# University of Florida College of Public Health & Health Professions Syllabus Course Number: PHC 6937

## Introduction to Mixed Methods Research (3 credits)

Semester: Spring 2024
Delivery Format: In–Person. HPNP G-110
Schedule: 8.30-11.30 am Monday

Instructor Name: Deepthi S. Varma, PhD, MSW, MPhil

Department of Epidemiology Room Number: CTRB 4238

College of Public Health & Health Professions

College of Medicine

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Office Hours: By appointment
Teaching Assistants: None

Preferred Course Communications (e.g. email, office phone): e-mail

**Prerequisites:** Principles of Epidemiology and Epidemiologic Methods I (or equivalent research methods coursework). Students with no prior instruction in epidemiology but with methodological coursework from another related discipline may be admitted with permission from the instructor.

### **PURPOSE AND OUTCOME**

**Course Overview:** This course focuses on techniques to design and implement research studies that combine qualitative and quantitative data collection. Students will complete assignments that increase their understanding of the appropriate use of mixed methods research design and how to effectively avoid pitfalls in mixing methods while designing a research proposal.

#### **Relation to Program Outcomes**

- 1. Illustrate a thorough understanding of epidemiology concepts. (PhD in Epidemiology Student Learning Outcome 3)
  - Articulate the goal of using mixed methods research designs in epidemiological research studies
  - b. Compare and understand the differences between qualitative, quantitative, and mixed methods research designs
  - c. Identify the various types of mixed methods designs, and strategies to analyze mixed methods data
- 2. Design epidemiologic research studies and analyze data to answer health-related research questions that are currently relevant to the population. (PhD in Epidemiology Student Learning Outcome 1)
  - a. Develop a mixed methods study protocol including strategies for analysis

#### Course Objectives and/or Goals:

Upon completion of the course, you will be able to:

- 1. Demonstrate understanding of key paradigmatic debates about mixed methods research methodology.
- 2. Identify the distinguishing characteristics of major mixed methods research designs.
- 3. Distinguish between qualitative, quantitative, and mixed-method research questions.

- 4. Identify the variety of ways that qualitative and quantitative data and analytical procedures can be mixed.
- 5. Write effective mixed methods manuscripts and grant proposals.
- 6. Understand different viewpoints about major areas of controversy that concern mixed methods methodologists.

#### **Instructional Methods**

- 1) **Lectures:** There will be didactic lectures by the instructor for general orientation to concepts and issues related to mixed methods research.
- 2) **Readings and Resources:** Readings and resources will be posted on the course website by the beginning of each week. Students are expected to read the article before class, and critically discuss various sections of the article. All students are expected to participate in article review discussions.
- 3) **Case Studies:** To better illustrate the concepts of mixed methods research design, the course instructor and guest speakers will present research studies led by them or others in the United States or in other countries.
- 4) **Assessments:** Students will be graded on homework, in-class presentations, discussions, participation in class, and attendance.

#### What is expected of you?

You are expected to actively engage in the course throughout the semester. Your participation fosters a rich course experience for you and your peers, facilitating overall mastery of the course objectives.

Week	Topic(s)	Readings & Assignments
1 01/08	Introduction to the course	Required Reading: Johnson BR, Onwuegbuzie, Turner LA. (2007) Toward a
01/00	Mixed methods research: Definition and its	definition of mixed methods research. Journal
	evolution	of Mixed Methods Research 1 (2); 112-133.
		Recommended Reading: Maxwell, J. A.
		(2016). Expanding the History and Range of
		Mixed Methods Research. Journal of Mixed
		Methods Research, 10(1), 12–27. https://doi.org/10.1177/1558689815571132
		111193.//doi.org/10.1177/100000010071102
		Will also be provided on Canvas
2 01/15	Holic	lay
3 01/22	Purpose, goals, and theoretical framework in mixed methods research with examples from research studies.	Required Reading: Tashakkori, A., & Creswell, J. W. (2007). Editorial: Exploring the Nature of Research Questions in Mixed Methods Research. Journal of Mixed Methods Research, 1(3), 207–211. https://doi.org/10.1177/1558689807302814  Recommended Reading: Wasti, Sharada Prasad et al. "The Growing Importance of Mixed-Methods Research in Health." Nepal journal of epidemiology vol. 12,1 1175-1178. 31 Mar. 2022, doi:10.3126/nje.v12i1.43633  Will also be provided on Canvas  Assignment 1 Due: Identify ONE article in your area of interest (published in 2017–2019 only) that uses mixed methods design and

		critically evaluate the suitability of the design
4 02/29	Overview of Qualitative Research      Definition     How is it different from quantitative research?     When do you use qualitative research?     Different types of qualitative research approaches     Advantages and challenges of qualitative research methods	(maximum 10 slides).  Required Reading: Austin, Z., & Sutton, J. (2014). Qualitative Research: Getting Started. The Canadian Journal of Hospital Pharmacy, 67(6). https://dx.doi.org/10.4212/cjhp.v67i6.1406  Recommended Reading: Bannister-Tyrrell M, Meiqari L. Qualitative research in epidemiology: theoretical and methodological perspectives. Ann Epidemiol. 2020 Sep;49:27-35. doi: 10.1016/j.annepidem.2020.07.008. Epub 2020 Jul 22. PMID: 32711056.
		Will also be provided on Canvas
5 02/05	<ul><li>Designing a qualitative research study:</li><li>Sampling</li><li>Data collection methods</li></ul>	Required Reading: Gill et al. Methods of data collection in qualitative research: interviews and focus groups. British Dental Journal. 204 (6), 2008.
		Will also be provided on Canvas
6 02/12	<ul><li>Coding</li><li>Data analysis</li><li>Interpretation</li></ul>	Required Reading: Qualitative Data Analysis. Chapters 4 & 5, Miles & Huberman.  Will be provided on Canvas  In-class activity: Coding a qualitative data
7 02/19	Mixed methods procedures: Theory and application	set. The instructor will provide the data set.  Required Reading: Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a Definition of Mixed Methods Research. Journal of Mixed Methods Research, 1(2), 112–133. https://doi.org/10.1177/1558689806298224  Will also be provided on Canvas  Assignment Due: None
8 02/26	Sampling procedures in mixed methods research	Required Reading: Teddlie, C., & Yu, F. (2007). Mixed Methods Sampling: A Typology With Examples. Journal of Mixed Methods Research, 1(1), 77–100. https://doi.org/10.1177/1558689806292430  Will also be provided on Canvas  Assignment Due: None
9 03/04	Formulating questions in mixed methods research	Required Reading: Schoonenboom, Judith, and R Burke Johnson. "How to Construct

10	Student presentations and discussion	a Mixed Methods Research Design." Kolner Zeitschrift fur Soziologie und Sozialpsychologie vol. 69,Suppl 2 (2017): 107-131. doi:10.1007/s11577-017-0454-1  Will also be provided on Canvas  Assignment 2 Due: Identify and present a topic on which you will develop and present a mixed methods research study during this course. The presentation must include: a) a topic with rationale, b) objectives of the study) Sampling and d) expected outcomes (maximum 10 slides).
03/11	Spring	Break
11 03/18	Data collection procedures in mixed methods research  (Guest Lecture: TBD)	Required Reading: Bowers B, Cohen LW, Elliot AE, Grabowski DC, Fishman NW, Sharkey SS, Zimmerman S, Horn SD, Kemper P. Creating and supporting a mixed methods health services research team. Health Serv Res. 2013 Dec;48(6 Pt 2):2157-80. doi: 10.1111/1475-6773.12118. Epub 2013 Oct 21. PMID: 24138774; PMCID: PMC3870895.  Will also be provided on Canvas  Assignment Due: None
12	Strategies for data integration	Required Readings: Guetterman, Timothy C
03/25	Mixed Methods Analytical Procedures  Student Presentations and Discussions	et al. "Integrating Quantitative and Qualitative Results in Health Science Mixed Methods Research Through Joint Displays." <i>Annals of family medicine</i> vol. 13,6 (2015): 554-61. doi:10.1370/afm.1865
		Recommended Reading: The Use of "Mixing" Procedure of Mixed Methods in Health Services Research. Wanqing Zhang, MD, PhD* and John Creswell, PhD. Medical Care. 51 (8).2013.  Will also be provided on Canvas
		Assignment 3 Due: Based on your previous presentation design, develop and present a study flowchart, data collection methods and the strategies for mixing the methods prior to the analysis (maximum 10 slides).

13 04/01	Application of mixed methods design in large-scale program evaluation  Student presentations and discussion	Required Reading: Bryman, A. (2007). Barriers to Integrating Quantitative and Qualitative Research. Journal of Mixed Methods Research, 1(1), 8–8. https://doi.org/10.1177/1558689806290531
		Will also be provided on Canvas
14 04/08	Writing effective mixed methods manuscripts and grant proposals	Required Reading: https://obssr.od.nih.gov/sites/obssr/files/Best Practices for Mixed Methods Research.pdf  Recommended Reading: Leech, N. L. (2012). Writing Mixed Research Reports. American Behavioral Scientist, 56(6), 866–881. https://doi.org/10.1177/0002764211433800
15 04/15	Final research proposal presentations and discussion	Will also be provided on Canvas  Reading: None
0-7/10	41004001011	Assignment 4 Due: Compile your previous 3 presentations and present a complete study proposal (maximum 10 slides, excluding reference section).

#### **Points to Note**

- 1. All presentations will be in groups of 3-4 students. Group allocation will occur on the first day of the class. All group members will actively participate in the preparation and presentation of all assignments in the class.
- 2. Several lectures will be accompanied by in-class activities for a better understanding of the topic discussed that day.

# **Course Materials and Technology**

Reading materials will be provided each week. It is strongly recommended that you bring a laptop computer to class during the Week 5 class meeting for the in-class activity.

## **Recommended Readings**

- Creamer, E. G. (2018). An Introduction to Fully Integrated Mixed Methods Research. Los Angeles: SAGE.
- 2. Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Los Angeles: SAGE Publications.

For technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP select option 2
- https://lss.at.ufl.edu/help.shtml

#### ACADEMIC REQUIREMENTS AND GRADING

## Grading

Grades are assigned based on the following criteria (see below). We will take every effort to grade all submitted assignments within seven days of the due date. A full explanation of content, discussion questions, assignments, and other course components are completely described in the appropriate weekly pages of this syllabus. All grades will be posted on the course website. If a student notices a discrepancy in any grade as it

appears online, s/he must contact the course instructor within one week of the posting date to address the problem. Students may not wait until the end of the semester to contest a grade.

Assignments & Grading									
List	Topics	Due	Points						
1	Identify one article in your area of interest that uses mixed methods design & critically evaluate the suitability of the design (maximum 5 slides).	01/30	15%						
	Your presentation must include:  a) Topic of article b) Summary of research design c) What were the research questions and study objectives? d) Do they lend themselves to a mixed methods research design? e) What made it better than a purely quantitative or qualitative approach? f) Benefits and limitations of using mixed methods design								
2	Identify and present on a topic on which you will develop and present a mixed methods research study during this course.  The presentation must include: a) topic with rationale, b) objectives of the study c) Sampling and d) Expected outcomes (maximum 10 slides)	03/06	15%						
3	Based on your 03/06 presentation design, develop and present a study flowchart, data collection methods, and the strategies for mixing the methods prior to the analysis (maximum 10 slides).	03/20	15%						
4	Compile your previous 3 presentations and present a complete study proposal (maximum 10 slides, excluding reference section).	04/03	15%						
5	Submit the final proposal (Maximum 5 pages).  The final research protocol is expected to be a maximum of 5 pages including Background, Aims, Methods with a study flowchart, Analysis plans (how will you integrate the data), and Study Timeline.	04/23	30%						
6	Attendance and class interactions	Weekly	10%						
		Total	100%						

Rubrics will be provided in class for specifics of grading for each assignment.

Tentative due dates for all grade components are listed on the course schedule above and additional information and specific instructions will be posted on the course website, under the *Assignments* tool. All assignments need to be submitted through course website on Canvas. Please check Canvas regularly for updates to the syllabus that may affect due dates.

Point system used (i.e., how do course points translate into letter grades).

Points earned	93-	90-	87-	83-	80-	77-	73-	70-	67-	63-	65-	Below
	100	92	89	86	82	79	76	72	69	66	62	60
Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	E

Please be aware that a C- is not an acceptable grade for graduate students. A grade of C counts toward a graduate degree only if an equal number of credits in courses numbered 5000 or higher have been earned with an A. In addition, the Bachelor of Health Science Program does not use C- grades.

You must include the letter grade to grade point conversion table below. Letter grade to grade point conversions are fixed by UF and cannot be changed.

Letter Grade	Α	Α-	B+	В	B-	C+	С	C-	D+	D	D-	E	WF	I	NG	S- U
Grade	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0
Points																

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at: http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

## **Exam Policy**

There are no exams for this course.

## Policy Related to Make up Assignments or Class Presentations

The instructor <u>must be informed via email</u> of any requests to make-up assignments or class presentations that were missed due to personal/ family emergencies or technical difficulties within 24 hours. Late submission of assignments without prior permission will result in deduction of 2% from the overall grade. Approved makeup assignments should be submitted via email to the instructor.

### **Policy Related to Required Class Attendance**

All students are expected to attend all classes. Late arrival and/or early departures require prior permission from the instructor. Students are also expected to inform the instructor via email if they are going to be absent from the class any particular day.

Please note all faculty members are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

#### **Policy Related to Guests Attending Class**

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers. Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy in its entirety. Link to full policy: http://facstaff.phhp.ufl.edu/services/resourceguide/getstarted.htm

#### STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

# **Expectations Regarding Course Behavior**

Electronics such as cell phones, and other recording devices are not permitted during the class hours. Laptops are allowed for note taking, if needed.

Please be sure to print this syllabus and plan adequate time each week to view your lectures, read, complete your assignments. Please plan your time accordingly and ask questions if you are not clear on a lecture or assignment before they are due, versus after it is due. Please submit all assignments on time. Please verify that you submitted (1) the right assignment paper, and (2) that you submitted ANY attachment to your assignment.

## **Communication Guidelines**

If you have questions, please feel free to email me through the *Mail* function of Canvas. Also, <u>remember to check the checkbox with the cc option that reads "send a copy of this message to recipients' email address(es)"</u>; this will ensure a timely response to your question. Please contact the UF HelpDesk if you have access questions or technical issues with the course: (352) 392-HELP (4357) or helpdesk@ufl.edu or in the HUB, room 132. Please keep a copy of all assignments and work submitted. <u>Canvas will issue an email receipt when assignments are submitted</u>. Please check your submission to be sure it was properly submitted and that you attached the correct file. Print the syllabus for your reference. It is your responsibility to be aware of all assignments, due dates and guidelines. All assignments must be submitted through Turnitin.

## **Academic Integrity**

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

## **Online Faculty Course Evaluation Process**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <a href="https://evaluations.ufl.edu">https://evaluations.ufl.edu</a>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <a href="https://evaluations.ufl.edu/results/">https://evaluations.ufl.edu/results/</a>.

## **Inclusive Learning Environment**

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: <a href="https://www.multicultural.ufl.edu">www.multicultural.ufl.edu</a>

#### SUPPORT SERVICES

#### **Accommodations for Students with Disabilities**

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office <a href="http://www.dso.ufl.edu">http://www.dso.ufl.edu</a> within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

## **Counseling and Student Health**

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu. On line and in person assistance is available.
- You Matter We Care website: <a href="http://www.umatter.ufl.edu/">http://www.umatter.ufl.edu/</a>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services.
   The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from: Alachua County Crisis Center
   (352) 264-6789. http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone; so do not be afraid to ask for assistance.