

Course Title: Mixed Methods Research for Public Health

Course Number: HBSP 0722

Course Pre- and Co-requisite(s): None

Course Location: Online and synchronous

Course Date & Time: Thursday, 6:30 pm - 8:30 pm

Course Instructor: Marybec Griffin, PhD, Assistant Professor

mcg197@sph.rutgers.edu, (732) 235-9067, SPH building

Office Hours: By Appointment

Course Assistant: None

Course Website: Add course website (i.e., <u>canvas.rutgers.edu</u>)

Required Course Text: Creswell JW, Clark V. 2018. Designing and conducting mixed

methods research (3rd ed.). Thousand Oaks: Sage.

Creswell, JW and Creswell, JD. Research Design: Qualitative,

Quantitative, and Mixed Methods Approaches. 5th ed.

Additional/Supplemental Readings/Resources: For article critique assignment:

Carroll, J. J., Marshall, B. D., Rich, J. D., & Green, T. C. (2017). Exposure to fentanyl-contaminated heroin and overdose risk among illicit opioid users in Rhode Island: A mixed methods study. *International Journal of Drug Policy*, *46*, 136-145.

Course Description: This course is designed to introduce students to a variety of methodological approaches to conducting public health research with a specific focus on mixed methods. In this course, we will review both qualitative and quantitative methods before discussing the integration of these two methodological approaches into a mixed methods study design. The topics presented in this course will mirror the research process beginning with developing a research question, identifying the appropriate research methods, and implementing the proposed study. Students are strongly encouraged to use the assignments and topics presented in this class to critically engage with their dissertation research. This course will rely on peer-review of each other's work so that we may draw from the practical and academic experience of the students enrolled in this course.

Selected Concentration Competencies Addressed: Each Concentration identifies competencies for each degree offered. The competencies addressed in this course for the DrPH in data and analysis foundational competency include:

- Explain **qualitative**, quantitative, **mixed methods** and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels
- Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue



Please visit the Concentration webpages on the School of Public Health's website at sph.rutgers.edu for additional competencies addressed by this course for other degrees and concentrations.

Course Objectives: By the completion of this course, students will be able to:

- Understand the different types of methodological approaches (quantitative, qualitative, and mixed methods)
- Identify strengths and weaknesses methodological approaches to previous public health research
- Learn techniques of data collection for each methodological approach
- Develop a research proposal including: developing a research question, identifying the appropriate research methods, and implementing the proposed study

Course Requirements and Grading:

- Quizzes: Students will be expected to complete an online quiz on each of the three methodological approaches presented (quantitative, qualitative, and mixed methods).
 These will be administered online via Canvas.
- Article Critique: Each student will read a mixed methods research article and identify the
 quantitative, qualitative, and mixed methods components. This paper should also
 include an assessment of the strengths and weaknesses of this approach for the given
 study.
- Mini-papers: Each student will prepare three mini-papers: background and needs, specific aims and hypothesis, and methods. These mini-papers should be no more than two pages each. They are the foundation for the Peer-Review Sessions.
 - Background and Need. Choose an issue in public health to address throughout the semester (students are strongly encouraged to use their dissertation topics). Prepare a brief written statement of your central social concern and intervention interest to distribute in the Peer-Review Sessions. In your statement, address the following questions:
 - 1) What is the need, problem, or condition? What is its prevalence? How has the prevalence changed over time? Use primary data sources (e.g., CDC Youth Risk Behavior Surveillance or U.S. Census Bureau data). Do not rely on secondary sources, such as newsletters or advocacy websites.
 - 2) What empirical and theoretical literature should you review? Key words?
 - 3) Identify a topic to study. What kinds of studies/research questions might be appropriate and feasible at each level (e.g. individual, family, organizational, state, nation)?
 - 4) What level of study is of interest to you at this point?
 - 5) What research methodologies (design, measures, and analysis) are you considering? Are there reviews of measures in your field?



- Specific Aims and Hypothesis. Using your chosen public health topic, prepare a brief written statement of your hypothesis and specific aims to distribute in the Peer-Review Sessions. In your statement, address the following questions:
 - 1) Identify a theory or model that will guide your study design.
 - 2) Define factors under each construct.
 - 3) Specify the hypothesis of your study.
 - 4) Specify the aims of your study.
- Methods. Using your chosen public health topic, prepare a brief written statement of your methods to distribute in the Peer-Review Sessions. In your statement, address the following questions:
 - Identify relevant study design method(s) you expect to explore. Briefly describe each.
 - 2) Provide an example of three questions from your survey and/or key informant interview guide. Specify instruments or well-known measures and describe their reliability and validity.
 - 3) Discuss sample size and participant recruitment techniques you plan to use.
 - 4) Identify relevant outcome measures and themes your anticipate emerging.
- Peer-Review Sessions: Each student will be assigned a peer-review group. A summary
 of questions, suggestions, and strengths of each proposal will be distributed to the
 instruction and the group members. Group members should find 30 minutes outside of
 class to discuss these comments. Each proposal should be discussed for approximately
 10 minutes each.
- Discussion Boards: Each student will participate in the online discussion boards via Canvas. The instructor will post the prompt for the discussion the week it is due. Responses should be between 100-250 words. These are due the Friday after class.
- Research Proposal: Using your chosen public health topic, prepare a single spaced, 6-7 page (excluding references) research proposal. You should only propose what can actually be done feasibly. Each proposal should contain the following sections:
 - Specific Aims (1 page)
 - 1) Brief background
 - 2) Brief methods
 - 3) Specific aims
 - 4) Hypothesis
 - Background and Significance (3 pages)
 - Describe the need or problem area in national terms by using incidence, prevalence, or other primary data. Make the case that you will address a problem of national significance.
 - 2) Develop and describe a conceptual framework or model (include a graphic image that specifies malleable mediators).
 - 3) Use research literature to support each construct in the conceptual framework. You are not expected to have completed this review of the



literature. Describe 3-4 relevant articles . Be sure to assess the statistical conclusion and internal validity of this literature. Then identify the etiological or related literature on which you will rely.

- Design and Methods (2-3 pages)
 - 1) Study aims and hypothesis
 - 2) Chosen study design
 - 3) Sampling (including target population, sampling frame, inclusion criteria)
 - 4) Recruitment (recruitment, informed consent, enrollment, tracking)
 - 5) Data collection
 - 6) Measures
 - 7) Analysis
 - 8) Limitations
- References (use APA style)
- List of Assignments:

Honor Code Quiz	2 pts
Quizzes (three total)	5 pts each
Article critique	5 pts
Background and need mini-paper	5 pts
Hypothesis and specific aims mini-paper	5 pts
Methods mini-paper	5 pts
Peer-Review sessions (three total)	15 pts
Discussion boards (eight total)	1 pt each
Research proposal	30 pts
Attendance and participation	10 pts
Total	100

- Attendance: Attendance will be taken at the beginning of every class by noting who has
 logged on to the virtual session. Students are expected to join the session promptly and
 attend every class. 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, please email the
 instructor prior to class or as soon as possible afterwards.
- Participation: Participation is critical to the success of this course. This includes
 participating in class discussions, the online activities, and peer-review process. A lack
 of class participation (especially the peer-review process) will negatively impact your
 grade.
- Late assignments will not be accepted unless permission is given <u>before</u> the assignment due date.



• Grading Scale:

94 - 100 A 90 - < 94 A-87 - < 90 B+ 84 - < 87 B 80 - < 84 B-77 - < 80 C+ 70 - < 77 C

Course Schedule:

Week	Date	Course Topic	Online 30	Assignments/ Assessments	Link To Competencies And Assessments
1	Sept 8	Introduction to mixed methods Reading: Creswell & Clark ch 1&2	Discussion board 1: introductions		Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue (Assessed by Minipapers, Article Critique and Research Proposal)
2	Sept 15	Research questions, hypotheses, and aims Reading: Creswell & Creswell ch 2,3 &7	Discussion board 2: research topics		Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue (Assessed by Minipapers, Article Critique and Research Proposal)
3	Sept 22	Writing a research proposal Reading: Creswell & Creswell ch 4, 5&6	Peer-review session 1	Background and need mini-paper	Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue (Assessed by Minipapers, Article Critique and Research Proposal)
4	Sept 29	Qualitative research designs (sampling and recruitment) Reading: Creswell & Creswell ch 9	Discussion board 3: qualitative designs		Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue



		1		1	(Assessed by Mini
					(Assessed by Minipapers, Article Critique
					and Research Proposal)
5	Oct 6	Designing a key	Quiz 1	Quiz 1	Explain qualitative,
3	OCI 6	informant	Quiz I	Quiz I	quantitative, mixed
		interview			methods and policy
		interview			analysis research and
		Reading:			evaluation methods to
		Creswell &			address health issues at
		Creswell ch 9			multiple (individual,
		Ordowon on o			group, organization,
					community and
					population) levels
					(Assessed by Quizzes
					and Discussion Boards)
6	Oct 13	Quantitative	Peer-review	Hypothesis	Design a qualitative,
	0000	research designs	session 2	and specific	quantitative, mixed
		(sampling and		aims mini-	methods, policy analysis
		recruitment)		paper	or evaluation project to
					address a public health
		Reading:			issue
		Creswell &			(Accessed to Add)
		Creswell ch 8			(Assessed by Mini-
					papers, Article Critique and Research Proposal)
7	Oct 20	Designing a	Quiz 2	Quiz 2	Explain qualitative,
'	OCI 20	survey	Quiz Z	Quiz Z	quantitative, mixed
		July			methods and policy
		Reading:			analysis research and
		Creswell &			evaluation methods to
		Creswell ch 8			address health issues at
					multiple (individual,
					group, organization,
					community and
					population) levels
					(Assessed by Quizzes
					and Discussion Boards)
8	Oct 27	Mixed methods	Discussion	Article critique	Design a qualitative,
		integration and	board 4:		quantitative, mixed
		when to use them	quantitative		methods, policy analysis
		D	designs		or evaluation project to
		Reading:			address a public health
		Creswell & Clark ch 3,			issue
		on o,			(Assessed by Mini-
					papers, Article Critique
					and Research Proposal)
9	Nov 3	Mixed methods	Quiz 3	Quiz 3	Explain qualitative,
		research designs			quantitative, mixed
		(sampling and			methods and policy
		recruitment)			analysis research and
					evaluation methods to



		Reading: Creswell & Clark ch 4&5, Carroll article			address health issues at multiple (individual, group, organization, community and population) levels (Assessed by Quizzes
10	Nov 10	Data collection Reading: Creswell & Clark ch 6	Discussion board 5: mixed methods designs	Methods mini- paper	and Discussion Boards) Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue
					(Assessed by Mini- papers, Article Critique and Research Proposal)
11	Nov 17	Reliability & validity Reading: Creswell & Clark ch 7	Peer-review session 3		Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels
					(Assessed by Quizzes and Discussion Boards)
12	Nov 22	Evaluating mixed methods research Reading: Creswell & Clark ch 8	Discussion board 6: questions		Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels
					(Assessed by Quizzes and Discussion Boards)
13	Dec 1	Proposal workshop 1	Discussion board 7: what came up during the proposal workshop		Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue (Assessed by Minipapers, Article Critique and Research Proposal)



14	Dec 8	Writing and publishing mixed methods research Reading: Creswell & Clark ch 8	Discussion board 8: journals		Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue (Assessed by Minipapers, Article Critique and Research Proposal)
15	Dec 15	NO CLASS		Full proposal due	Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue (Assessed by Minipapers, Article Critique and Research Proposal)

Learning Management System: Canvas will be used extensively throughout the semester for course syllabus, assignments, announcements, communication and/or other course-related activities. It is the student's responsibility to familiarize themselves with Canvas and check it regularly. If you have difficulties accessing Canvas, please inform the instructor and Canvas Support (help@canvas.rutgers.edu). Canvas is accessible at canvas.rutgers.edu.

School of Public Health Honor Code: The School of Public Health Honor Code is found in the School Catalog (sph.rutgers.edu/academics/catalog.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.

Students with Disabilities: Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student must apply for Services by first completing a Registration Form with the Rutgers Office of Disability Services (ODS) at ods.rutgers.edu. The student will also be required to participate in an ODS intake interview and provide documentation. If reasonable accommodations are granted, ODS will provide you with a Letter of Accommodations which should be shared with your instructors as early in your courses as possible.

Commitment to Safe Learning Environment: The Rutgers School of Public Health is committed to helping create a safe learning environment for all students and for the School as a whole. Free expression in an academic community is essential to the mission of providing the highest caliber of education possible. The School encourages civil discourse, reasoned thought, sustained discussion, and



constructive engagement. Provocative ideas respectfully presented are an expected result. An enlightened academic community, however, connects freedom with responsibility. The School encourages all students to disclose any situations where you may feel unsafe, discriminated against, or harassed. Harassment or discrimination of any kind will be not tolerated and violations may lead to disciplinary actions.

Reporting Discrimination or Harassment: If you experience any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking, know that help and support are available. You may report such incidents to the RBHS Title IX Office or to the School of Public Health's Office of Student Affairs. Rutgers University has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. If you experience any other form of discrimination or harassment, including racial, ethnic, religious, political, or academic, please report any such incidents to the School's Office of Student Affairs. The School strongly encourages all students to report any incidents of discrimination or harassment to the School. Please be aware that all Rutgers employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers as listed in Appendix A to Policy 10.3.12) are required to report information about such discrimination and harassment to the School and potentially the University. For example, if you tell a faculty or staff member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty or staff member must share that information with the RBHS Title IX Coordinator. If you wish to speak to a confidential employee who does not have this reporting responsibility, you can find a list of resources in Appendix A to University Policy 10.3.12. For more information about your options at Rutgers, please visit Rutgers Violence Prevention and Victim Assistance.

Graduate Student Computer Policy: Students are required to possess a personal laptop, no older than approximately two years, that must meet minimum requirements which may be found online at: sph.rutgers.edu/student-life/computer-support.html

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 Use of Turnitin: Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com (directly or via learning management system, i.e. Canvas) for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site. Students who do not agree should contact the course instructor immediately.

Withdrawal/Refund Schedule: Students who stop attending their course(s) without submitting a completed Add/Drop Course form will receive a failing grade. Furthermore, students dropping to zero credits for the semester are considered withdrawn and must submit a completed Leave of Absence form from the School of Public Health's Office of Student Affairs. The School of Public Health refunds tuition only. Administrative and technology fees are non-refundable. You may find the Withdrawal/Refund Schedule on the School of Public Health website at:

sph.rutgers.edu/academics/academic-calendar.html