Course Number: 16:910:660:01

Intervention Research, Spring 2016

Seminar Room- Room 602, 390 George St Tuesdays: 9:00-11:40am

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I. Course Description:

The purpose of this course is to prepare doctoral students to design and evaluate interventions that address clinical or social needs, problems and conditions and to design intervention research grant proposals.

II. Course Objectives:

Students completing this course will be able to:
1) Identify and define a specific clinical or social need, problem or condition (i.e. “research issue”) at the societal, institutional, organizational, familial, interpersonal and/or individual levels;
2) Analyze the research issue relevant to a target population and examine implications of various research questions and levels of analysis for designing appropriate interventions;
3) Assess the theoretical and empirical support for alternative interventions that address the research issue with a target population;
4) Describe and critically evaluate a logical sequence of development to guide the design, implementation, analysis and evaluation of one specific intervention (or comparison of interventions);
5) Select and apply an appropriate research design to an intervention that is responsive to the research issue with a target population;
6) Consider issues of intervention fidelity and unintended negative impact on stakeholders.
7) Ensure the design addresses issues that pose potential confounds or limitations (i.e. age, class, ethnicity, disability status, gender, sexual preference etc.)
8) Generate qualitatively-based questions and quantitatively-based hypotheses to guide empirical inquiry for intervention research;
9) Apply theory construction strategies and techniques for building the intervention;
10) Propose effective strategies for collaborating with key stakeholders in the community in designing, implementing and evaluating the intervention; and

11) Distill components into a grant proposal to fund the intervention and identify potential funding sources

**III. Course Requirements and Evaluation Criteria**

The major thrust of this course focuses on students developing an intervention research proposal incrementally throughout the semester. Students will identify an area of interest by the first day of class that they will be using for their proposal. Throughout the semester, lectures and readings will guide the student in the development of specific content for a complete NIH proposal. The course is taught in a seminar style to provide the student ample opportunity to ask for and receive feedback from their student colleagues and the instructor.

The assignments for this course constitute seven (7) units:

1. **NIH style R01 TYPE** (Applications are generally awarded for 1 - 5 budget periods, each normally 12 months in duration.) **Specific Aims page** that includes the design, support for that design from the literature, and development of an intervention. (This will be a draft that will be refined by the end of the semester.)
   a. This is a 1 page *draft* proposal (includes specific aims), due **February 16** (**Constitutes one (1) unit**), with a brief presentation to class on this day.
   b. You will formally present the proposal to class (**Constitutes one (1) unit**) on **March 22** with the Significance & Innovation sections

2. **Class co-instruction/Seminar Leadership**
   a. Each student will be expected to co-lead a portion of an individual class section with the instructor.
   b. Students are expected to identify and present relevant readings for the class section, prepare lecture/activities to facilitate application of the methods, and develop questions to facilitate discussion
   c. Students will be required to provide a session outline/plan to the instructor and readings to both fellow students and the instructor prior to the class session (**Constitutes one (1) unit for the preparation and one (1) unit for the presentation**)

3. **Create an intervention research NIH R01 TYPE proposal** (**Constitutes two (2) units for the proposal and supplementary materials and one (1) unit for the presentation—Total of 3 units for this assignment.**)
   a. Following the guidelines specified at: [http://grants.nih.gov/grants/funding/424/#inst](http://grants.nih.gov/grants/funding/424/#inst)
   b. Includes the design and development of an intervention due April 26
   c. The details of the guidelines will be outlined and discussed in class.
d. This final proposal will be presented to the class in PowerPoint

IV. Class Participation & Attendance Policy

As this is a seminar style course, attendance and active participation is required. You are allowed to miss two classes for any reason, if a third class is missed your grade will be lowered by one full grade, and more than three will result in an “F”.

<table>
<thead>
<tr>
<th>Course Deliverables (i.e., graded assignments)</th>
<th>Due Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-page NIH proposal Specific Aims page (1pt)</td>
<td>Feb 16</td>
<td>Class</td>
</tr>
<tr>
<td>Oral presentation of Specific Aims, Significance &amp; Innovation (1 pt)</td>
<td>March 22</td>
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<tr>
<td>Draft of Research Questions, Hypotheses, Intervention plan</td>
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<td>(E-mail PF)</td>
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<td>(Presented for group consultation)</td>
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<tr>
<td>(No points, but required)</td>
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<tr>
<td>R01 TYPE NIH proposal – final and attachments (2pts)</td>
<td>Due April 26</td>
<td>(Email PF)</td>
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<tr>
<td>Oral presentation of Final Proposal (1pt)</td>
<td>April 26</td>
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<tr>
<td>Seminar Leadership (Prep &amp; Presentation) (2pts)</td>
<td>TBA</td>
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Grading

Each unit is graded as pass/fail. There are a total of 7 units in this course. To Pass a unit, a student must obtain a score of 70% or higher. Final grades are based on the total number of “Pass” grades for the semester.

A=7 passes
B=6 passes
C=5 passes
Fail=4 passes or below

V. Required Texts


**Readings are due the week they are assigned.** Come to class prepared to discuss the readings.

VI. Course Evaluation

Rutgers University issues a survey that evaluates both the course and instructor. This survey is completed by students toward the end of the semester, and all answers are anonymous. The instructor may also choose to conduct a mid-point evaluation. Please provide feedback at any time that can contribute to a better classroom and learning experience.

VIII. Course Outline

A variety of methods are used including lectures, discussions, exercises, assignments, and readings. Supplemental readings and materials are available electronically through the eCollege. Lecture Power Points will also be posted there.

**Week 1: Introduction and Course Overview (January 19)**

*Objectives:*
1. Gain understanding of the overall intent and structure of the course
2. Explain intervention research versus evaluation research in social science research
3. Identify how grant writing supports the efforts of intervention research
4. Discuss clinical and social needs, issues, or conditions used in intervention research.

*Required Reading:*


*Assignment:* Ensure securing copies of the required textbook, and then begin reading for next week.

**Week 2: Developing an Intervention Research Project (January 26)**

*Objectives:*
1. Review the components of an intervention to set the stage for a research project
2. Discuss the format of a literature review the format of a literature review on area of need in a target population
3. Illustrate how to generate research questions and specific aims for an intervention research study
4. Differentiate specific aims from hypotheses
5. Discuss differences in efficacy and effectiveness research.

*Required Readings:*
Melnyk & Morrison-Breedy, Chapter 1 Setting the Stage for Intervention Research: The “So What Factor”

Melnyk & Morrison-Breedy, Chapter 2 Using Theory to Guide Intervention Research

Melnyk & Morrison-Breedy, Chapter 3 Nuts and Bolts of Designing Intervention Studies

Russell & Morrison, Chapters 7-9 (Part 2: The Template for your Research Plan)


Review:
Office of Extramural Research, National Institute of Health website:
http://grants.nih.gov/GRANTS/guide/
Under Forms and Deadlines, specifically review: Standard Form 424 (Research & Related) Grant Application Forms
NIH Research Portfolio Online Reporting Tool (RePORT) http://projectreporter.nih.gov/reporter.cfm (Database of funding NIH grants)

Assignment:
Identify a specific clinical or social need, issue, or condition as your research topic
Prepare a brief written statement (~ two 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. How does this relate to Healthy People 2020?
4. What kinds of interventions might be needed and feasible at each level (e.g., individual, family, organizational, county or court jurisdiction, state, nation)? What level of intervention is of interest to you at this point?

These all lead to your Specific Aims section. Start the bulleted draft as you think through these questions. This is the start of your literature review.

Week 3: Developing specific aims, research questions, and hypothesis (February 2)
Objectives:
1. Explore the development of specific aims, research questions, and hypotheses
2. Review and discuss the NIH funding mechanism
3. Identify the agency within NIH that might fund your project
4. Learn to address two key components for federal grant funding: evaluating the significance of the proposed project and addressing innovation.

Guest Lecture:

Grant Writing, Dr. Ramesh Raghavan, Associate Dean for Research

Required Readings:
Melnyk & Morrison-Breedy, Chapter 11 Navigating the IRB for Investigators
Russell & Morrison, Chapters 1-6 (Part One: Before you Write)

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

Review this website: http://socialwork.rutgers.edu/researchrepository
(Note: You must be at a Rutgers’ SSW computer or VPN to do so.)

Assignments:
Start to develop the Specific Aims page. Bring copies of draft to class next week; we will be doing a critical review of them in discussion for consultation and feedback

Week 4: Project Significance and Innovation (February 9)
Objectives:
1. Critically review Specific Aims section in an NIH application
2. Describe Project Significance as part of an NIH application
3. Describe Innovation as part of an NIH application
4. In class discussion and working on specific aims by students

Required Readings:
Melnyk & Morrison-Breedy, Chapter 3 Nuts and Bolts of Designing Intervention Studies (repeated)
Melnyk & Morrison-Breedy, Chapter 20 Writing Grants that Fund
Fraser et al. (2009). pp. 2-24 (electronic reading)

Assignment:
A. Summarize the literature on existing intervention models pertinent to your research and evaluate strengths and weaknesses of those models. Select a theoretical framework to guide the intervention; write up a literature review on the framework and its benefits.

B. State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact of the research results on the research field(s) involved. List succinctly the specific objectives of the research proposed (e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology).

C. Start to develop the Project Significance and Innovation subsections of the Research Strategy section

**Week 5 (February 16)**

**Conducting Intervention Research**

*Specific Aims section DUE in class with student presentation of Specific Aims*

*Note: This will be a draft that will evolve over the semester*

*Objectives:*
1. Explore intervention research in a well-constructed and well-conducted project
2. Explore the ways to accommodate specialized settings in intervention research
3. Review the method to create a NIH biosketch

*Required Readings:*
Melnyk & Morrison-Breedy, Chapter 4 Designing Interventions That Are Sensitive to Culture, Race/Ethnicity, and Gender

Melnyk & Morrison-Breedy, Chapter 15 Considerations in Conducting Interventions in Specialized Settings

Russell & Morrison, Chapters 10-12 (A portion of Part 3: Development of the Rest of Your Application)

*Supplemental Reading:*

**Assignment:** Create your own NIH Biosketch document, not due until end of class with final application/assignment

**Week 6: Writing Questions and Hypotheses; Creating Designs for Intervention Research (February 23)**
Guest Speaker: Antoinette Farmer, PhD, Associate Dean, SSW Faculty

Objectives:
1. Conceptualize and generate qualitatively-based questions and quantitatively-based hypotheses for your study of an intervention, and learn to define
2. Examine ways to operationalize key constructs and variables for examination

Required Readings:
Russell & Morrison, Chapters 8 (Writing the Specific Aims Section) Review

Assignment:
Write questions and/or hypotheses for your study, including considering variables required and methods to examine them. We will discuss these in class to help advise each other.

Week 7 (March 1)
Intervention Models, Treatment Manuals introduced

Objectives:
1. Identify key components of a treatment manual in intervention research
2. Examine models of treatment manuals
3. Review key intervention models

Required Readings:
Examples of treatment manuals
http://www.ibr.tcu.edu/_private/confirmmanuals.asp#BIGettingMotivated

Assignment:
Think about a treatment manual for your project. You can use one from the literature or create one of your own. This is an OUTLINE that will be included in your final assignment.

Week 8 Developing Treatment Manuals, Role of Treatment Fidelity and Bias in Intervention Research (March 8)

Objectives:
1. Further exploration of what a treatment manual is for intervention research
3. Explore bias in intervention research
4. Explore treatment fidelity in social sciences research
5. Critically analyze other’s draft treatment manual outlines

Required Readings:
Melnyk & Morrison-Breedy, Chapter 13 Maintaining Fidelity of the Intervention
Melnyk & Morrison-Breedy, Chapter 14 Study Implementation: An Example Using the Madres Para La Salud (Mothers for Health) Study


*In class discussion:*

A. 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.

B. Be prepared to discuss a treatment protocol based on your treatment manual in class that would lead to use in your intervention research project.

*Assignment:* For the next class begin to draft your treatment manual outline. Be prepared to discuss it in class.

**SPRING BREAK WEEK NO CLASS MARCH 15**

****Due March 21 (e-mail to PF) Draft of Research Questions, Hypotheses, Intervention Plan

**Week 9 Recruitment Strategies, Data Collection, Tracking (March 22)**

*Objectives:*
1. Evaluate recruitment strategies used in intervention research
2. Consider how recruitment and tracking of subject impacts data collection issues in intervention research projects
3. Investigate ways to retain subjects
4. Review draft content areas for group consultation

*In Class:* Critical review of draft research questions, hypothesis, intervention plan and treatment manual outlines. The point of this is to help keep you moving forward and use the team for consultation. This is a draft, no grades are attached, so be creative and ask questions.

*Required Readings:*
Melnyk & Morrison-Breedy, Chapter 12 Participant Recruitment and Retention
Assignment: Think about the ethical issues in your proposed project that need consideration in the recruitment process. Be prepared to discuss them next week in class—both the recruitment process as well as the ethical issues.

Week 10 Ethics in Intervention Research, Informed Consent, Ethics Review, the Institution Review Board (March 29)

Objectives:
1. Discuss ethical dilemmas in intervention research.
2. Illustrate ways to maintain confidentiality in intervention research
3. Review the process to apply for approval under the Rutgers University Institutional Review Board
4 Explain the various types of reviews under Title 45 Code of Federal Regulations Part 46

Required Readings:

Melnyk & Morrison-Breedy, Chapter 5 Ethical Consideration in Designing Intervention Studies


Week 11: Data Management and Analysis (April 5)

In Class: Be prepared to discuss any ethical issues you have with your project overall—from recruitment to methods.

Objectives:
1. Explore types of research design used in intervention research
2. Explore the types of analyses that pertain to the different designs
3. Consider threats to internal and external validity in research designs
4. Discuss power analysis, apply it by using a software program to determine power

Required Readings:

Melnyk & Morrison-Breedy, Chapter 6 Minimizing Threats to Internal Validity

Melnyk & Morrison-Breedy, Chapter 7 Minimizing Threats to External Validity

Melnyk & Morrison-Breedy, Chapter 16 Data Management

Melnyk & Morrison-Breedy, Chapter 17 Analyzing Intervention Studies

Melnyk & Morrison-Breedy, Chapter 19 Explaining Intervention Effects


**Assignment:**
Write a data management and analysis plan for your study.

**Week 12: Environment and Collaboration with Stakeholders, Developing the Budget (April 12)**

**Objectives:**
1. Explore the steps to developing a budget for your research project that meets both university and NIH requirements
2. Review the forms used by both institutions
3. Examine how to work with and budget for collaborators and key stakeholders at different institutions
4. Review the institutional Capacity Statement used by Rutgers
5. Examine methods ways to write and obtain obtaining letters of support and other support.

**In Class:** Critical review of your data management plan

**Required Readings:**
Melnyk & Morrison-Breedy, Chapter 10 Developing the Budget for Intervention Research Studies

Russell & Morrison, Chapters 13-17 (A portion of Part 3: Development of the Rest of Your Application)


**Guest Lecture:**
Christina Maggio, MBA, Director of SSW Business Office, Guest Speaker
Assignment:
Edit the SSW Capacity Statement for your project that details:
- How the scientific environment in which the work will be done will contribute to the probability of success
- The institutional support, equipment and other physical resources available to the investigators adequate for the project proposed.
- The benefits to the project of the unique features of the scientific environment, subject populations, or collaborative arrangements.

Write a budget for your grant and a dissemination plan for your intervention; bring in a draft of your budget for discussion next week.

Week 13 Dissemination, Translation Research (April 19)
Putting it all together

In Class: Critical review of draft budgets

Objectives:
1. Review ways to synthesize all the pieces of the research proposal into an application for grant funding.
2. Create a dissemination plan for the research project that meets NIH requirements
3. Explore translation research and how to apply the techniques
4. Review the components of the NIH grant review process
5. Critically review other’s budget proposals

Required Readings:
Melnyk & Morrison-Breedy, Chapter 23 Dissemination Findings of Intervention Research Studies
Melnyk & Morrison-Breedy, Chapter 24 Translating Evidence-Based Interventions into Real World Practice Settings
Russell & Morrison, Chapters 18-21 (Part Four: Maximizing your Application’s Competitiveness)

Assignment:
Complete proposal and all accompanying documents; prepare a power point presentation for final in-class presentation next week or the week after based on assignment.

Week 14 (April 26)

Objectives:
1. Apply the NIH review criteria to proposals as presented
2. Review the completeness of the NIH proposals, preparing for “submission”
3. Discuss the online submission process

In class: Presentation of Proposals
Week 15 (May 3) No Class

IX. Academic Integrity

All work submitted in a graduate course must be your own. It is unethical and a violation of the University’s Academic Integrity Policy to present the ideas or words of another without clearly and fully identifying the source. Inadequate citations will be construed as an attempt to misrepresent the cited material as your own.

Use the APA citation style which is described in the Publication manual of the American Psychological Association, 6th edition.

Plagiarism is the representation of the words or ideas of another as one’s own in any academic exercise. To avoid plagiarism, every direct quotation must be identified by quotation marks or by appropriate indentation and must be properly cited in the text or footnote. Acknowledgement is required when material from another source is stored in print, electronic, or other medium and is paraphrased or summarized in whole or in part in one’s own words. To acknowledge a paraphrase properly, one might state: “to paraphrase Plato’s comment…” and conclude with a footnote identifying the exact reference. A footnote acknowledging only a directly quoted statement does not suffice to notify the reader of any preceding or succeeding paraphrased material. Information which is common knowledge, such as names of leaders of prominent nations, basic scientific laws, etc., need not be footnoted; however, all facts or information obtained in reading or research that are not common knowledge among students in the course must be acknowledged. In addition to materials specifically cited in the text, only materials that contribute to one’s general understanding of the subject may be acknowledged in the bibliography. Plagiarism can, in some cases, be a subtle issue. Any question about what constitutes plagiarism should be discussed with the faculty member.

Plagiarism as described in the University’s Academic Integrity Policy is as follows:

“Plagiarism: Plagiarism is the use of another person’s words, ideas, or results without giving that person appropriate credit. To avoid plagiarism, every direct quotation must be identified by quotation marks or appropriate indentation and both direct quotation and paraphrasing must be cited properly according to the accepted format for the particular discipline or as required by the instructor in a course. Some common examples of plagiarism are:

- Copying word for word (i.e. quoting directly) from an oral, printed, or electronic source without proper attribution.
- Paraphrasing without proper attribution, i.e., presenting in one’s own words another person’s written words or ideas as if they were ones own.
- Submitting a purchased or downloaded term paper or other materials to satisfy a course requirement.
- Incorporating into one’s work graphs, drawings, photographs, diagrams, tables, spreadsheets, computer programs, or other nontextual material from other sources.
Plagiarism along with any and all other violations of academic integrity by graduate and professional students will normally be penalized more severely than violations by undergraduate students. Since all violations of academic integrity by a graduate or professional student are potentially separable under the Academic Integrity Policy, faculty members should not adjudicate alleged academic integrity violations by graduate and professional students, but should refer such allegations to the appropriate Academic Integrity Facilitator (AIF) or to the Office of Student Conduct. The AIF that you should contact is Antoinette Y. Farmer, 848.932.5358. The student shall be notified in writing, by email or hand delivery, of the alleged violation and of the fact that the matter has been referred to the AIF for adjudication. This notification shall be done within 10 days of identifying the alleged violation. Once the student has been notified of the allegation, the student may not drop the course or withdraw from the school until the adjudication process is complete. A TZ or incomplete grade shall be assigned until the case is resolved. For more information regarding the Rutgers Academic Integrity Policies and Procedures, see: http://academicintegrity.rutgers.edu/academic-integrity-at-rutgers.

It has been recommended by the Office of Student Conduct that the honor pledge below be written on all examinations and major course assignments.

To promote a strong culture of academic integrity, Rutgers has adopted the following honor pledge to be written and signed on examinations and major course assignments submitted for grading: **On my honor, I have neither received nor given any unauthorized assistance on this examination.**

X. Disability Accommodation

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus’ disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

XI. Bibliography


Case Management for Substance Abuse Treatment: A Guide for Administrators (SAMHSA publication)


Kirk & Reid Chapter 4 (The Scientific Model in Practice) and Chapter 7 (Research Based Practice) This is a historical text.

Kirk & Reid, Chapter 1 (Science and Social Work: A Historical Perspective)


Longhofer, J., Floersch, J. Hoy, J. (2013). Qualitative methods for practice research. New York, New York: Oxford University Press. Chapter 2 (Quick Start for Qualitative Research to Practice) and Chapter 4 (Engaged Scholarship Qualitative Methods and Adapting Evidence Based Practice).


Rothman, J., & Thomas, E.J. (1994). (Chapter 1)

Rothman, J., & Thomas, E.J. (1994). (Chapter 8) (Review)


Rothman, J., & Thomas, E.J. (1994). (Chapters 2, 3, & 9) Conducting Intervention Research;

SAMHSA (2002). DASIS Report: Facilities offering special programs or services for women

SAMHSA (2010). The TEDS Report: Differences in Substance Abuse Treatment Admissions between Mexican-American Males and Females


