Methods
- 3. Assignment I I- 2 pages apply EBP 6 Step process in Rubin & Babbie to your own social work practice question

Sept 30

Topics

- 1. Problem formulation
- 2. Developing research questions
- 3. Developing hypotheses
- 4. Consideration of diversity and culture

Assignments due for class

- 1. Read Rubin & Babbie, Chapter 7,8
- 2. Be prepared to discuss your research question & hypotheses

Oct 7

Topics

- 1. Ethics of social work research
- 2. Institutional Review Boards
- 3. Culturally competent research
- 4. Politics of conducting social work research

Assignments due for class

- 1. Read Rubin & Babbie, Chapters 5,6
- 2. Read *The Belmont Report* (Canvas)
- 3. Read Code of Federal Regulations, Title 45, Public Welfare (Canvas)
- 4. Read *Declaration of Helsinki* (1964) (Canvas)
- 5. Read Editorial: Advancing our commitment to antiracist scholarship
- 6. Assignment II Two page concept paper due for research proposal

Oct. 14

Topics

- 1. What is measurement
- 2. Measurement error
- 3. Measurement Reliability
- 4. Measurement Validity
- 5. Outcome measures
- 6. Diagnostic assessment
- 7. Consideration of diversity & inclusion

Assignment due for class

- 1. Read Rubin & Babbie, Chapter 9
- 2. Do CITI training online –send me completion certificate

Oct. 21

Topics

- 1. Question Construction
- 2. Scale construction
- 3. Questionnaire construction
- 4. Interview Construction
- 5. Conducting survey research

Assignment due for class

- 1. Read Rubin & Babbie Chapters 10, 16
- 2. Be prepared with examples of good & bad questions used in questionnaires, & interviews

Oct. 28

Topics

- 1. Sampling procedures
- 2. Issues of power- sample size estimates
- 3. Sample recruitment
- 4. Exclusion & Inclusion criteria

Assignments due for class

- 1. Read Rubin & Babbie Chapter 15
- 2. Cohen, J (1992). A power primer. Psychological Bulletin, 112 (1). 155-159.

Nov 4

Topics

- 1. Internal validity
- 2. External validity
- 3. Correlational designs
- 4. Case control
- 5. Cohort studies

Assignment due for class

1. Read Rubin & Babbie Chapter 11

Nov. 11

Topics

- 1. Pre-experimental designs
- 2. Experimental designs
- 3. Quasi experimental designs

Assignments due for class

- 1. Read Rubin & Babbie Chapter 12
- 2. Assignment III Redone concept paper and outline of remaining proposal

Nov. 18

Topics

- 1. What are RCTs?
- 2. Difference between efficacy & effectiveness studies
- 3. Intervention manuals
- 4. Fidelity assessment

Assignments due for class

- 1. Read Solomon, Cavanaugh, & Draine book
- 2. Read Galinski, Fraser, Day & Richman; Fraser & Galinsky, 2010; Mowbray, Holter, Teague & Bybee, 2003

Nov 25

No Class Thanksgiving

Dec 2

Topics

- 1. Writing research proposals
- 2. Writing research articles
- 3. Critique research proposals & articles
- 4. Revisiting Conceptualizations

Assignments due for class

1. Read Rubin & Babbie Chapter 23

Dec. 9

Topics

- 1. Single subject designs
- 2. Evaluation Research

Assignment due for class

- 1. Read Rubin & Babbie Chapter 13, 14
- 2. Martinez & Wong article example of single system design
- 3. Final Proposal due

Dec. 16

Topics

- 1. Use of existing data
- 2. Observational data
- 3. Content Analysis
- 4. Meta analysis revisit EBPs

Assignment due for class

- 1. Read Rubin & Babbie Chapter 17
- 2. Chapters 16 &17 Thyer Systematic & meta- analytic reviews