Course Title: Applied Research Methods in Behavioral Science

Course Number: HEBS 0600J

Course Location: SPH Bldg, 2A (Computer Lab)

Course Date & Time: Wednesday, 2:00pm – 5:00pm

Course Instructor: Olivia Wackowski, PhD, Assistant Professor
Department of Health Education Behavioral Science
wackowol@sph.rutgers.edu

HEBS Secretary: Mary Ganss 732-235-9725

Office Hours: By Appointment


Course Readings/Resources: Other readings as assigned (to be made available on Moodle)

SPSS- You will need to use SPSS to analyze your final project datasets. SPSS is available on the computers in the SPH computer lab. We will have some class time for you to use SPSS on the classroom computers. You may also rent SPSS for ~$55 for 6 months at On the Hub http://www.onthehub.com/spss/

Prerequisite: Introduction to Epidemiology, Introduction to Biostatistics

Course Description: This is a basic course in research methods, designed to acquaint HEBS students with methods to conduct health behavior research. Major research methods and techniques will be explored in this course. While the emphasis will be on quantitative methods, qualitative methods will be introduced. While this is not a statistics course, a basic understanding of statistics will be useful in this course as statistical concepts, problems and analyses are frequently considered.

Selected Department Competencies Addressed: Each Department identifies competencies for each degree offered. The competencies addressed in this course for the MPH include:

- Assess and delineate health education and promotion needs of diverse populations using a variety of techniques;
- Design, implement, conduct and evaluate programs in diverse settings
- Conduct behavioral science research.
Course Objectives: At the end of this course, students will be able to:

1. Demonstrate their understanding of the basic research designs and processes
2. Review and synthesize research literature
3. Formulate research questions/generate hypotheses
4. Evaluate instruments for quality, including validity and reliability
5. Articulate the pros and cons of various data collection methodologies
6. Describe principles of sampling
7. Describe appropriate uses of qualitative and quantitative approaches.
8. List and describe data bases used in behavioral science
9. Analyze a public health dataset
10. Interpret and effectively communicate results from data analysis

School of Public Health Honor Code: The School of Public Health Honor Code is found in the student bulletin (sph.rutgers.edu/academics/catalog/index.html ). Each student bears a fundamental responsibility for maintaining academic integrity and intellectual honesty in his or her graduate work. For example, all students are expected to observe the generally accepted principles of scholarly work, to submit their own rather than another’s work, to refrain from falsifying data, and to refrain from receiving and/or giving aid on examinations or other assigned work requiring independent effort. In submitting written material, the writer takes full responsibility for the work as a whole and implies that, except as properly noted by use of quotation marks, footnotes, etc., both the ideas and the works used are his or her own. In addition to maintaining personal academic integrity, each student is expected to contribute to the academic integrity of the school community by not facilitating inappropriate use of her/his own work by others and by reporting acts of academic dishonesty by others to an appropriate school authority. It should be clearly understood that plagiarism, cheating, or other forms of academic dishonesty will not be tolerated and can lead to sanctions up to and including separation from the Rutgers School of Public Health.

Policy Concerning Use of Recording Devices and Other Electronic Communications Systems: When personally owned communication/recording devices are used by students to record lectures and/or classroom lessons, such use must be authorized by the faculty member or instructor who must give either oral or written permission prior to the start of the semester and identify restrictions, if any, on the use of mobile communications or recording devices.

Policy Concerning Handouts: Faculty photocopying of PowerPoint handouts for classes is no longer supported in school efforts to reduce our carbon footprint. Therefore, it is students’ responsibility to access and, if desired, print handouts on their own. Class handouts for each class session will be posted on Moodle 24 hours before that session.
Course Requirements and Grading:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Weight</th>
<th>Points</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance &amp; Participation</td>
<td>5%</td>
<td>(12.5 pts)</td>
<td>94+ A</td>
</tr>
<tr>
<td>Exam</td>
<td>40%</td>
<td>(100 pts)</td>
<td>90-93 A-</td>
</tr>
<tr>
<td>Quiz</td>
<td>10%</td>
<td>(25 pts)</td>
<td>87-89 B+</td>
</tr>
<tr>
<td>Data Analysis Project</td>
<td>45%</td>
<td>(97.5 pts)</td>
<td>84-86 B</td>
</tr>
<tr>
<td>Annotated bibliography on topic area</td>
<td>10%</td>
<td>(25 pts)</td>
<td>80-83 B-</td>
</tr>
<tr>
<td>Research Question &amp; Variable List</td>
<td>5%</td>
<td>(12.5 pts)</td>
<td>77-79 C+</td>
</tr>
<tr>
<td>Research Presentation</td>
<td>30%</td>
<td>(75 pts)</td>
<td>74-76 C</td>
</tr>
</tbody>
</table>

100% (250 total points)

On occasion you might desire clarification as to why your exam was graded a certain way or why you may have lost points on one of the assignments. I would be happy to talk about these issues during my office hours or a mutually arranged appointment. I will often ask students to write out their concerns before we sit down together so that the issue is clear for both of us.

ATTENDANCE AND PARTICIPATION: Students are expected to arrive promptly and attend every class. **Attendance is especially important since our meetings are double periods, so missing one class is really like missing two.** Classes missed will result in points deducted from the Attendance portion of your grade. Late arrivals will also affect the Attendance portion of the grade. In the event of an emergency or illness requiring you to miss class, let me know by email (wackowol@sph.rutgers.edu) prior to class or as soon as possible afterwards. If you miss class, contact a classmate to arrange pick up of any handouts, class notes, and other updates promptly.

Each student is also encouraged to **participate** fully in all class discussions, especially in discussions related to the readings, lecture notes and class activities. You can actively participate in class by responding to the Professor’s questions during lecture (“can anyone remember what we said an independent variable is?”), working with partners as needed and asking thoughtful questions as they may arise. A lack of class participation may negatively impact your grade. Clearly if you do not attend class, you will also miss opportunities to participate.

DATA ANALYSIS PROJECT: You will be introduced to a large public health survey dataset and will analyze it to begin the process of answering a research question you develop. You will present the findings in tables and/or figures and interpret the results in a brief oral class powerpoint presentation. The project will occur over the course of the semester, with emphasis on literature review, research question formulation and the development of an analytic plan.

*Further details on these assignments will be forthcoming.*
Tentative Course Schedule

Week 1. Introduction to Research Methods & Literature Review  (9/6/2017)
Babbie Ch 4 “Research Design”
Optional Lit Review Readings/Resources on Moodle:
- How to Read a Research Article
- Literature Reviews-UNC Guide
- Literature Review – Ex 1 and Ex 2

Week 2. Study Designs and Research Questions (9/13/2017)
Babbie Ch 8 “Experiments”

Week 3 Measurement (Conceptualizing and operationalizing variables) & Sampling (9/20/2017)
Babbie Ch 5 “Conceptualization, Operationalization and Measurement”
Babbie Ch 7. The Logic of Sampling
Guest Presenter: Michelle Manderski, MPH – An Overview of BRFSS

Week 4 Survey Research  (9/27/2017)
Babbie Ch 9 “Survey Research” (pgs 269-285)
*DUE: DRAFT Project Research Questions & Variables of Interest*

Week 5 Instrument Development/Cognitive testing (10/4/2017)
MOODLE READING: Ch1 “Introduction” in Willis, G. Cognitive Interviewing (*MOODLE*)

Week 6 Data Collection Methods, Implementation Procedures (10/11/2017)
Babbie Ch 9 “Survey Research” (pgs 286-303)
MOODLE READING Ch 5 “Methods of Data Collection “ in Aday L. & Cornelius L. Designing and Conducting Health Surveys 3rd Edition (*MOODLE*)
*DUE: Variables Assignment*

Week 7 Data Management/ Code Books/ Introduction to Data Analysis (10/18/2017)
Babbie Ch 14 Quantitative data analysis in Babbie
*DUE: Annotated Bibliography Assignment*

Week 8: Data Analysis Cont./SPSS Overview (10/25/2017)
No Readings/SPSS Demonstration
*Bring your created dataset*

Week 9:  Exam (11/1/2017)

Babbie Ch 15 Reading and Writing Social Research
*Bring your created dataset*
Babbie Ch 10 Qualitative Field Research
Bring your created dataset

Week 12: Thanksgiving break. NO CLASS (11/22/2017)

Babbie Ch 11 Unobtrusive Research
Bring your created dataset

Week 14 Qualitative Quiz /Guest Lecture/ Data Analysis Support - (12/6/2017)
Time for one on one SPSS/analysis support
Bring your created dataset

Week 15: Student presentations (12/13/2017)