



NYU

**SCHOOL OF GLOBAL
PUBLIC HEALTH**

**Research Methods in Public Health – SPRING 2022
GPH-GU 2361-003**

Class Schedule: Wednesdays 4:55 – 6:35 PM
Class Location: BOBS Room: LL150
Semester and Year: Spring 2022

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COURSE DESCRIPTION:

This course is a review of research and original writings related to public health. Students will learn to apply research methodology to problems in public health. This course provides an introduction to the fundamentals of research study design and methods. It serves as an introduction to quantitative and qualitative 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 critically evaluating research designs and research findings.

COURSE LEARNING OBJECTIVES AND RELATED COMPETENCIES AND COMPONENTS:

Learning Objective	Social and Behavioral Science and Epidemiology Competencies	Course component (Topic #, assignment, etc.)
1. Identify the types of research questions and designs appropriate for studies in public health	Apply the methods and analytic tools of social and behavioral science to design, implement, and analyze evaluation or research studies (SBS) Critically evaluate the application of epidemiologic methods to answer public health questions (EPI)	Topics: 1. Intro 2. Intro/ethics 3. Observational 4. Experimental 9. Qualitative 12. Program Eval Assessments: Midterm Final project
2. Identify ethical principles in conducting research and how they	Apply ethical principles to public health research and evaluation (SBS)	Topics: 1. Intro 2. Intro/ethics

<p>apply to various research questions and designs</p>		<p>9. Qualitative</p> <p>Assessments: Midterm Survey draft Focus group exercise Final project</p>
<p>3. Describe the various types of qualitative and quantitative methods used in social research</p>	<p>Apply the methods and analytic tools of social and behavioral science to design, implement, and analyze evaluation or research studies (SBS)</p>	<p>Topics: 1. Intro 2. Intro/ethics 3. Observational 4. Experimental 9. Qualitative 10. Focus Groups 11. Coding Focus Gr 12. Program Eval</p> <p>Assessments: Midterm Survey draft Survey Presentations Focus group exercise FG moderator guide Coding focus groups Final project</p>
<p>4. Describe the design, strength, and limitations of standard tools of research and measurement, such as administrative data, survey data, interviews, and focus groups</p>	<p>Apply the methods and analytic tools of social and behavioral science to design, implement, and analyze evaluation or research studies (SBS)</p> <p>Critically evaluate the application of epidemiologic methods to answer public health questions (EPI)</p>	<p>Topics: 5. Measurement, 6. Survey sampling 10. Focus Groups 11. Coding Focus Gr</p> <p>Assessments: Midterm Survey draft Survey Presentations Focus group exercise FG moderator guide Coding focus groups Final project</p>
<p>5. Identify alternative methods of analysis for various types of data and understand how findings are communicated and presented</p>	<p>Apply the methods and analytic tools of social and behavioral science to design, implement, and analyze evaluation or research studies (SBS)</p> <p>Critically evaluate the application of epidemiologic methods to answer public health questions (EPI)</p> <p>Effectively communicate epidemiologic findings both orally and in writing (EPI)</p>	<p>Topics: 7. Analytic techniques 9. Qualitative 10. Focus Groups 11. Coding Focus Gr 12. Program Eval</p> <p>Assessments: Midterm Survey draft Survey Presentations Focus group exercise FG moderator guide</p>

		Coding focus groups Final project
6. Evaluate the strengths and limitations of methods used in specific research projects	Apply the methods and analytic tools of social and behavioral science to design, implement, and analyze evaluation or research studies Critically evaluate the application of epidemiologic methods to answer public health questions	Topics: 1. Intro 2. Intro/ethics 3. Observational 4. Experimental 5. Measurement, 6. Survey sampling 7. Analytic techniques 9. Qualitative 10. Focus Groups 11. Coding Focus Gr 12. Program Eval Assessments: Midterm Survey draft Survey Presentations Final project

PRE/CO-REQUISITES:

Epidemiology (GPH-GU 2106/5106): pre-requisite

COURSE REQUIREMENTS AND EXPECTATIONS:

Course Format and Materials:

This course draws on 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.

Expectations and Classroom Etiquette

- It is expected that everyone will attend class and **show up on time**. There will be a sign in sheet to keep a record of class attendance, and it is your responsibility to ensure that you have signed in. *Attendance is part of your grade.*
- Absences will be excused for religious obligations with advanced notification of the TA. You are still, however, responsible for the materials covered in class.
- Readings should be completed prior to class, and it is assumed that you will be able to discuss and answer questions pertaining to the readings during class. Please come to each class with at least 1 question pertaining to the readings. You may be called on during class to share your question for discussion.
- You are strongly encouraged ask questions and express your views in class. Indeed, class participation and in-class dialogue and exchange are essential components of the learning

process for this course. It will also help me to understand where you are and help us all better understand the materials. You are required to respect other points of view treat your fellow classmates with respect. *Class participation is part of your grade.*

Required Readings

- **Salazar LF, Crosby RA, DiClemente RJ. (2015) *Research Methods in Health Promotion*, 2nd Edition, CA: Jossey Bass.**
- *Articles from Peer Reviewed Journals.* Unless noted, all the articles cited in the syllabus as required readings will be posted on NYU Brightspace. **NOTE: The reading assignments may be modified as the course proceeds.** You will be notified via email of any such changes and the new, updated syllabus will be posted NYU Brightspace.

Group Assignments:

1. Survey Instrument First Draft and Pilot Testing: Each team will draft a survey instrument on a public health topic. Each student will then administer the draft survey to 8 people for pilot testing, and the group will compile the results. Each group will then present their results and reflections from the pilot testing to the class. The team will then use results and feedback from the pilot testing to revise the instrument. The revised survey instrument is then submitted as part of the final project, along with a discussion of the piloting process and results.

2. Focus Group Moderator's Guide: Each team will develop a moderators' guide for a 45-minute focus group investigating your group's topic. The issues explored in the focus group may flow from the survey results, but can go further, as the group determines. The moderator guide is submitted as part of the final project.

3. Final Project: Each team will prepare a 10–14-page paper, outlining a research proposal and design using a survey and focus groups. The paper should identify a target population, the research question, 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 will include an appendix comprised of the focus group moderator's guide, survey instrument, and tables describing the pre-test of the survey. Format for the final paper will be discussed in class.

***At the end of the course, you will be asked, confidentially, to rate the participation of other members of your group. These peer-evaluations will be factored into the final project grade for each individual.

GRADING COMPONENTS:

Item:	Percentage or Points:
Midterm	35%
Survey Instrument Draft and In-Class Presentation	15%
Final Group Project (w/peer evaluation)	30%
Class Participation	10%
Attendance	10%

GRADING SCALE:

A:	94-100	C+:	77-79
A-:	90-93	C:	73-76
B+:	87-89	C-:	70-72
B:	83-86	D+:	67-69
B-:	80-82	D:	60-66
		F:	<60

BRIGHTSPACE:

Brightspace will be used extensively throughout the semester for assignments, announcements, and communication. Brightspace is accessible through at <https://home.nyu.edu/academics>

TECHNOLOGY POLICY:

- Laptops are permitted solely for the purpose of note-taking and referring to assigned readings. Please do not use laptops to check email, use social media, surf the Web, work on assignments, etc. during class. This is disrespectful to the instructor.
- Mobile phones should be silenced and **put away**. Please do not send or check messages, etc. during class.
- It is expected that everyone will check their NYU email accounts and NYU Brightspace regularly for course updates, new materials and announcements.

COURSE OUTLINE:

Date	Topic No.	Readings/Materials Due	Assignments Due
January 26	1. Course assignments, introduction to research	a) Salazar CH 1,2	

February 2	2. Introduction to research design, approaches to research and research paradigms, and ethics of research	a) Salazar CH 3 In-Class: Fresh Air interview (link in readings section below) <u>For Reference:</u> - Belmont Report - NYU Principal Investigator's Guide	Group requests due Wed Feb 2 @ 5 PM
February 9	3. Observational Research Designs	a) Salazar, CH 4, 9 b) Houston c) Melchior d) Costello	Group Topic Submission due Tues Feb 8 @ 5 PM
February 16	4. Experimental Research Designs	a) Salazar, CH 5, 10 b) Gray c) Patton	
February 23	5. Measurement in Research Design	a) Salazar CH 7 b) Li c) Kenney	
March 2	6. Survey Sampling and Survey Design	a) Salazar CH 6, 13	
March 9		IN-CLASS MIDTERM	
March 16		NO CLASS- Spring Break	
March 23	7. Analytic Techniques in Health Promotion and Disease Prevention	Salazar CH 14, 15	Revised group topics due before Tues March 22 @ 5PM
March 30		Group work on survey drafts and presentations	

April 6	8. In Class Presentations	Group work on survey drafts and presentations	
April 13	8. In Class Presentations		
April 20	9. Qualitative Methods of Inquiry	a) Salazar CH 8, 16 b) TBD	
April 27	10. Thinking through Focus Groups and Interviews	FG Moderator Guide Example and Class Exercise Instructions	
May 4	11. Coding Focus Groups 12. Program Evaluation	FG Transcripts Salazar CH 12	Final Project due Fri May 14 @ 5PM - *Includes FG Moderator Guide (no need to separate submission)

ARTICLES AND ADDITIONAL READINGS

Topic 2:

Fresh Air Interview

<http://www.npr.org/blogs/health/2014/10/07/354103536/the-great-bluff-that-lead-to-a-magical-pill-and-a-sexual-revolution>

For Reference:

The Belmont Report

<http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html>

NYU Principal Investigator's Guide

<https://www.nyu.edu/research/resources-and-support-offices/sponsored-programs/proposal-development/principal-investigators-guide.html>

Topic 3:

Houston DJ, Richardson LE. 2006. "Safety Belt Use and the Switch to Primary Enforcement, 1991-2003." *Am J Public Health* 96:1949-54.

Melchior M, Berkman LF, Kawachi I, et al. 2006. "Lifelong Socioeconomic Trajectory and Premature Mortality (35-65 Years) in France: Findings from the GAZEL Cohort Study." *J Epidemiol Community Health* 60:937-44.

Costello EJ, Compton SN, Keeler G, Angold A. 2003. "Relationships Between Poverty and Psychopathology: A Natural Experiment" *JAMA* 290:2023-29.

Topic 4:

Gray RH, Kigozi G, Serwadda D, et al. 2007. "Male Circumcision for HIV Prevention in Men in Rakai, Uganda: A Randomised Trial." *Lancet* 369:657-66.

Patton GC, Bond L, Carlin JB, Thomas L, et al. 2006. "Promoting Social Inclusion in Schools: A Group-Randomized Trial of Effects on Student Health Risk Behavior and Well-Being" *Am J Public Health* 96:1582-7.

Topic 5:

Li L, Lee, SJ, Thammawijaya P, Jiraphongsa C, Rotheram-Borus, MJ. 2009. Stigma, Social Support, and Depression among People Living with HIV in Thailand." *AIDS Care* 21:1007-13.

Kenney GM, McFeeters JR, Yee JY. 2005. "Preventive Dental Care and Unmet Dental Needs among Low-Income Children." *Am J Public Health* 95:1360-66.

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?

GPH DIVERSITY, EQUITY, and INCLUSION (DEI) STATEMENT:

The NYU School of Global Public Health (GPH) is committed to maintaining and celebrating a diverse, just, and inclusive environment for our students, faculty, and staff around the world. To foster this atmosphere and ideals of Diversity, Equity, and Inclusion (DEI), GPH promotes a welcoming learning environment that embraces cultural humility, and respects and values

differences. These differences can include race, ethnicity, religion, gender identity, sexual orientation, physical, mental and emotional abilities, socioeconomic status, and other aspects of human diversity. In this course, we encourage students to share and discuss different perspectives, beliefs, and experiences while treating all with dignity and respect.

STATEMENT OF ACADEMIC INTEGRITY:

The NYU School of Global Public Health values both open inquiry and academic integrity. Students in the program are expected to follow standards of excellence set forth by New York University. Such standards include respect, honesty and responsibility. The SGPH does not tolerate violations to academic integrity including:

- Plagiarism
- Cheating on an exam
- Submitting your own work toward requirements in more than one course without prior approval from the instructor
- Collaborating with other students for work expected to be completed individually
- Giving your work to another student to submit as his/her own
- Purchasing or using papers or work online or from a commercial firm and presenting it as your own work

Students are expected to familiarize themselves with the SGPH and University's policy on academic integrity as they will be expected to adhere to such policies at all times – as a student and an alumnus of New York University.

Plagiarism

Plagiarism, whether intended or not, is not tolerated in the SGPH. Plagiarism involves presenting ideas and/or words without acknowledging the source and includes any of the following acts:

- Using a phrase, sentence, or passage from another writer's work without using quotation marks
- Paraphrasing a passage from another writer's work without attribution
- Presenting facts, ideas, or written text gathered or downloaded from the Internet as your own
- Submitting another student's work with your name on it
- Submitting your own work toward requirements in more than one course without prior approval from the instructor
- Purchasing a paper or "research" from a term paper mill.

Students in the SGPH and SGPH courses are responsible for understanding what constitutes plagiarism. Students are encouraged to discuss specific questions with faculty instructors and to utilize the many resources available at New York University.

Disciplinary Sanctions

When a professor suspects cheating, plagiarism, and/or other forms of academic dishonesty, appropriate disciplinary action is as follows:

- The Professor will meet with the student to discuss, and present evidence for the particular violation, giving the student opportunity to refute or deny the charge(s).
- If the Professor confirms that violation(s), he/she, in consultation with the Chairperson or Program Director may take any of the following actions:
 - Allow the student to redo the assignment
 - Lower the grade for the work in question
 - Assign a grade of F for the work in question
 - Assign a grade of F for the course
 - Recommend dismissal

Once an action(s) is taken, the Professor will inform the Chairperson or Program Director and inform the student in writing, instructing the student to schedule an appointment with the Senior Associate Dean for Academic Affairs, as a final step. The student has the right to appeal the action taken in accordance with the GPH Student Complaint Procedure.

STUDENTS WITH DISABILITIES:

Students with disabilities should contact the Moses Center for Students with Disabilities regarding the resources available to them, and to determine what classroom accommodations should be made available. More information about the Moses Center can be found here: <https://www.nyu.edu/life/safety-health-wellness/students-with-disabilities.html>. Students requesting accommodation must obtain a letter from the Moses Center to provide to me as early in the semester as possible.