

**University of Florida
College of Public Health & Health Professions
Department of Behavioral Science and Community Health**

Course Syllabus

**PHC6700: Social & Behavioral Research methods
Spring 2014**

Meeting Days	Times	Location
Thursday	3 th -5 th period (9:35-12:35)	HPNP 1102

Instructor Information

Giselle Carnaby, MPH, PhD
4172 PPHP
Phone: 352-273 6164
Email: gmann@phpp.ufl.edu
Office hours by appointment.

Course Overview

The purpose of this course is to introduce students to social and behavioral research methods used in the field of public health. Students will gain expertise in reading, evaluating and testing data from various forms of research. The focus will be on the practical application of health and behavioral data. The content focuses on the theoretical foundations of measurement, types of research design (qualitative / quantitative), study construction for large and small scale projects, analysis, validity and reliability assessment, survey /questionnaire design, and content analysis. The classes will incorporate readings, lectures, in-class discussion, practical labs and student presentations.

Course Timetable: 3hrs per week (2 hrs in person lecture format, 1 hr tutorial)

Course Objectives

1. To increase exposure to and knowledge of research methodology in public health with emphasis on social behavioral applications.
2. To identify and understand the role of research and measurement in social outcomes research.
3. To develop skills in hypothesis development, sampling, and application of the concepts of validity and reliability.
4. To broaden knowledge of qualitative and quantitative designs and their application and interpretation in community and health environments.
5. To apply basic concepts of data gathering, management, accuracy, precision, and testing and reproducibility to measured health data.
6. To critically assess research concepts in published research papers from a variety of social and behavioral areas.





Recommended Text: (will be made available on closed reserve)

1. Bryman A. Social Research Methods, 3rd eds. Oxford University Press. ISBN: 0199202958 / 978-0199202050

Other Recommended Texts:

1. Babbie, E. (2008). The Basics of Social Research. 4th Edition.
2. Leedy P.D, Ormrod JE (2005). Practical Research: Planning and Design. 8th Eds.
3. Creswell JW (2003) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (2nd Edition). California. Sage Publications.
4. Cosby PC. (2006). Methods in Behavioral Research. 9th Eds. Boston. McGraw Hill International.
5. Burg BL. Qualitative Research Methods for the Social Sciences (6th Edition)
6. Newman WL. (2002) Social Research Methods: Qualitative and quantitative approaches. 6th Eds. Boston: Allyn & Bacon.
7. Hully SB, Cummings SR. (2006). Designing Clinical Research- an epidemiologic approach. Baltimore: Williams & Wilkins.

Additional Suggested readings:

-  Fletcher RH, Fletcher SW, Wagner EH. Diagnosis in Clinical Epidemiology: the essentials (3d print). Baltimore, Media: Williams & Wilkins 1996. Chapter 3: 43-74
-  Fowler FJ. Survey Research methods. Newbury Park, CA: Sage Publications, 2001
-  Maxim PS. Quantitative research methods in the social sciences. New York. Oxford University Press
-  Wooden KE, Schneider JC. The CRAIS Guide to monitoring clinical research. 2003

Note: Additional readings will be provided with class notes.

Computer requirements:

The interactive and applied nature of this course requires that you bring a laptop to class on selected sessions. *******You will need access to Microsoft Word, Excel, and Powerpoint as well as SPSS to be successful in this course. If you are using a MAC based computer you must ensure you have access to conversion software to ensure use of SPSS or other PC based statistical programs.**

The UF Bookstore offers these programs at reduced costs for students:

<http://www.bsd.ufl.edu/g1c/bookstore/bookstore.asp>. All relevant course material will be available on e-Learning in Sakai, <http://www.lss.at.ufl.edu>

Course requirement/ evaluation/ grading

Tutorials /Computer Labs and homework / activity exercises (40%)

Each student is required to attend and complete all work activities assigned for tutorial sessions. These sessions will be practical applications of material covered in lectures. There will be a combination of research exemplars, and computer data for analysis (with some classes you will be provided with datasets for you to use for the computer data analysis). In the case of assignments for these applied sessions, all work must be clearly written /printed and if stated on class schedule -provided to the instructor at the **start** of each following class.

Below is a list of all Tutorial Activities required:

- Activity 1- Evaluating research**
- Activity 2- Paper provided**
- Activity 3- Paper provided**
- Activity 4- Gathering survey data**
- Activity 5 -Introduction to research datasets**
- Activity 6- Intro to research dataset- clean/transform**
- Activity 7 -Analyzing Research datasets**
- Activity 8-Reliability on data**
- Activity 9-Qualitative transcription**
- Activity 10-RCT analysis**
- Activity 11-Analysis of Survey Questions**

Research project (50%)

Students will be randomly allocated to groups for this project. The student group will be asked to develop a research project on a specific health topic. Students will present an overview of their project to the class using MS power point or similar software program prior to completion. **This presentation will be worth 20% of the mark.** Following this a full written proposal report of this project will be required one week following the student's presentation. **The written report will be worth 30%.**

All reports should contain the following:

- | | |
|--|------------------------------------|
| A. A hypothesis statement | G. Control for bias |
| B. A rationale- including the background (literature review) & theoretical framework that forms a basis for the question | H. Control for confounding |
| C. Sampling frame | I. Plans for analysis |
| D. Participants | J. Expected outcomes |
| E. Measurement techniques (validity/ reliability) | K. Statement/ evaluation of impact |
| F. Methods for administration of the study | |

The final manuscript report (completed individually) must include a researched introduction to the health topic chosen and may be no less than 5 pages and no greater than 10 typed pages in length, 12 font, 1.5-2 point spacing, and 1 inch margins all around.*** **A 200 word abstract is to accompany each paper.** Each written report is to be your own work! Each report must be submitted electronically via turn it in AND submitted in paper version to the course instructor. You will only be allowed to make up points from class sessions individually if your absence warrants a medical excuse or similar documentation (consistent with the College policy) .
****Assignments missed or turned in late for any other reason will receive a grade of "zero."**

Class participation (10%)

Students are expected to attend every class meeting. Students must notify the course instructor in writing (email), if they are unable to attend a class session for any reason. **Students are expected to have read all assigned readings prior to class and be prepared to participate in discussions.** Students will be evaluated on the quality and quantity of their participation.

Final Grade Breakdown:

A	93-100%	C	73-77%
A-	90-92%	C-	70-72%
B+	88-89%	D+	68-69%
B	83-87%	D	63-67%
B-	80-82%	D-	60-62%
C+	78-79%	E	<60%

Statement of University's Honesty Policy

Academic Integrity – Students are expected to act in accordance with the University of Florida policy on academic integrity (see Graduate Student Handbook for details). As a member of the University of Florida community, each of us is bound by the academic honesty guidelines of the University and the Code of Student Conduct, printed in the Student Guide and published on the University website. The Honor Code states: “We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.” Cheating, plagiarism, other academic dishonesty or conduct violations in any form is unacceptable and inexcusable behavior that can result in dismissal from the College and/or University. If you have any questions or need any clarifications whatsoever, please ask your instructor.

Cheating or plagiarism **in any form** is unacceptable and inexcusable behavior and will not be tolerated. Any evidence of **this behavior will result in a score of zero being awarded for the entire class [regardless of previous work submitted]**.

Definitions/ Guide

Cheating. The improper taking or tendering of any information or material, which shall be used to determine academic credit. Taking of information includes, but is not limited to, copying graded homework assignments from another student; working together with another individual(s) on a take-home test or homework when not specifically permitted by the course instructor; looking or attempting to look at another student's paper during an examination; looking or attempting to look at text or notes during an examination when not permitted. The tendering of information includes, but is not limited to, giving of your work to another student to be used or copied; giving someone answers to exam questions either when the exam is being given or after taking an exam giving or selling a term paper or other written materials to another student; sharing information on a graded assignment.

Plagiarism. The attempt to represent the work of another as the product of one's own thought, whether the work is published or unpublished, or the work of a fellow student/s. Plagiarism includes, but is not limited to, quoting oral or written materials without citation on an exam, term paper, homework, or other written materials or oral presentations for an academic requirement; submitting a paper which was purchased from a term paper service as your own work; submitting anyone else's paper as your own work. Submitting a previously utilized report from a previous class without substantial changes made.

Policy related to class attendance or other work

You will be expected to attend and be prepared to participate in all class sessions and participate in discussions and activities. At a bare minimum, you are responsible for coming to all class sessions. Of course, unanticipated circumstances may arise (illnesses, emergencies, even deaths in our lives and communities). Please notify your instructor immediately (preferably in person or via telephone and not via email) if such events occur. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis. You will only be allowed to make up points from class sessions individually if your absence warrants a medical excuse or similar documentation (consistent with the College policy). **There will be no “make-up exams” without an official medical or similar emergency.** Examinations missed or turned in late for any other reasons will receive a grade of “zero.”

Technology in the Classroom

Class content and syllabus will be available to students on the Sakai website associated with this course. Weekly class information will become available to students on the Tuesday of each week. Students are expected to have downloaded and read all required course content prior to the class lectures.

The use of laptops/tablets/ I-pad is permissible within the class sessions only for the purpose of note taking, data analysis or class note review. **Failure to comply with this policy will result in a deduction of class marks.**

Statement related to accommodations for students with disabilities

If you require academic accommodations, you must first register with the Dean of Students’ Office. The Dean of Students’ Office will provide you with documentation that you must provide to me as the faculty member for this course at the time you request the accommodation. The College and the instructor are committed to providing reasonable accommodations to students with special needs in order to assist students in their coursework.

Counseling and mental health services: Students in need of counseling and mental health services are encouraged to explore the Student Health Care Center, <http://www.shcc.ufl.edu> , (352)-392-1161, or the University of Florida Counseling and Wellness Center, <https://www.counseling.ufl.edu/cwc/>, (352)-392-1575

Readings from the TEXT by “Bryman” will be outlined each week in class!

Week	Dates	Topics & Tutorials	Additional Readings
1	Jan. 9 th	Course overview and introduction to research Purpose statements; Causal relationships; Bias; Confounding Tutorial 1: <i>The basics of measurement</i>	Babbie: Ch. 1-2 Oxman et al. ¹ Greenhalgh ² Ziebergold ³
2	Jan. 16 th	Sampling; Randomization; Reliability of measurement: procedures for estimating reliability & Reliability coefficients Tutorial 2: <i>Identifying threats to validity</i> Hand in Activity 1	Babbie: Ch. 4 Babbie: Pg. 208-209 Warren ⁴ Grimes ⁵ Priester ⁶ Ottenbacher ⁷
3	Jan. 23 th		Babbie: Ch. 7

		Tutorial 3: <i>Analyzing published studies</i> <u>Guest Presenter:</u> Review activity 2	Cosby: Ch. 5 Neuman: Ch.8 Haas ⁸ Levin ⁹ Jaeschke ¹⁰ Fulkerson ¹¹
4	Jan 30th	<u>Guest Presenter-</u><i>Analyzing published studies</i> Review activity 3	Guest Lecture
	ONLINE	Online Lecture information: Quantitative vs. Qualitative designs Differentiation and design overview Complete Activity 4: <i>Exploring research designs</i> ON YOUR OWN	Babbie: Pg. 25-27
5	Feb. 6 th	Introduction to Validity: Criterion related / Concurrent validity; Accuracy, precision & bias; Construct & predictive validity Tutorial 5: <i>Introduction to a research database</i> Hand in Activity 4	Babbie: Pg. 156-164 Cosby: Ch. 5 Cockburn ¹² Choi ¹³
6	Feb. 13 th	Quantitative Designs in Depth: Quasi experimental designs: pre-post; cross sectional; cohort study Tutorial 6: <i>Working with Practice datasets-coding</i> <i>cleaning, transforming</i> Review Activity 5	Babbie: Pg. 383-387 Cosby: Ch. 11 Sackett et al. ¹⁴
7	Feb. 20 th	Quantitative Designs in Depth: Experimental; Group designs; RCT, N of 1 Tutorial 7: <i>Working with Practice datasets Pt:2-</i> <i>analysis</i> Review Activity 6	Babbie: Ch. 8 Miettinen ¹⁵ Schlesselman ¹⁶ Stephenson ¹⁷ Yusuf ¹⁸
8	Feb 27th	Descriptive, Single Case Design, Non-experimental Tutorial 8: <i>Reliability on Practice datasets</i> Review Activity 7	Cosby: Ch. 11 Robey ¹⁹
	Mar 1-9	Spring break- NO CLASS! *****	
9	March 13th	Introduction to Qualitative Design Tutorial 9: <i>RCT</i> Hand in Activity 8	Guest Lecture
10	Mar 20th	Qualitative Designs; Field, Content Analysis	Babbie: Ch. 10

		Tutorial 10: Transcribe, code & theme Review Activity 9	Babbie: Pg. 349-362
11	Mar. 27th	Ecological /Survey Research Tutorial 11: Evaluating survey questions Hand in activity 10	Babbie: Ch. 9
12	April. 3rd	Making statistics work for you Effect size, Error, Power/Analyzing Results Hand in activity 11 Tutorial -Research ethics /Writing/presenting research	Babbie: Ch. 14 Babbie: Ch. 3 Babbie: Pg. 486-492 Cosby: Ch. 3 Cosby: Ch. 12
13	Apr. 10 th	<u>Student presentations</u>	
14	Apr. 17th	<u>Student Presentations</u>	
16	Apr 25th	FINAL Course Project due by 5:00pm	

Required Readings:

1. Oxman A, Sackett D, Guyatt G. (1993) Users guide to the medical literature. I. How to get started. *JAMA*; 270 (17): 2093 – 5.
2. Greenhalgh T (1997) How to read a paper: getting your bearings (deciding what the paper is about). *BMJ*; 315: 243-246
3. Zybergold, R.S & Piper, M.C. (1981). Lumbar disc disease: Comparative analysis of physical therapy treatments, *Archives of Physiology and Medical Rehabilitation*, 62.
4. Warren, J.M., Henry, C.J., Lightowler, H.J., Bradshaw, S.M., Perwaiz, S. (2003). Evaluation of a pilot school programme aimed at the prevention of obesity in children, *Health Promotion International*, 18 (4): 28796.
5. Grimes, D.A & Schulz, K. (2002). Bias and causal associations in observational research, *Lancet*, 359: 248-52
6. Priester, P.E., Azen, R., Speight, S., Vera, E.M. (2007). The impact of counselor recovery status similarity on perception of attractiveness with members of alcoholics anonymous: An exception to the repulsion hypothesis, *RCB*, 51:1, 14-20
7. Ottenbacher K (1995) Why rehabilitation research does not work as well as we think it should. *Arch Phys Med Rehabil*; 76: 123- 129.
8. Haas M (1991) Statistical methodology for reliability studies. *J Manip & Phys Ther*, 14 (2): 119 – 132.
9. Levin, K.A. (2005). Study design II. Issues of chance, bias, confounding and contamination, *Evidence Based Dentistry*, 6: 102-103.
10. Jaeschke R, Guyatt G, Sackett DL. (1994) Users guide to the medical literature. III. How to use an article about a diagnostic test. A. Are the results of the study valid? *JAMA*; 271: 389-91.
11. Fulkerson, J.A. & French, S.A. (2003). Cigarette smoking for weight loss or control among adolescents: Gender and racial/ethnic differences, *Journal of Adolescent Health*, 32:4, 306-313.
12. Cockburn J & DeLuise T (1992) Some issues regarding reliability and validity. *Health Promotion Journal of Aust*; 2(2): 49-54
13. Choi C, Noseworthy L (1992) Classification, direction, and prevention of bias in epidemiologic research. *JOM*; 34(3) :265 – 271.
14. Sackett DL, Rosenberg W, Gray M, Haynes B, Richardson S (1996) Evidenced based medicine: What it is and what it isn't. *BMJ*; 312: 71-72.
15. Miettinen O (1985) The case control study valid selection of subjects. *J Chron Dis*; 38(7) : 543-548.
16. Schlesselman J (1985) Valid selection of subjects in case-control studies. *J Chron Dis* ; 38(7): 549 – 550.
17. Stephenson J, Imrie J (1998) Why do we need randomised controlled trials to assess behavioural interventions? *BMJ*; 316: 611-613
18. Yusuf S, Collins R, Peto R. (1984) Why do we need some large, simple randomized trials? *Stat in Med*; 3: 409-420.
19. Robey, R. R., Schultz, M. C., Crawford, A. B., & Sinner, C. A. (1999). Single-subject Clinical -outcome research: Designs, data, effect sizes, and analyses. *Aphasiology*, 13, 445–473.

20. Subak, L.L., Quesenberry, C.P., Posner, S.F., Cattolica, E., Soghikian, K. (2002). The effect of behavioral therapy on urinary incontinence: A randomized controlled trial, *American College of Obstetricians and Gynecologists*, 100:1.

Additional Reading list

1. Cockburn J & DeLuise T (1992) Some issues regarding reliability and validity. *Health Promotion Journal of Australia*; 2 (2): 49-54
2. Kelsey JL, Thompson WD & Evans AS (1986) *Methods in observational epidemiology* Oxford University press, New York. Chaps 1
3. Choi C, Noseworthy L (1992) Classification, direction, and prevention of bias in epidemiologic research. *JOM*; 34(3):265 – 271.
4. Fletcher RH, Fletcher SW & Wagner EH. (1988) *Clinical epidemiology: the essentials* Baltimore, Williams & Wilkins. Chpt 3
5. Fletcher RH, Fletcher SW & Wagner EH. (1988) *Clinical epidemiology: the essentials* Baltimore, Williams & Wilkins. Chapter 3
6. Abramson JH (1979) *Survey methods in community medicine* Churchill Livingstone
7. Cronbach, L.J. and Meehl, P.E. (1955) Construct validity in psychological tests. *Psychological Bulletin*, 52, 281-302
8. Messick, S. (1989). Validity. In R. L. Linn, (ed.), *Educational Measurement*. New York: Macmillan Publishing Company, pp. 13-103.
9. Armitage P (1971) *Statistical methods in medical research* Oxford, Blackwell
10. Fleiss JL (1981) *Statistical methods for rates and proportions* New York, John Wiley & Sons.
11. Kelsey JL, Thompson WD & Evans AS (1986) *Methods in observational epidemiology* Oxford University press, New York. Chaps 4. Prospective Cohort Studies 1: Planning and execution.
12. Gardner MJ, Altman DG (1989) *Statistics with confidence*. Belfast, Universities Press
13. Sackett DL, Haynes RB, Guyatt GH, Tugwell P (1991) *Clinical Epidemiology: a basic science for clinical medicine*. Boston, Little, Brown and Company.
14. Campbell DT & Stanley JC. (1966) *Experimental and quasi experimental designs for research*. Chicago, Rand McNally
15. Cohen J (1988) *Statistical power analysis for the behavioural sciences* 2nd Rev Ed. Hillsdale NJ, Lawrence Erlbaum.
16. Lipsey MW (1990) *Design sensitivity: Statistical power for experimental research* Newbury Park CA, Sage.
17. Friedman LM, Furburg CD, DeMets DL. (1985) *Fundermentals of clinical trials* (2nd Ed) Littleton MA, PSG
18. Kraemer HC, Thieman S (1987) *How many subjects? Statistical power analysis in research*. Newbury Park, Sage
19. Abramson JH (1979) *Survey methods in community medicine* Churchill Livingstone.
20. Arnold, B. L. (1997). Single-subject research as an alternative to group research. *Athletic Therapy Today*, 2(3), 19-20.
21. Barlow, D. H., & Hersen, M. (1985). *Single case experimental design: Strategies for studying behavior change* (2nd ed.) New York: Pergamon.
22. Abramson JH (1979) *Survey methods in community medicine* Churchill Livingstone Moser CA, Kalton G (1971).

23. Katz R, Campagnolo D, Golberg G, Parker J, Pine Z, Whyte J. (1995) Critical evaluation of clinical research. *Arch Phys Med Rehabil*; 76: 82 – 93