

# NGR 7XXX: Mixed Methods and Implementation Science Research

## Delivery Method: Online

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### Faculty Contact Information:

### Credit Hours and Prerequisites

**Credit Hours:** 3

**Prerequisites:** NGR 6801-Quantitative Methods and NGR 6XXX-Qualitative Methods

**Co-Requisite:** None

**Meeting Time:** None

**Meeting Location:** Online

### Course Description

The purpose of the course is to familiarize students with mixed research methods used by medical, nursing, and public health researchers and practitioners, focusing on application of these techniques in the health sciences and within clinical trials. We will familiarize students with the discipline of dissemination and implementation science and explore the use of mixed methods implementation science research for health equity and scholarly inquiry. The main purpose of the bulk of the course is to facilitate the development of knowledge and skills related to implementation science mixed methods research in nursing, medical, and public health scholarship.

### Course Objectives

The class is designed to be interactive with practice sessions for various skills. Because many students will be applying mixed methods in evaluation and needs assessment projects in the field of nursing, we will also focus on these aspects in class. The course objectives are as follows:

- 1) To integrate and apply knowledge using mixed research methods, focusing on application of these techniques in the health sciences and within clinical trials.
- 2) To analyze researchable problems in the context of the discipline of dissemination and implementation science.
- 3) To evaluate and apply the mixed methods and implementation science techniques to foster health equity and scholarly inquiry.
- 4) Students will design a mixed methods and implementation science based-study.
- 5) Students will differentiate multi-methods and mixed methods research.

## **Course Materials**

### **Required Textbook:**

*Creswell JW. A Concise Introduction to Mixed Methods Research. 3<sup>rd</sup> Edition. Thousand Oaks, CA: Sage Publications, 2017.*

*Brownson RC, Colditz GA, & Proctor EK (Eds.). 3<sup>rd</sup> Edition. Dissemination and Implementation Research in Health: Translating Science to Practice. Oxford University Press. 2023.*

### **Required Software:**

None.

### **Recommended Texts:**

None.

### **Other Required Reading:**

See weekly assignments.

### **Websites:**

<https://obssr.od.nih.gov/research-resources/mixed-methods-research>

<https://catalyst.harvard.edu/community-engagement/mmr/>

<https://prevention.nih.gov/research-priorities/dissemination-implementation>

## **Student Responsibilities**

- Students should log on to Canvas at least every other day to check for course updates.
- Students are expected to keep up with the class, engage with the course material, and submit assignments by the due dates.
- Assignments, quizzes, and exams are expected to be products of individual students per the FSU Academic Honor Policy Links to an external site. Students should not discuss any of the questions with each other before or during the actual assignments, activities, quizzes, or exams without instructor approval.
- To receive maximum points for questions, students need to follow the instructions carefully, follow word limits as instructed, and use spell and grammar checking.
- To be successful in this course, students need to complete all required assignments and tests.

### **Course Content:**

Instructional strategies may include reading guides, lecture/discussion, group work, audiovisuals, interactive case studies, quizzes, and critical reasoning exercises.

## Course Calendar

<b>Week</b>	<b>Topic/Content</b>
Week 1 August 26	Course Orientation
	Introduction to Mixed Methods <i>Creswell Chapters 1 and 2</i>
Week 2 September 1	Planning and Introducing a Mixed Methods Study <i>Creswell Chapters 3 and 4</i>
	Core Mixed Methods <i>Creswell Chapter 5</i>
Week 3 September 8	Complex Mixed Methods <i>Creswell Chapter 6</i>
Week 4 September 15	Mixed Methods Sampling and Integration <i>Creswell Chapter 8</i>
	Assignment: Research Overview
Week 5 September 22	Mixed Methods Designs and Selecting the “Right” One <i>NIH OBSSR Best Practices for Mixed Methods Research</i>
	Community-Based Participatory Research in Mixed-Methods Studies <i>Tolley, pp. 50-51; TBD Supplements</i>
Week 6 September 29	Mixed Methods as Part of Implementation Science <i>Brownson, Colditz, and Proctor Chapter 20; Supplements</i>
Week 7 October 6	Learning Implementation Science <i>Brownson, Colditz, and Proctor Chapters 2 and 3</i>
Week 8 October 13	Models and Frameworks <i>Brownson, Colditz, and Proctor Chapter 5; Supplements</i>
	Hybrid Type Designs <i>TBD Supplements</i>
Week 9 October 20	Quality Improvement vs. Implementation Science <i>TBD Supplements</i>
	Assignment: Article Summary 1
Week 10 October 27	Designing for Dissemination <i>Brownson, Colditz, and Proctor Chapter 7</i>
Week 11 November 3	Community-Based Participatory Research in Implementation Science <i>Brownson, Colditz, and Proctor Chapter 11; Supplements</i>
	Implementation Strategies <i>Brownson, Colditz, and Proctor Chapter 15; Supplements</i>
Week 12 November 10	Fidelity in Intervention Trials <i>Brownson, Colditz, and Proctor Chapter 16; Supplements</i>
	Implementation in Community and Public Health <i>Brownson, Colditz, and Proctor Chapter 21; Supplements</i>
Week 13 November 17	Implementation in Social Service <i>Brownson, Colditz, and Proctor Chapter 22; Supplements</i>
	Assignment: Article Summary 2

Week 14	<b>Fall Break: No Classes, Online Activities, and Assignments</b>
Week 15 December 1	Implementation in Health Care <i>Brownson, Colditz, and Proctor Chapter 23; Supplements</i>
	Mixed Methods Policy and Implementation Research <i>Brownson, Colditz, and Proctor Chapter 26; Supplements</i>
Week 16 December 8	Final Student Presentations

***Calendar Subject to Change***

## **Grading Policy**

**Attendance and Participation:** Class attendance is expected, and instructors should be notified of any absences. The responsibility for any missed assignments is the students.

**Evaluation:** Doctoral students will be evaluated based on class participation; leadership of a class discussion; and the assignments. All class assignments and exercises should contribute towards the completion of the course as defined below.

### **Assignment, Weekly Discussions:**

- Every week, two to three prompts will be released to the Canvas discussion Board. Students are expected to write a thoughtful response to one of the prompts (primary) and respond to one of their peers' primary responses (secondary).
  - Primary responses (4%) should be posted by Wednesday evening. Secondary responses (1%) should be posted to by Friday evening.
  - To be on time, responses must be posted by 11:59 PM eastern.
  - Late responses will be docked 10% per day late.
- Primary responses should be the equivalent of about ½ of a Word document page, double spaced, 1-inch margins, Times New Roman 12-point front and not to exceed 1 page of text using these parameters. In addition, primary responses should cite 1-2 journal articles to justify what is written; do not include the text of the citations in length of your main text.
- Secondary responses should be thoughtful commentary and engagement with one of your peer's primary responses. These do not have defined lengths, but should not be simple, "good job," or "I agree" types of response. Note: if a student responds thoughtfully to a secondary post that includes a question on their primary post, this fulfills that secondary post requirement for the week.

See below for example of a quality series of responses:

*Prompt: Comparing different implementation science frameworks, which seems to fit best with your work?*

Primary (Student A): Exploration Preparation Implementation Sustainment (EPIS) framework guides the integration of evidence-based practices into real-world settings. The application of this model for patient-provider interventions, such as my proposed intervention, in healthcare practice is novel and would help me to make a meaningful impact. EPIS highlights key phases that guide and describe the implementation process and enumerates common and unique factors within and across levels of outer context and inner context (internal to clinics, organizational leadership, provider traits) across phases, and considers factors that bridge outer and inner contexts, innovation natures, and role of

the program. As part of implementation evaluation, EPIS interviews will focus on assessing inner contexts as primary, namely leadership, clinic traits including readiness, supports, staffing, etc. and outer contexts, specifically culture, governmental support, and advocacy efforts related to stigma reduction secondarily. EPIS interviews will also explore perceptions on bridging and innovation factors that may affect future dissemination.

*Moullin JC, Dickson KS, Stadnick NA, Rabin B, Aarons GA. Systematic review of the exploration, preparation, implementation, sustainment (EPIS) framework. Implementation Science. 2019;14(1):1-16.*

*Eger WH, Altice FL, Lee J, et al. Using nominal group technique to identify barriers and facilitators to preventing HIV using combination same-day pre-exposure prophylaxis and medications for opioid use disorder. Harm Reduction Journal. 2022;19(1):120.*

Secondary (Student B): Have you considered using RE-AIM or CFIR as the implementation science frameworks? I understand that you are engaging with community partners and that EPIS may be perceived as more intuitive and applicable to local contexts, but the other options seems like they would produce better data and insights.

### **Assignment, Presentation of Research:**

At the beginning of the semester, students will submit a 1-page summary of their program of research. This document is designed to orient the instructor to the priorities of the class. The submission should adhere to the following guidelines:

- 1-inch margins all around, Times New Roman 12-point font, and double spaced. The heading should only include the student's name. There should be no title. Do not include references in the main text of document; if you include references, includes them on a separate page. For those who use non-English versions of Word, please copy and paste your text into an English version prior to submission. Deviations from this format will result in an automatic 10% deduction from the graded score received.
- In this summary, include your current or planned program of research. Share about your prior experiences using mixed methods and implementation science. Share what you'd like to gain from this class. Be thorough and detailed.
- This assignment is due by 11:59 PM eastern on Friday of the week assigned. Late responses will be docked 10% per day late.

### **Assignment, Research Article Summaries:**

Students will submit two 2-page summaries of research articles that are aligned with their program of research but involve mixed methods or implementation science.

- General: 1-inch margins all around, Times New Roman 12-point font, and double spaced.
- Page 1: The heading should only include the student's name. Please include a one-line title. The reference to this article should be included right below the title. Thereafter, provide a description on why you selected this article and how it aligns with your research.
- Page 2: Provide a 1-page summary of the article.
- For those who use non-English versions of Word, please copy and paste your text into an English version prior to submission. Deviations from this format will result in an automatic 10% deduction from the graded score received.
- This assignment is due by 11:59 PM eastern on Friday of the week assigned. Late responses will be docked 10% per day late.

### **Assignment, Presentation:**

Students will video record a 4–6 minute presentation on what they learned in this class and how this class can inform their research. In this presentation, students are encouraged to reflect on their learnings. More directions will be shared about this video presentation during the delivery of this course.

**Course Grades are determined by:**

<b>Assignment:</b>	<b>%</b>
Participation grade based on canvas weekly discussions, including 1 primary response and 1 secondary response. See above for guidelines on this assignment type. 16 weekly discussion board topics valued at 5% each. <ul style="list-style-type: none"> <li>• 90-100 pts (participated; adds quality; does not dominate).</li> <li>• 80-89 pts (effectively completed one of the two required components; adds some quality).</li> <li>• 70-79 pts (occasionally participates; adds some quality).</li> <li>• 0-69 pts (did not participate; attendance spotty; disruptive; dominates; poor quality input)</li> </ul>	75
Presentation of research overview and how mixed-methods or implementation science can improve student’s research plans	5
Research article summary 1	5
Research article summary 2	5
Presentation on lessons learn within the context of the student’s research agenda / priorities	10

**Grading Scheme**

<b>Grade</b>	<b>Range</b>
A	90 -100%
B+	86-89.9%
B	80-85.9
C	75-79.9%
D	60-74.9
F	<60

**Proctored Exams**

Not Applicable.

**Technology Requirements**

Course content is accessible through Canvas. Students will need to be able to view videos, write and upload assignments, post to discussion boards, and take assessments. Students should have access to high-speed internet and updated software. Mobile devices may be used to view course content, upload assignments, and take assessments as determined by the instructor. To view the most current technology requirements, visit the FSU Canvas support site.

**Canvas Support**

Need help with Canvas? Contact FSU Canvas Support:

**Email:** [canvas@fsu.edu](mailto:canvas@fsu.edu)

**Phone:** (850) 644-8004

**Website:** [support.canvas.fsu.edu](http://support.canvas.fsu.edu)

**Hours:** 8am to 5pm, Monday – Friday

### **Communication Standards:**

Most information related to this course will be communicated via Canvas announcements. Please check course site routinely.

### **For Zoom Lectures/Meetings:**

- Make sure that your camera is turned on and that your face is in full view of the camera
- Do not lay in or sit on your bed. Please sit at a table or desk.
- Do not sit in full view of bathroom/mirrors.
- Remind roommates and family camera is on.
- Shirt and pants are NOT optional. Dress like you are having a face-to-face class.
- Turn off the TV/music if in the same room.
- Have treats/snacks for dogs/children
- Log in 5 min early.
- Have charger in same room.
- Pencil drums and pen clicking are distracting
- Mute yourself if you are not talking
- If using headphones, make sure they work prior to the call
- Please eat and cook breakfast before the call

### **For Discussions:**

- Please use polite, respectful behavior when posting your responses to prompts in the Discussion Boards.
- Be mindful of how you express your emotions and humor and be sensitive to cultural and ability differences of your online peers.
- Keep postings to the point, and make sure your comments are relevant to the topic of discussion.
- Avoid messages such as, "Wow," "Way to go," or "Ditto" and aim for comments that validate other members' ideas through careful explanation of why.
- When replying, give a short description in the subject line of what you are replying to, and use correct punctuation and spelling throughout your post.

### **For Email Communication:**

- The official method of communication for this course is our FSU e-mail accounts.
- To stay informed and aware, students are required to set up and maintain the account and check it *AT LEAST* three times per week.
- If you choose to have your official FSU account forwarded to another e-mail account, you are still held responsible for all information distributed by the University to your FSU account.
- For email, please respond to your instructor's and peers' messages within a 24-hour period.
- Use a brief description in the subject line that outlines the topic of discussion.
- Avoid using slang or profane words.
- Use your instructor's correct title he or she prefers for communication.
- Avoid using emoticons, such as smiley faces, and maintain a professional demeanor.
- Sign your email messages using your full name.
- AVOID USING ALL CAPS. This makes the message visually difficult to read and is perceived by the reader as "shouting."

- Use correct spelling, grammar, and punctuation, just as you would for any communication.
- Ask yourself whether you would be comfortable if someone other than the intended receiver was to read your message. Remember, email is not a completely secure form of communication.
- Refrain from "flaming," which is expressing a strongly held opinion without tact or regard for others. Don't assume that recipients will know the intent of the message (e.g., "just kidding"). It reads differently when it's in print (electronic or not).
- Report any inappropriate communication considered to be of a serious nature to your instructor, as it may be a violation of university policy.
- Treat others with respect by making messages clear and succinct.

**Text Communication:**

Do not text. Not Applicable.

**Class Participation, Lateness, and Absence Policy:**

- Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities.
- These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse.
- Consideration will also be given to students whose dependent children experience serious illness.
- There are no points associated with attendance in lecture; however, it is an inherent expectation that you will attend class and be an active participant. A random number sequence will be displayed 2-3 times every lecture and students are responsible for individually and privately replying with the displayed number each time.

**Policy for Assignments:**

- Dates will be clearly posted for all assignments.
- Late assignments will be penalized by 5% per day late, unless the delay is related to notable extenuating circumstances.

**Policy on Responding to Students:**

- Email responses can typically be expected within 48 hours.
- Graded assignments are usually returned to students 2 weeks after the due date.

**College of Nursing Policies**

**Professional Critical Behavior Policy:**

The College of Nursing strictly adheres to the Florida State University Academic Honor Code as stated and as delineated in the FSU General Bulletin. In addition, the following apply in the College of Nursing: The CON Academic Honesty Policy (S-10), the Substance Abuse Policy (S-5) and the Mandatory Clinical Behaviors Policy (U-15). Each policy can be found on the Canvas site for the College of Nursing's Undergraduate Program under Student Policies and within the 2016-2017 Undergraduate Student Handbook.

**Academic Penalties:**

In the FSU College of Nursing, students violating the Academic Honor Policy in any assignment, test, etc. will receive a minimum penalty of a grade of zero (0) for the assignment in question. The violation will be reported to the Dean and the University Judicial Officer, and the student may receive an "F" for the course at the option of the instructor.



## **All College of Nursing Student Policies:**

<https://nursing.fsu.edu/programs/student-policies>

### **University Attendance Policy:**

Excused absences include documented illness, deaths in the family, and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid written excuse. Consideration will also be given to students whose dependent children experience serious illness.

### **Academic Honor Policy:**

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of student's academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy>)

### **Academic Success:**

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Department of Student Support and Transitions to learn more.

### **Americans With Disabilities Act:**

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodation for all persons with disabilities in a manner that is consistent with the academic standards of the course while empowering the student to meet the integral requirements of the course. Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Office of Accessibility Services; and (2) request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and (3) meet (in person, via phone, email, skype, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations. Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided. This syllabus and other class materials are available in an alternative format upon request. For the latest version of this statement and more information about services available to FSU students with disabilities, contact the:

Office of Accessibility Services  
874 Traditions Way  
108 Student Services Building  
Florida State University  
Tallahassee, FL 32306-4167  
(850) 644-9566 (voice)  
(850) 644-8504 (TDD)

[oas@fsu.edu](mailto:oas@fsu.edu)  
<https://dsst.fsu.edu/oas>

### **Confidential campus resources:**

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

#### **Victim Advocate Program**

University Center A, Rm. 4100  
(850) 644-7161  
Available 24/7/365  
Office Hours: M-F 8-5  
<https://dsst.fsu.edu/vap>

#### **Counseling and Psychological Services (CAPS)**

Florida State University's Counseling and Psychological Services (CAPS) primary mission is to address psychological needs and personal concerns, which may interfere with students' academic progress, social development, and emotional well-being. The following in-person and virtual (tele-mental health) services are available to all enrolled students residing in the state of Florida:

1. Individual therapy
  2. Group therapy
  3. Crisis Intervention
  4. Psychoeducational and outreach programming
  5. After hours crisis-hotline
  6. Access to community providers for specialized treatment
- Call 850-644-TALK (8255) for more information on how to initiate services.

Counseling and Psychological Services  
250 Askew Student Life Center  
942 Learning Way  
(850) 644-TALK (8255)  
Walk-in and Appointment Hours:  
M-F 8 am – 4 pm  
<https://counseling.fsu.edu/>

#### **Services at UHS are available to all enrolled students residing in Florida:**

The mission of University Health Services (UHS) is to promote and improve the overall health and well-being of FSU students. UHS provides a coordinated continuum of care through prevention, intervention, and treatment. Services include general medical care, priority care, gynecological services, physicals, allergy injection clinic, immunizations, diagnostic imaging, physical therapy, and a medical response unit. The Center for Health Advocacy and Wellness (CHAW) assists students in their academic success through individual, group, and population-based health and wellness initiatives. Topics include wellness, alcohol and other drugs, hazing prevention, nutrition and body image, sexual health, and power based personal violence prevention. For more information, go to [uhs.fsu.edu](http://uhs.fsu.edu).

University Health Services  
Health and Wellness Center  
960 Learning Way  
Tallahassee, FL 32306  
Hours: M-F, 8 am – 4 pm

(850) 644-6230

<https://uhs.fsu.edu/>

## **Free Tutoring from FSU**

On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list of on-campus tutoring options –see <https://ace.fsu.edu/tutoring> or contact [tutor@fsu.edu](mailto:tutor@fsu.edu). High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

## **Syllabus Change Policy**

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

## **Statement on Public Health Protocols**

Classes are expected to continue to meet in person this semester. If necessary, however, we will shift to remote instruction. There are currently no mask mandates in place at FSU, but it is likely that not everyone in the class will feel the same way about public health protocols. Some members of our community remain more at risk than others. We encourage everyone to be patient with one another while we navigate these ongoing challenges.

While the Covid and M-pox pandemics are receding, in order to continue meeting in person, we must all work together as a community to protect one another and to promote our shared health and safety in indoor spaces. FSU will continue to monitor all public health issues. Whatever happens, we are committed to helping you learn the material thoroughly and stay on schedule with your degree program. You can find up-to-date guidance at: <https://stayhealthy.fsu.edu>.

## **Statement for Classes Subject to HB233 Recording**

In this class, consistent with state law and university policy, students are permitted to make recordings of class lectures for personal use only. As noted, sharing, posting, or publishing classroom recordings may subject you to honor code violations and legal penalties associated with theft of intellectual property and violations of other state laws. Moreover, students and educators have expressed concern that recording classroom activities may negatively impact the learning experience for others, especially in classes that involve questions, discussion, or participation. To protect a learning environment in which everyone feels free to experiment with ideas, we ask you to refrain from recording in ways that could make others feel reluctant to ask questions, explore new ideas, or otherwise participate in class. Students must monitor their recordings so that they do not include participation by other students without permission. Students with disabilities will continue to have appropriate accommodations for recordings as established by the Office of Accessibility Services.

## **Statement for Courses Not Subject to HB233 Recording**

In this class, consistent with state law and university policy, you may not make recordings of classroom activities without the permission of the instructor. This policy applies to both audio and video recordings.

e for the course and is subject to change with advance notice.