Course Number: SOWO 940
Course Title: Development of Social Intervention Models
Instructor: Mark W. Fraser - 962-6538; Room 548J, mfraser@email.unc.edu

Office Hours: Tuesday 8-9 (Call to schedule appointment…other times available)

Course Description: The purpose of this course is to prepare advanced graduate students to design and evaluate interventions that address social needs, problems, and conditions.

Course Objectives: Students completing this course will be able to:

1. Identify and assess the socio-political dynamics involved in defining a specific social need, problem, or condition at the societal and institutional, organizational, familial and interpersonal, and individual levels;

2. Analyze a social need, problem, or condition relevant to a particular population and identify the implications of different levels and kinds of analysis for designing appropriate interventions;

3. Assess the theoretical and empirical support for alternative interventions that address a selected need, problem, or condition with a particular population;

4. Describe and critically assess a logical sequence of development that guides the design, implementation, and evaluation of social interventions;

5. Apply a systematic approach to designing a social intervention that is responsive to a selected social need, problem, or condition of a particular population;

6. Select and apply appropriate research methodology in evaluating a social intervention;

7. Demonstrate awareness of the interplay of different levels of intervention and moderators such as age, class, culture, disability status, ethnicity, gender, language, race, religion, and sexual preference in designing, implementing, and evaluating a social intervention;

8. Generate hypotheses for guiding empirical inquiry for testing social interventions;

9. Apply theory construction strategies and techniques for building social interventions;

10. Delineate effective strategies for collaboration between academic and practice communities in designing, implementing, and evaluating social interventions.

Course Expectations:
This course is structured as a seminar. In our discussions, we will examine and critique the assigned readings, provide consultation to one another, and respond to presentations by seminar participants and guests. All members of the class are expected to be prepared for class and contribute to the discussion. If you find you will not be able to be in class, you should notify the instructor.

Students are expected to complete assigned and independent readings, contribute to the development of a positive learning environment in the seminar, and demonstrate their learning through written assignments and seminar participation. Required readings are identified on the proposed schedule. Students should conduct substantial independent readings (see Dear X in Class 1), and this reading should be reflected and cited in papers and assignments. Emphasis should be placed on peer-reviewed journals.

Written assignments must be submitted when due, and they should be prepared in accordance with guidelines of the American Psychological Association (APA), the format required by many leading journals in social work and related fields. Because written assignments are the basis for scheduled class presentations, late submission will be penalized 5 points for a major assignment and .5 point for a mini-assignment. In the Publication Manual (6th ed.) of the American Psychological Association (2010), please pay special attention to pp. 61-124, which focus on the mechanics of writing with style. In addition, please attend to pp. 169-224, which focus on crediting sources including use of digital object identifiers in the reference list. APA style writing is expected and will be considered in evaluating papers.

Note: You can find a self-paced tutorial for APA style at http://www.lib.unc.edu/instruct/citations/apa/index.html

**Required Readings:**

All required articles are available electronically through the UNC Library system. The principle texts are available for purchase at the Health Affairs Bookstore:


Assignments:

There will be no mid-term examination or final examination. Instead, the course will be organized around the development of an Exploratory Developmental Research Grant proposal. For this proposal, we will use PA-10-069 (Parent R21) or its equivalent offered through a NIH institute or center. A series of mini-assignments is designed to prepare you to write your proposal. The focus of all assignments is on mastery of the process of designing and developing social interventions. Assignments are described below and numbered in the Course Outline.

1. **Draft of R21 Proposal.** Students will prepare and present a draft of a 6-page (excluding Specific Aims) NIH proposal for the design and development of an intervention focused on a social need, problem, or condition. Handouts should include a bibliography of literature related to a selected social need, problem, or condition and a conceptual model used to address the selected problem. See description in Course Outline. Due **March 24.**

2. **Seminar Leadership.** Each seminar participant will be expected to take a special leadership role for one session. This will involve preparation for and conduct of a class session related to evaluation design in intervention research. Plans for the session will be developed in consultation with the instructor. Seminar leadership will include:
   - Selecting and presenting appropriate conceptual material from assigned, supplementary, and independent readings;
   - Preparing questions to focus discussion;
   - Involving the class in the application of concepts;
   - Facilitating discussion; and
   - Preparing a List of References and other materials.

3. **R21 Intervention Research Proposal.** Each student will prepare and present a NIH proposal to develop an intervention to address a need, problem, or condition within a particular population. Due on **April 28,** proposals should include:
   - **Specific Aims** – explicitly state 2-3 aims and hypotheses (if any)
   - **Significance** – critically appraise and integrate literature related to etiology and intervention; describe the national significance; (as appropriate) use incidence and prevalence information; link the **Specific Aims** or **Significance** to **Healthy People 2010** or **Healthy People 2020** (see [http://www.healthypeople.gov/](http://www.healthypeople.gov/)); conceptualize study as a building block of a series of studies
   - **Innovation** – explain how the proposal seeks to shift current research; discuss novel applications
   - **Approach** – describe the overall strategy
     i. **Design and Methods** – describe the intervention and a research plan; explain how you are going to do the study

   1. Describe the intervention (based on the expansion, refinement, or synthesis of existing models; append a multi-unit intervention manual of at least 20 pages);
2. Describe the research methods – a research plan for developing the intervention, including at least two phases of development and a description of the research design to be used in each phase; [Tips: Descriptions of research designs usually include the plan for recruiting/sampling participants, method of group assignment (if applicable), means for measuring outcomes and covariates (i.e., data collection methods, times, and measures), and methods of analysis. You should propose activities that have high practical value for your dissertation. Consider effect sizes, intracluster correlations, and measurement precision in estimating reasonable sample sizes. Estimate a Minimal Detectable Effect (MDE). Consider also the issues of causal inference. Be sure to link your intervention model to the measurement model.]; and

3. Identify and address implementation and research issues, including limitations.

   ii. Preliminary Studies – summarize pilot data that have been collected by the principal investigator or the proposed research team; emphasize the strength of the PI and others on the project

Note. To guide your work you might try using the NIDA Research Assistant tutorial (http://www.theresearchassistant.com/tutorial/4.asp) or you might seek background help at the NIH Grant Submission portal (www.grants.gov).

Note. CDFA is Catalog of Domestic Federal Assistance; FOA is Funding Opportunity Announcement; FON is Funding Opportunity Number; and PA is Program Announcement.

**Evaluation:**

Points may be earned for a variety of assignments and for participation in the seminar.

- 20 points – Seminar Participation and Completion of Minor Assignments
- 10 points – Classroom Participation and Preparedness
- 10 points – Mini-Assignments
  - Specifying the Need or Problem (3 points)
  - Identifying the Core Concepts or Constructs (3 points)
  - Drawing a Conceptual Model (4 points)
- 15 points – Draft of Proposal
  - Oral Presentation (5 points)
  - R21 Proposal (10 points)
- 15 points – Seminar Leadership Project
- 50 points – Intervention Research Proposal:
  - Oral Presentation (5 points)
  - Treatment Manual (20 points)
  - R21 Proposal (25 points)
- 100 points – Total

**Grading System:**
High Pass = 94-100
Pass = 80-93
Low Pass = 70-79
Fail = 69 and below

**Honor Code and Tips on Citing References:**

Original work is expected. Submitted work must conform to the Honor Code of the University of North Carolina. For information on the UNC-CH Honor Code, including guidance on representing the words, thoughts, and ideas of others, see: [http://honor.unc.edu/](http://honor.unc.edu/) Please note that plagiarism is defined in the *Instrument of Student Judicial Governance*, Section II.B.1 as, “…the deliberate or reckless representation of another's words, thoughts, or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise.” In keeping with the UNC Honor Code, if reason exists to believe that academic dishonesty has occurred, a referral will be made to the Office of the Student Attorney General for investigation and further action as required. Violations of the Honor Code result in a “F” grade. From Honor Code website, here are some helpful guidelines for when and how to cite the ideas and work of others:

*Quotations:* When directly quoting an outside source, the borrowed text must be surrounded by quotation marks or, if the quoted material is more than 40 words in length, it must be block quoted. See the *Publication Manual* of the American Psychological Association (2010, p. 92). Every quote must include a source – the author, year, and page number. The source must appear in the reference section at the end of your paper.

Here is an example of alternative ways to cite the same material:

*Original Text (more than 40 words in block quote):*

Unks (2007) found the following:

Our best teachers do not convey information by filling heads or stretching minds with some sort of illusionary basic subjects; they impart instead a way of looking, a way of perceiving, a way of investigating the wonder of life in such a way that students learn how and what to see. (p. 42)

*Internal Reference (less than 40 words):*

Unks (2007) argued that "our best teachers…impart instead a way of looking, a way of perceiving, a way of investigating the wonder of life in such a way that students learn how and what to see" (p. 42). OR

In an eloquent argument, Unks (2007, p. 42) claimed, "Our best teachers…impart instead a way of looking, a way of perceiving, a way of investigating the wonder of life in such a way that students learn how and what to see."
**Paraphrase:**

Responding to Barth (2006), Unks (2007) argued that the best teachers show students a way to perceive the wonder of life.

**Code of Honor Affirmation.** All written products in the course must have a signed Honor Code statement. Independent work is expected. Papers without this affirmation will not be accepted. The statement should read as follows:

*I have neither given nor received any unauthorized assistance on this assignment.*

*(Your Signature)*

**Policy on Accommodations for Students with Disabilities:**

Students with disabilities that affect their participation in the course may notify the instructor if they wish to have special accommodations in instructional or evaluation format considered. Accommodations and services, which may include – but are not limited to – note-takers, alternative testing, accessible class materials, and interpreters, are provided by Disability Services (Voice/TDD 962-8300). Academic Success Program for Students with Learning Disabilities (962-7227) provides supportive services for students with learning disabilities and attention-deficit/hyperactivity disorders. Students will be asked to provide documentation of disabling or medical conditions from an appropriate primary care provider. Working with Disability Services and the Academic Success Program and without lowering academic standards, the instructor will make reasonable accommodations to reduce barriers caused by a student’s disability.

**Course Website:**

The course description, lecture notes, and other course materials are available online through the Blackboard website. See [http://blackboard.unc.edu](http://blackboard.unc.edu)
Course Outline

January 13  No Class:  SSWR

Class #1:  Introduction and Course Overview (start Jan 20)

- Cause, effect, and causal relationships
- Causal description versus causal explanation
- Terminology
  - Experiment
  - Randomized experiment
  - Quasi-experiment
  - Natural experiment
  - Correlational study
- What is an intervention?
- What is intervention research? Why is it important in social work?
- Steps in intervention research
- Role of qualitative research: The Robbers Cave Experiment
- Review course syllabus

Required Reading:

Fraser et al. (2009) – pp. 3-44.


Dear X – see blackboard

Interested in the Robbers Cave study? See:


Discussion:

- Discuss intervention interests
- How is your expected dissertation related to an intervention?
- Consider: Does Tuchman et al. make a persuasive argument? Could it be a dissertation?

Recommended:
Read PA-10-069. Search for related PAs from other institutes and centers: http://grants.nih.gov/grants/guide/

January 20

Class #2

Content from Class #1

Overview of Types of Validity – The Generalization of Causal Connections

- Assessing the validity of causal inferences
- A typology of validity
  - Statistical conclusion validity
  - Internal validity
  - Construct validity
  - External validity

Required Reading:

Shadish, Cook, & Campbell, 2002, pp. 1-32

January 27

Class #3: Statistical Conclusion and Internal Validity

- How to assess the strength of causal inferences
  - Statistical conclusion validity
  - Internal validity
- Concept: The best available evidence

Required Reading:

Shadish, Cook, & Campbell, 2002, pp. 33-63

Mini-Assignment #1 – The Need or Problem: Pick a need, problem, or condition to address throughout the semester. Prepare a brief written statement (~2 pages) of your central social concern and intervention interest to distribute to class. In your statement, address the following questions:

1. What is the need, problem, or condition? What is its prevalence? How has the prevalence changed over time? Use primary data sources (e.g., CDC Youth Risk Behavior Surveillance or U.S. Census Bureau data). Do not (ever) rely on secondary sources, such as newsletters or advocacy websites.
2. What empirical and theoretical literature should you review? Key words?
3. What kinds of interventions might be needed and feasible at each level (e.g., individual, family, organizational, county or court jurisdiction, state, nation)?
4. What level of intervention is of interest to you at this point?
5. What research methodologies (design, measures, and analysis) are you considering? Are there reviews of measures in your field (see, e.g., Dawe, Loxton, Hides, Kavanagh, & Mattick, 2002)?

Jan 28 – Feb 3 Class #XYZ

We will schedule a catch up class if needed.

February 3 Class #4: Construct and External Validity

- Threats to construct validity
- Threats to external validity
- Implications for assessing the “best available” evidence

Required Reading:

Shadish, Cook, & Campbell, 2002, pp. 64-102


Optional Reading:


Mini-Assignment #2 – Identify the Core Constructs: Develop a list of constructs (i.e., units, settings, treatments, and outcomes) you will use to organize your literature review. Be prepared to share your list in class. As part of the process of building an intervention, begin a bibliography on your area. Include theoretical, empirical, and practice literature that defines the etiology, interventive opportunities (i.e., levels of potential intervention – individual, family, organizational, policy), and the interventions that have addressed this area in the past. To address the social need, problem, or condition, are multiple interventions needed? Which ones appear promising? Can they be combined or sequenced along some continuum (e.g., developmental age, setting, or risk status)? Submit your list and bibliography. Use asterisks to indicate those interventions that you intend to review.
TIP: From a practical perspective, you should begin work on your proposal with an assessment of what is currently funded, for an agency is unlikely to award funding for a new project if it is currently funding a similar project. To review abstracts of existing NIH research projects, use the Research Portfolio Online Reporting Tool (RePORT) at:

http://projectreporter.nih.gov/reporter.cfm

February 10  
No Class

February 17  
Class #5: Developing Conceptual Frameworks for Interventions – Specifying Mediational Models and Theories of Change

- How do we represent interventions in structural models?
- Specifying mediation in developmental and conceptual models
- Mediation, confounding, and suppression effects
- Theories of change

Example: The Biopsychosocial Model of Conduct Problems in Adolescence – Integrating Individual, Family, Peer, and Sociocultural Risks

Required Reading:

Fraser et al. (2009) – pp. 45-62

Optional Reading (review for format of conceptual framework):


Orlando, M., Ellickson, P. L., McCaffrey, D. F., & Longshore, D. L. (2005). Mediation analysis of a school-based drug prevention program: Effects of Project ALERT. Prevention Science, 6(1), 353-46. (Note. This is an example of mediation in intervention research, where specific mediators are designated by the program designers.)


Mini-Assignment #3 – Draw Your Conceptual Model: Use the graphing techniques demonstrated in Orlando et al. (2005) and draw a mediational model depicting mediators and distal outcomes related to your intervention. Next create a Logic Model for your intervention. Be prepared to present both in class.

**February 24**

**Class #6: Review and Catch-up**

**March 3**

**Class #7:**

**Policy Changes as Interventions**

**Developing Treatment Manuals**

- What is the proper unit of intervention and analysis?
- Beyond the individual and family: Legislation, rules, and administrative procedures as interventions
- Phases and considerations in developing treatment manuals

**Required Reading:**

Fraser et al. (2009) – pp. 63-104

On Reserve in Rare Books *Orders and Directions*… at Wilson Library (2nd floor rotunda) (DA398 1630 .G7):

*Sovereign (1625-1649: Charles I) Orders and directions, together with a Commission for the better administration of justice, and more perfect information of His Maiestie: How, and by whom the laws and statutes tending to the reliefe of the poore, the well ordering and training of youth in trades, and the reformation of disordered persons, are executed throughout the kingdome / which His Royall Maiestie hath commanded to be published and inquired of, by the body of his Priuie Councell, whom he hath made principall commissioners for this purpose. Imprinted at London: By Robert Barker, printer to the Kings most Excellent Maiestie, and by the assignes of John Bill, 1630.*
Note. You will have to fill out a Rare Books Collection Application to see this document. The application form is posted to our website. Be sure to have your UNC One Card. The hours of the Rare Books Collection of the Wilson Library are: 8-5, weekdays; 9-1 on Saturdays. If you have difficulty, contact Libby or Susan (962-1143), Public Services Librarians.

Examples of Policies Intended to Produce Systematic Changes:


March 10 Spring Break

March 17 Class #8: Designing Culturally Congruent Interventions

- Specifying culture-based program mediators in the design of social interventions
- Measurement considerations in cross-cultural intervention research
- Fidelity considerations in cross-cultural intervention research
- Consumer and parent groups, advisory boards, and consultants
- Dissemination and culturally congruent interventions

Guest Speaker: Betsy Bledsoe, Assistant Professor

Required Reading:

Fraser et al. (2009) – pp. 105-156


Optional Reading:

Discussion: How are interventions in your area tailored on the basis of potential moderators such as age, class, culture, disability status, ethnicity, gender, language, race, religion, and sexual orientation? Be prepared to share one example.

March 24

Class #9: R21 Research Proposal (draft)

Assignment: Prepare a single-spaced (.5” margins), 6-page draft of a proposal (including all figures and tables, but excluding one page for Specific Aims and an appendix for references) that addresses each of the following topics. You should propose only what can actually be done. Be realistic. Contact agencies if you need to access data or participants. Be sure that your proposal has high feasibility. Be prepared to present the paper for discussion in class. Write to a specific R21 and submit a copy of this PA, RFA, or RFP with proposal.

Specific Aims (1 page)
- Specify the aims of your study
- Specify any hypotheses

Significance (1 page?)
- Describe the need or problem area in national terms by using incidence, prevalence, or other primary data. That is, make the case that you will address a problem of national significance.
- Develop and describe a conceptual framework or model (include a graphic image that specifies malleable mediators)
- Use research literature to support each construct in the conceptual framework. Describe (in detail) 4-6 relevant studies. Be sure to assess the statistical conclusion and internal validity of this literature.

Innovation (.5 page?)

Approach (4.5 pages?)
- Describe the design, including participants, recruitment and sampling procedures, assignment mechanism, measures, data collection strategy, data analysis plan, and power. Be sure to address such issues as reliability and validity of measures, expected attrition of sample, imputation of missing data (Can you make the MAR assumption?), and mechanisms for insuring treatment fidelity plus fidelity assessment.
- Describe your intervention and indicate that the treatment manual is appended.
- Describe preliminary studies

References (use APA style)

Resource:
See Making Choices and other proposals at course website.
March 31  

Class #10: Seminar Leadership

Seminar Leadership #1
Quasi-Experimental Designs with and without Control Groups
Time: 2:00 – 3:45

- Designs without control groups
- Designs that use a control group but no pretest
- Designs that use both control groups and pretests
- Designs that combine many design elements

Required Readings:


Seminar Leaders for Seminar #1:
1. 
2. 

*****************************

Seminar Leadership #2
Interrupted Time-Series and Regression Discontinuity Designs in Policy Analysis and the Evaluation of Interventions
Time: 4:00-4:50

- Simple interrupted time series in tests of policy changes
- Adding other design features to the basic interrupted time series
- Problems with interrupted time-series designs
- The basics of regression discontinuity designs
- Cutoffs and threats to validity in regression discontinuity designs

Required Reading:

Shadish, Cook, & Campbell, 2002, pp. 171-245

Seminar Leaders:
1. 
2. 

April 7 

Class #11: Seminar Leadership (continued)

Seminar Leadership #2 (continued)
Interrupted Time-Series and Regression Discontinuity Designs in Policy Analysis and the Evaluation of Interventions

Time: 2:00-2:45
- Simple interrupted time series in tests of policy changes
- Adding other design features to the basic interrupted time series
- Problems with interrupted time-series designs
- The basics of regression discontinuity designs
- Cutoffs and threats to validity in regression discontinuity designs

Seminar Leadership #3
Rationale, Recruitment, Types of Randomization, Program Implementation, Attrition, and Missingness

Time: 3:00-4:50
- Theory of random assignment
- Designs used with random assignment
- Conditions conducive to random assignment
- Recruiting participants to be in experiments
- Improving the random assignment process with matching
- Inducing and measuring implementation
- Attrition and imputation of missing information
- Translational research

Required Reading:
Shadish, Cook, & Campbell, 2002, pp. 246-278; 292-340

Seminar Leaders:
1. 
2. 

April 14

Class #12: Ethics in Intervention Research

Ethics
- Ethical codes
- Informed consent in experiments
- Withholding potentially effective services
- The ethics of random assignment
- When to discontinue studies
- Competing interests ($) in intervention research

Guest Speaker: Kim Strom-Gottfried, Professor
Required Reading (see course website):


**April 21**

**Class #13: Generalized Causal Inference**

- Formal sampling
- Grounded theory of generalized causal inference: Five Principles
- Critical analyses of assumptions
- Methods for single studies
  - Qualitative methods
  - Statistical models
- Methods for multiple studies (if time)
  - Narrative reviews
  - Quantitative reviews – meta-analyses

**Guest Speaker:**

Sheryl I. Zimmerman, Professor (tentative)
Required Reading:

Shadish, Cook, & Campbell, 2002, pp. 341-504 (browse)

April 28

Class #14: Presentation of R21 Intervention Research Proposal

Recommended Reading:


Note: Submit proposal and treatment manual as separate documents. Attach to your proposal the R21 PA under which your proposal will be submitted.