Spring 2015

COHE 6130A - Research Methods in Health Science

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Georgia Southern University  
Jiann-Ping Hsu College of Public Health  
COHE 6130- A: Research Methods in Health Science  
Spring 2015

Instructors:  Dziyana Nazaruk, DrPH, MPH, MSSM  
Offices:  Hendricks  
Phones:  N/A  
E-Mails:  Via Folio Only  
Office Hours:  By appointment.  
Class Meets:  Wednesday: 6 pm- 8:45 pm  IT Building Room  2203

--- Course schedules can be found at:  
http://students.georgiasouthern.edu/registrar/classSchedule.htm

Catalog Description:  Introduces students to research methods in health science.  
Development and presentation of practicum and research proposal will be the focus of the course. Additional emphasis will be placed on Community- Based Participatory Research for Health.

Required Texts:  

Other Required Readings:  
Reference lists, websites, links to reports, and PDF copies posted on Folio.

Social and Behavioral Sciences Core Competencies  
1. Synthesize theories, concepts and models from social and behavioral science disciplines that are used in public health practice and research.  
2. Assess philosophical foundations and assumptions of research applied to community health problems.  
3. Analyze social and behavioral determinants of health equity at all ecological levels (individual through policy).
4. Demonstrate the use of a variety of health communication methods and techniques including social marketing, media advocacy, and GIS software for data communication.
5. Demonstrate legislative advocacy skills that influence health policy.
6. Demonstrate how to plan and implement Community-Based Participatory Research (CBPR) principles and approaches when working on collaborative projects.
7. Compare qualitative, quantitative, and mixed methods and their use in community health intervention, evaluation, and research.
8. Describe the benefits and challenges of a mixed methods approach.
9. Utilize qualitative, quantitative, and mixed methods to address community health problems.
10. Apply Community-Based Participatory Research (CBPR) approaches when working with diverse communities.
11. Explain ethical principles critical to community-based research and practice.
12. Assess the impact of power and privilege on health inequity at local, national, and global levels.
14. Analyze evidence-based social and behavioral interventions to address community health issues.
15. Develop collaborative and transdisciplinary relationships to respond to public health problems.
16. Describe skills needed to function successfully as a community and organizational change agent.
17. Develop logic model and mission, goal, and objective (outcome) driven program development and program evaluation plans.
18. Promote the public health and health education professions individually and collectively.

**Specific Course Learning Objectives**

At the completion of this course the student will be able to:

1. Identify appropriate areas and issues of concern for research that will improve public health practice (2,6)
2. Develop skills to participate in transdisciplinary research (1,7,8)
3. Develop skills to assess the usefulness of research across the ecological view of public health education (9,10)
4. Describe the relationship of published scientific literature to future research (1,2)
5. Apply the appropriate strategies for developing a research problem including literature reviews and methodological assessment (1,7,9)
6. Identify and describe the major paradigms of research that impact public health education (7,9)
7. Construct appropriate hypotheses and research questions for developing evidence-based public health education (1,7)
8. Identify and apply various research designs and methods that are appropriate to help solve public health education problems (1,2)
9. Identify the importance of and develop a plan for conducting quantitative, qualitative, and mixed method strategies (9)
10. Describe relevant validity and reliability issues that impact data measurement and select appropriate instruments or measurement techniques for research projects (7)
11. Describe the issues that impact the trustworthiness of qualitative research (9)
12. Select appropriate observation and analysis techniques for public health education research projects, including those involving communities (7,9,10)
13. Demonstrate ability to draw conclusions from and communicate findings of public health research (11)
14. Understand the limitations and delimitations of research design for providing evidence-based strategies (10,11)
15. Describe appropriate approaches for critiquing the usefulness of public health education research (10)
16. Demonstrate knowledge of ethical issues, including informed consent and data maintenance, of concern to research in general and qualitative and quantitative research in particular (11)
17. Demonstrate research skills to support evaluation research of community initiatives (7,8,9,11)
## Overview of the Content to be Covered During the Semester:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignment</th>
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</thead>
</table>
| 1/14 | INTRODUCTION  
Course Introduction, Syllabus Review, Expectations.  
*Film (Unnatural Causes – In Sickness and in Wealth)* | RK Chap 1-2  
JC Chap 1 |  |
| 01/21 | Formulating a Research Problem  
Lab: Introduction to SPSS; Entering and Editing Data | RK Chap 3-4  
JC Chap 2 | Class Activity |
| 01/28 | Formulating a Research Problem  
Lab: Inserting and Deleting Cases  
Exporting and Importing Data; Splitting and Merging Files (SPSS) | RK Chap 5-6  
JC Chap 3 |  |
| 02/04 | Conceptualizing a Research Design  
Lab: Introduction to Qualitative Software; Organizing Data; Coding; Data Analysis | JC Chap 5-7 | Lit. Review Due |
| 02/11 | Exam 1  
COLLABORATION  
Community Partnerships, Community Coalitions, and Collaborations | Minkler (Folio) – Ch. 6, 8 | Exam 1 |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading Material</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/18</td>
<td>COMMUNITY CAPACITY Definitions of Capacity, How to Assess Partnership and Capacity</td>
<td>Minkler (Folio)- Ch. 10</td>
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<td></td>
<td>ETHICS, POWER, &amp; PRIVILEGE IN CBPR Issue Identification, Strategy Review</td>
<td>M&amp;W (Folio) -Ch. 5, 15, 17</td>
<td>Student In Class Presentation (Ethics, Power, &amp; Privilege)</td>
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<tr>
<td></td>
<td>Student In Class Presentation – Critical Review of Ethics, Power, &amp; Privilege</td>
<td>Minkler (Folio)- Ch. 17</td>
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<td><em>Film (Half the Sky)</em></td>
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<td>02/25</td>
<td>EVALUATING CBPR Evaluation Approaches, Collaborative Logic Modeling, Combining Participatory Research with Clinical Trials</td>
<td>M&amp;W Ch. 14, 21 Minkler Ch. 19</td>
<td>Class Activity</td>
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<td>03/04</td>
<td>Constructing an Instrument for Data Collection</td>
<td>RK Chap 9-11</td>
<td>Scientific Article Critique Due</td>
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<td>03/11</td>
<td>Data collection and Sampling Lab: creating variables and computing descriptive statistics</td>
<td>JC Chap- 8-9 RK Chap- 12</td>
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<td>03/18</td>
<td><em>Spring Break- no class</em></td>
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<td>Date</td>
<td>Activity</td>
<td>Chapters</td>
<td>Notes</td>
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<tr>
<td>03/25</td>
<td>Writing a research proposal</td>
<td>RK Chap- 13</td>
<td>Class Activity</td>
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<td>Lab: creating variables and computing descriptive statistics</td>
<td>JC Chap- 4</td>
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<td>04/01</td>
<td>Data Collection</td>
<td>RK Chap- 14</td>
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<td></td>
<td>Lab: Computing Bivariate Statistics</td>
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<td>04/08</td>
<td>Processing and Displaying Data</td>
<td>RK Chap- 15, 16</td>
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<td>Lab: Tables, Charts and Graphs</td>
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<td>04/15</td>
<td>Class: Exam 2</td>
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<td>Exam 2</td>
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<td>Wrap up</td>
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<td>04/22</td>
<td>No class: Working on a Research Proposal</td>
<td>RK Chap- 17-18</td>
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<td>04/29</td>
<td>Presentations I</td>
<td>N/A</td>
<td>Presenters</td>
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<tr>
<td>05/06</td>
<td>Presentations II</td>
<td>N/A</td>
<td>Presenters Written Proposals Due</td>
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Instructional Methods

Class meetings will be a combination of lecture, class discussion, and in-class activities. Written homework assignments, exams, and oral presentations constitute the basis of student evaluation.

Grading

- Literature Review- 300 points (20%)
- In-class examinations- 300 points (20%)
- Article Critique- 150 points (10%)
- Ethic, power, privilege presentation and discussion- 150 points (10%)
- Final proposal – 300 points (20%)
- Final presentation – 150 points (10%)
- Class participation – 150 points (10%)

Total points – 1500 points (100%)

Description of Requirements

A. Literature Review- This is a process of organizing references systematically that support your knowledge of content or subject or research and your understanding of the methods you will use. Your literature review should include empirical studies that tell you what research questions have received convincing answers. You will provide a written product as well as discuss the assignment in class. For the written product, the first part will consist of background, objective, research question, types of studies, description of participants, database used, date/year ranges, and search strategy. The second part of the review will be the results in the form of tables, and a written synthesis of your findings, drawing from the readings and other materials. The literature review must have at least 10 peer-reviewed articles.

B. Examination- Two exams will be given throughout this course.

C. Ethics, Power, & Privilege Article Presentation & Discussion- In Week 6, each student is expected to present a critical review of ethics, power and privilege issues discussed in a peer reviewed journal article of their choosing. Students should prepare a 15 minute presentation that provides a summary of the article AND a critical discussion of how ethics, power, and privilege influenced the article. Students will be expected to lead a discussion of the article after their formal presentation. (Learning Objectives 6-8)

D. Research presentation- Write the first three chapters of a research proposal (must use quantitative, qualitative, or mixed methods along with proposed timeline and appendices).

*Use the Proposal Format
E. **Article Critique:**

1. What health issue was addressed in this study?
2. Who was the target population?
3. How was the needs assessment data collected?
4. Did the author(s) presentation of the data persuade you to believe the health issue is a burden for the target population at the national and local level? Explain
5. Which risk factors were mentioned?
6. Was theory used? Which one? How?
7. What research questions and hypothesis(es) guided the study?
8. What evidence did the author(s) provide to determine support for their research question(s)?
9. How important is the article? Is this article significant?
10. What are some Public Health Implications?

**Assignment Formatting:** Students are expected to follow APA 6 guidelines when preparing all written assignments (including discussion posts) for this class. Failure to do so will result in grade reductions. If you do not possess the official APA style guide, please purchase or borrow it for this class.

**Academic Misconduct:** As a student registered at this University, it is expected that you will adhere to only the strictest standards of conduct. It is recommended that you review the latest edition of the Student Conduct Code book, as well as the latest Undergraduate & Graduate Catalog to familiarize yourself with the University’s policies in this regard. Your continued enrollment in this course is an implied contract between you and the instructor on this issue; from this point forward, it is assumed that you will conduct yourself appropriately.

Academic integrity relates to the appropriate use of intellectual property. The syllabus, lecture notes, and all materials presented and/or distributed during this course are protected by copyright law. Students are authorized to take notes in class, but that authorization extends only to making one set of notes for personal (and no other) use. As such, students are not authorized to sell, license, commercially publish, distribute, transmit, display, or record notes in or from class without the express written permission of the instructor.

"According to the Academic Dishonesty Policy of GSU, Plagiarism includes (but is not limited to):
A. Directly quoting the words of others without using quotation marks or indented format to identify them."
B. Using published or unpublished sources of information without identifying them.
C. Paraphrasing material or ideas without identifying the source.
D. Unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic material.

If you are accused of plagiarism by a JPHCOPH, the following policy, as per the Judicial Affairs website (http://students.georgiasouthern.edu/judicial/faculty.htm) will be enforced:

PROCEDURES FOR ADJUDICATING ACADEMIC DISHONESTY CASES
First Offense - In Violation Plea
1. If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is a first violation of academic dishonesty. The incident will be reported via the following website:
http://students.georgiasouthern.edu/judicial/faculty.htm
2. If it is a first violation, the professor should talk with the student about the violation. If the student accepts responsibility in writing and the professor decides to adjudicate the case, the following procedures will be followed:
   a. The student will be placed on disciplinary probation for a minimum of one semester by the Office of Judicial Affairs.
   b. The student will be subject to any academic sanctions imposed by the professor (from receiving a 0 on the assignment to receiving a failing grade in the class).
   c. A copy of all the material involved in the case (Academic Dishonesty Report Form and the Request For Instructor to Adjudicate Form) and a brief statement from the professor concerning the facts of the case and the course syllabus should be mailed to the Office of Judicial Affairs for inclusion in the student’s discipline record.

First Offense - Not In Violation Plea (student does not admit the violation)
If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, the professor should contact the Office of Judicial Affairs to determine if this is the first or second violation of academic dishonesty. The student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case. If the student is found responsible, the following penalty will normally be imposed:
a. The student will be placed on Disciplinary Probation for a minimum of one semester by the Office of Judicial Affairs.
b. The student will be subject to any academic sanctions imposed by the professor.

Second Violation of Academic Dishonesty
If the professor and the Dean of Students agree that the evidence is sufficient to warrant a charge of academic dishonesty, and if it is determined this is the second violation, the student will be charged with academic dishonesty and the University Judicial Board or a University Hearing Officer would hear the case. If the student is found responsible, the following penalty will normally be imposed:
a. Suspension for a minimum of one semester or expulsion.
b. The student will be subject to any academic sanctions imposed by the professor.

NOT RESPONSIBLE FINDING
When a student is found not responsible of academic dishonesty, the work in question (assignment, paper, test, etc.) would be forwarded to the Department Chair. It is the responsibility of the Department Chair to ensure that the work is evaluated by a faculty member other than the individual who brought the charge and, if necessary, submit a final grade to the Registrar. For the protection of the faculty member and the student, the work in question should not be referred back to the faculty member who charged the student with academic dishonesty. In the case of a Department Chair bringing charges against a student, an administrator at the Dean’s level will ensure that the student’s work is evaluated in an appropriate manner.

CONFIDENTIALITY
In accordance with provisions of the Family Educational Rights and Privacy Act of 1974 and the Georgia Open Records Act, any information related to a violation of academic dishonesty or the outcome of a judicial hearing regarding academic dishonesty, is prohibited and must be treated as confidential by members of the faculty."

**Academic Handbook:** Students are expected to abide by the Academic Handbook, located at [http://students.georgiasouthern.edu/sta/guide/](http://students.georgiasouthern.edu/sta/guide/). Your failure to comply with any part of this Handbook may be a violation and thus, you may receive an F in the course and/or be referred for disciplinary action.
University Calendar for the Semester: The University Calendar is located with the semester schedule on the University’s Web page, and can be found at the following address: http://students.georgiasouthern.edu/registrar/calendar.htm

Attendance Policy: Federal regulations require attendance be verified prior to distribution of financial aid allotments. Attendance will be recorded after this initial period and will count toward your final grade.

One Final Note: The contents of this syllabus are as complete and accurate as possible. The instructor reserves the right to make any changes necessary to the syllabus and course material. The instructor will make every effort to inform students of changes as they occur. It is the responsibility of the student to know what changes have been made in order to successfully complete the requirements of the course. Samples of your work may be reproduced for search purposes and/or inclusion in the professor’s teaching portfolio. You have the right to review anything selected for use, and subsequently ask for its removal.