Research Methods in Public Health  
E.33.2361- Spring 2008  
Department of Nutrition, Food Studies and Public Health  
Mondays 6:45 – 8:25  

Professor: Diana Silver, Ph.D.  
Office Hours: Mondays 2:00-4:00 or by appointment  
Phone: 212.998.5592  
Email: diana.silver@nyu.edu  

Overview of the Course:  
This course provides an introduction to the fundamentals of research study design and methods and data collection. It serves as an introduction to quantitative, qualitative, mixed method and participatory approaches to research, as well as ethical issues in conducting research. Through the mix of texts, articles from the public health literature, and course work, students will build skills for conducting research and evaluation.  

Course Objectives:  
At the end of the course, students should be able to:  
1. Identify the types of research questions and designs appropriate for studies in public health.  
2. Demonstrate knowledge of key concepts with sample selection and measurement.  
3. Demonstrate competence in constructing and thinking through basic analysis of surveys and semi-structured interviews.  
4. Demonstrate competence in conducting and analyzing focus groups.  
5. Evaluate the strengths and weaknesses of methods used in various research studies.  
6. Describe methods for designing research projects related to specific public health problems.  

Course Format and Materials:  
This course draws upon two types of reading material: texts that focus on the conduct of research and scientific articles that are examples of different kinds of research. For each of the aspects of research methodology presented during lectures, students will be assigned reading materials that make use of those methods. It is essential that you come to class having completed the readings, ready to discuss them.  

For some of the topics I will be posting discussion questions on Blackboard. When discussion questions are posted, students are expected to provide their responses to the questions as well as review and respond to each other’s responses. All responses should be completed by 5 pm, the Sunday before class. This format necessitates the completion of readings and assignments prior to each class as well as class preparation.  

Work completed in this course prepares students for the work they must complete in next semester’s course, Assessing Community Needs. The survey instrument and focus group
moderator’s guide are tools you will use next semester (although you will probably modify them as you undertake that work). The topic you will be assessing in the communities in which you will work next semester is children’s health, and thus your survey instrument and moderator’s guide should focus on these (unless I give special permission). Students will complete these assignments in groups of four. When it is possible, time will be given for teams to meet in class.

**Classroom Etiquette**

- It is expected that everyone will attend class and show up on time. If you are not able to attend class, please advise me in advance. I will be circulating a sign in sheet to keep a record of class attendance.
- Cellphones will be turned off prior to class.
- It is expected that everyone will check their NYU email accounts and Blackboard regularly for course updates, new materials and announcements.

**Required Readings**

- Readings on Blackboard. Readings, handouts, discussion questions and announcements will be available through the NYU blackboard system. For help using Blackboard go to http://www.nyu.edu/its/faq/blackboard

**Assignments:**

Students will be required to turn in the following assignments:

1. **Literature Review and Article Critique.** Each student will conduct a summary literature review of 5 public health articles and a critique of one of those articles, using the lit review template and critique guide that appear at the end of this syllabus. The literature you select should help you think about unanswered questions in the literature that you may wish to explore in the focus group and survey development assignments, and should be done before the article critique. Once you complete the literature review, select an article from the literature you have reviewed, and complete a critique of the article. Article critiques are your reflections on the research design of a public health article that relates to your semester’s research topic. The article critique should not exceed 3 pages double-spaced. (individual assignment)

2. **Survey Instrument First Draft and Pre-Test:** Each team will draft a survey instrument on the semester’s topic. Students will then each be responsible for administering the survey to 5 parents, and compile results from the pre-test to present to the team to use in revision of the instrument, and for description in the final project. (group assignment)

3. **Focus Group Moderator’s Guide.** Each team will develop a moderators’ guide for a 45 minute focus group investigating the issue of children’s health. The issues explored in the
focus group may flow from the survey results, but can go further, as the group
determines. (group assignment)

4. Final Project: Each team will prepare a 5-7 page single spaced paper, outlining a
research design for investigating children’s access to health care and insurance. The
paper should identify a target population, the research question the study will investigate,
the basic design it will employ, the sampling frame, the sampling plan and a brief
discussion of the analytic plan for the data collected. The paper should include an
appendix comprised of the moderator’s guide, survey instrument and tables describing
the pre-test of the survey. Format for the final paper will be discussed in class. (group
assignment)

Grading:

Summary Literature Review and Article Critique: 15%
Midterm: 20%
Survey Instrument First Draft: 15%
Focus Group Moderator Guide: 10%
Final Group Project: 20%
Class Participation: 20%
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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings Due</th>
<th>Assignment Due</th>
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<tbody>
<tr>
<td>January 28</td>
<td>An Introduction to Research, sources of data, generating research questions, using the literature</td>
<td>a) Crosby, ch 1,2 b) Susser c) Giachello d) Millet e) Jones</td>
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<td>February 4</td>
<td>Introduction to Research Design, approaches to research and research paradigms, and ethics of research</td>
<td>a) Crosby, ch 3,4 b) NYU Principal Investigator’s Guide to Human Subjects c) Guidelines for the Conduct of Research Involving Human Subjects as the National Institutes for Health d) Marshall e) Malone</td>
<td>Blackboard Discussion Questions</td>
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<td>February 11</td>
<td>Observational Research Designs</td>
<td>a) Crosby, ch 5 b) Two Feathers c) Liller d) Costello e) Burton f) Friedman</td>
<td>Blackboard discussion questions</td>
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<td>February 18</td>
<td>NO CLASS – President’s Day</td>
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<td>February 25</td>
<td>Experimental Research Designs</td>
<td>a) Crosby, ch 6 b) Rosen c) Patton d) Perry</td>
<td>Blackboard discussion questions</td>
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<td>March 3</td>
<td>Measurement in Research Design</td>
<td>a) Crosby ch 9, 10 b) Deklyen c) Siegel d) Kenney e) Hallfors f) Dufrene g) Echeverria</td>
<td>Literature Review Due</td>
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<td>March 10</td>
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<td>IN-CLASS MIDTERM</td>
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<td>March 17</td>
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<td>NO CLASS- Spring Break</td>
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<td>Topic</td>
<td>Reading Sources</td>
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| March 24   | Survey Sampling and Survey Design                                      | a) Crosby ch 11  
              b) Zakrison (to be distributed in class)  
              c) Sugihantono                   |                                |
| March 31   | Analytic Techniques in Health Promotion and Disease Prevention        | a) Crosby 12, 13  
              b) Brodie  
              c) Vlahov  
              d) Ompad  
              e) Galea                        | Survey Draft Due                |
| April 7    | Qualitative Methods of Inquiry and Ethics                             | a) Crosby ch 7  
              b) excerpt from Saks and Allsop  
              c) Furst et al.  
              d) Rubin and Rubin (ch 1-4 distributed the prior week in class)  
              e) de Carvalho Mesquita Ayres  | Blackboard Questions            |
| April 14   | Thinking through Focus Groups and Interviews                         | a) Feldman (to be distributed in class)  
              b) Vaughn, Schumm and Sinagub (ch 10, distributed in class)  
              c) Shelley                      |                                |
| April 21   | Coding Focus Groups                                                  | a) Jackson  
              b) Bigby  
              c) focus group transcript to be handed out in previous week’s class for use in class! | Moderator Guide Due            |
| April 28   | Administrative Data Analysis and Mixed methods                       | a) Krieger  
              b) Robbins  
              c) Wilcox  
              d) VanLandingham  
              e) Bader                     |                                |
| May 5      | Program Evaluation                                                   | a) Crosby, ch 7  
              b) Mock  
              c) Neuhauser  
              d) Weitzman                    | Final Project Due               |
Additional Readings

For January 28:


For February 4:


Guidelines for the conduct of Research Involving Human Subjects at the National Institutes of Health

NYU Principal Investigator’s Guide to Human Subjects Research
http://www.nyu.edu/ucaihs/forms/guide.doc

For February 11:


For February 25:


For March 3:


For March 24:


For March 31:


For April 7:


For April 14:

For April 21:


For April 28:


For May 5:


Guide for Critiquing a Research Article

1. What is the research question?
2. What is the research design?
3. How are the key variables measured? How did they collect their data?
4. Who is the sample? How was the sample chosen?
5. What are the results?
6. What limitations do the authors identify, if any?
7. What are the key points in the discussion?
8. Given what else you have read regarding this topic, what is interesting about this article for your research project?