

HSC 3057

RESEARCH METHODS IN THE HEALTH SCIENCES

Instructor: **Dr. Mike Moorhouse**

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CLASS NUMBER: 13400	TUESDAY	4 TH	10:40A-11:30A	COMMUNICORE CG-024
CLASS NUMBER: 13402	TUESDAY	5 TH	11:45A-12:35P	COMMUNICORE CG-024
CLASS NUMBER: 13403	TUESDAY	7 TH	1:55P-2:45P	COMMUNICORE CG-024
CLASS NUMBER: 13401	WEDNESDAY	4 TH	10:40A-11:30A	COMMUNICORE CG-024
CLASS NUMBER: 13404	WEDNESDAY	5 TH	11:45A-12:35P	COMMUNICORE CG-024
CLASS NUMBER: 13405	WEDNESDAY	7 TH	1:55P-2:45P	COMMUNICORE CG-024

Course Overview

This course provides an overview of common methodological approaches used for health science research, and learn how to obtain, decipher, and critique research for clinical practice. We will use various instructional methods including online lectures, readings, class discussion, and worksheets.

Course Objectives

It is expected that by the end of this course students will be able to:

1. Explain the major tenets of quantitative and qualitative research approaches.
2. Compare and contrast the key features of experimental, quasi-experimental, comparative, associative, and descriptive research designs.
3. Summarize key ethical issues associated health science research.
4. Explain how to search for evidence based research when answering a clinical questions.
5. Critique the major elements of published public health and/or health sciences research articles (i.e., introduction, methodology, results, and discussion sections).

Course Materials

Textbook There is no required textbook for this course however students will be required to view all online material including lectures, videos, etc. prior to class.

Technology Required Equipment: Computer with high-speed internet access, and use of a supported browser. Additionally, all online students are required to have a working webcam and microphone to participate during the Zoom class times. If attending class online, you will be required to have your cameras turned on and facing you at all times, unless given permission by the instructor. To access this course on Canvas, you will use your Gatorlink ID and password to login.

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

- Calling (352) 392-HELP (option 2),
- Emailing learning-support@ufl.edu, or
- Going to lss.at.ufl.edu/help.shtml

Requirements/Evaluation

Syllabus Quiz (5 Points, 5% of Total Grade) To access course materials, students must complete an 8-question syllabus quiz and earn 100%. Students will take the quiz one time. If the student does not achieve 100%, then they will have to complete and upload a syllabus contract. The contract will be made available Monday January 10th.

Exams (15 Points Each, 45% of Total Grade) Students will take 3, 32 question multiple choice exams. All questions will be taken directly from recorded lectures and class discussion; and each question is worth .5 points. Exams will be administered as an assembly exam in the HPNP Auditorium via Lockdown Browser. Exam 1 will be Thursday, February 10 at 7p; Exam 2 will be Tuesday, March 22nd at 7p; and Exam 3 will be Tuesday, April 19th at 7p. Each exam must be taken in-person (unless authorized by the instructor). *Any student caught cheating will, at minimum, be referred to the Dean of Students Office, receive a zero on the exam, and have a full-letter grade reduction for the class.*

Check-In Quizzes (2 Points Each, 20% of Total Grade) Prior to the week of class, students will complete a 4 question quiz covering that week's material (e.g., lectures, videos, and podcasts). Each quiz is worth 2 points and the lowest quiz grade will be automatically dropped. Students are free to use their notes and/or reference the recorded lectures to complete the quiz. There are no time limits for the quizzes, but each quiz is due the Sunday before class by 11:59p.

Discussion Papers / Group Assignments (3 Points Each, 30% of Total Grade) During the in-person portion of the class, students will engage in a discussion or work on a group assignment relative to that week's topic. Following discussions, students will be prompted to provide their opinion regarding a specific aspect of the conversation. Discussion Papers must be a minimum of 150 words and do not require any outside sources (you only need to provide your opinion). Conversely, following Group Assignments, students must upload their own Group Assignment to Canvas. Each Discussion Paper / Group Assignment is worth 3 points and must be uploaded before midnight of the day of class. Late Discussion Papers and Group Assignments are not accepted. Only 10 of the 11 Discussion Papers / Group Assignments will be needed to fulfill the total points toward your grade, and no extra credit will be given to students who complete additional papers or activities. Note: You must attend class to be eligible to upload your Discussion Paper or Group Assignment. *Students who do not attend class but upload a Discussion Paper or Group Activity will, at minimum, receive a zero for the assignment, lose a full letter grade in the course (minus 10%), and be reported to UF's Dean of Students Office.*

Point Breakdown / Grading Scale

Syllabus Quiz	5 Points	A	93-100 Points	=	4.00
Exam 1	15 Points	A-	90-92.9 Points	=	3.67
Exam 2	15 Points	B+	87-89.9 Points	=	3.33
Exam 3	15 Points	B	83-86.9 Points	=	3.00
Check-In Quizzes	20 Points	B-	80-82.9 Points	=	2.67
Dis. Papers / Grp. Assign	30 Points	C+	77-79.9 Points	=	2.33
		C	70-76.9 Points	=	2.00
Extra Credit	3 Points	D+	67-69.9 Points	=	1.33
		D	63-65.9 Points	=	1.00
Total Points	100 Points	E	Less than 63 Points	=	0.00

General Information and Policies

Professionalism

Students are expected to conduct themselves in a professional manner in all communication with the course instructor and teaching assistants. Moreover, students are expected to arrive to class on-time and be respectful during class (e.g., no excessive talking/background distractions, no cell phone use, or distracting classmates).

COVID-19 Protocol for In-Person Students

In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and enhance the safety of our in-classroom interactions.

- A. Students are required to wear approved face coverings that fully cover their nose and mouth at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. If you fail to comply, you will be asked to leave class and you will be reported to the Program Director as well as the Office of Student Conduct and Conflict Resolution.
- B. Sanitizing supplies are available in the classroom if students wish to wipe down your desks prior to sitting down and at the end of the class.
- C. Students must follow instructor guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- D. Students must be tested and cleared to return to campus AND get repeated testing (and clearance) every two weeks. Students not cleared to return to campus will not be permitted to attend class.
- E. Students who are not cleared to return to campus may only participate in class via Zoom at the instructor's discretion.

Academic Honesty

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. Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Violations of the Honor Code at the University of Florida will not be tolerated and 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: www.dso.ufl.edu/sccr/process/student-conduct-honor-code/.

Collaboration Policy

Unless otherwise stated by written instructions, the preparation of all coursework should be done individually. If you are unsure about what level of collaboration is appropriate, ask the instructor before beginning any graded assignment.

Technology Policy

The use of any technology in class, including cell phones, computers, tablets, etc., at any point is strictly prohibited unless otherwise instructed by the instructor. Should you need to keep your cell phone on hand due to a personal reason, please inform the instructor prior to class.

Late Submission Policy

Late submissions for Opinion Papers and Group Assignment Uploads will be accepted for up to 48 hours after the original deadline, and graded for a maximum of half credit. Papers and assignments submitted after the 48 hour window will not be accepted unless the student has been granted permission by the instructor.

It is your responsibility to check that the correct assignment has been submitted to Canvas on time. If you submit the wrong assignment, Canvas allows you to resubmit the correct assignment before the deadline. Submitting the wrong assignment will be considered the same as not submitting the assignment at all.

Make-Up Policy

Make-ups may be granted for check-in quizzes and exams only, and must be based upon one of the following circumstances: (a) illness, (b) serious family emergencies, (c) military obligation, (d) religious holidays, (e) participation in official university activities, or (f) court-imposed legal obligations. For circumstances a. and b., students must contact the faculty via email within 48 hours of the missed exam/assignment, and the faculty may request the student provide medical or other forms of documentation to validate the make-up.

For all other circumstances, students must contact the faculty at least 72 hours prior to the anticipated missed day and provide reasonable documentation confirming the obligation/activity. The instructor will provide make-up materials to the student and he/she will have 1 week to complete the make-up.

Missed exams/opinion papers/group assignment uploads due to severe weather or poor internet connectivity will be reviewed on a case by case basis. If you are unable to access consistent internet, please email the instructor ahead of time (if possible); otherwise email the instructor at the earliest time possible. Check-in quizzes cannot be made up.

Positionality Statement

As a white, heterosexual, cisgender, able-bodied male, I recognize that my privilege insulates me from experiencing social and systemic discrimination, racism, oppression, rejection, or micro aggressions that many people have and continue to experience in their daily lives. This privilege is an inescapable part of my “identity” – something that has allowed me to never have to prove myself because of my sex, or be uneasy walking into a room where no one looks like me, or deny my authentic self for fear that family and friends will reject me. Moreover, my privilege has allowed me to navigate life largely unaffected by discriminatory practices, prejudicial policies, and implicit/explicit bias.

My lens, my values, my motivations have all been heavily influenced by my upbringing and my own lived experiences related to self-worth and inferiority. It is these experiences that drive me to champion diversity, equity, and inclusion inside and outside the classroom. I believe that we are all an intersection of vertical and horizontal identities that should be celebrated and affirmed, rather than hidden or oppressed. To that end, I strive to make safe and affirming spaces for all students regardless of race, ethnicity, sexual orientation, gender identity, or disability status; and hope to grow by becoming more educated and better understanding of the impact of social injustices.

Inclusive Learning Environment Policy

The College of Public Health and Health Professions believes in human dignity and 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: www.multicultural.ufl.edu.

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 <http://www.dso.ufl.edu> 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 & Wellness

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues. 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: www.counseling.ufl.edu. Online and in-person assistance is available.
- U Matter, We Care website: www.umatter.ufl.edu/. 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 (352) 392-0627 or check out the web site at: www.shcc.ufl.edu/.
- Crisis intervention is always available 24/7 from the Alachua County Crisis Center at: www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx, or call at (352) 264-6789.

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.

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. Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy: <http://facstaff.php.ufl.edu/services/resourceguide/getstarted.htm>

Online Faculty Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give professional and respectful feedback is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Calendar

*Subject to Change

	Before Class	During Class	After Class
Week 1 Online	Syllabus Video	No In-Person Class	
Week 2 In-Person	Spanning the Research Spectrum: Quantitative and Qualitative Research Basic Research Variables Formulating Quantitative Research Questions Syllabus Quiz (Complete Sunday 1/9 before Midnight) Quiz 1 (Complete by Sunday 1/9 before Midnight)	Class Discussion	Discussion #1 Due Day of Class Before Midnight
Week 3 In-Person	General Research Designs for Examining Causality Choosing Which Casual Research Design to Compare Groups Video: Last Week Tonight with John Oliver Quiz 2 (Complete by Sunday 1/16 before Midnight)	Class Discussion	Discussion #2 Due Day of Class Before Midnight
Week 4 In-Person	Experimental and Quasi-Experimental Designs (Internal Validity) Clinical Trial Phases Quiz 3 (Complete by Sunday 1/23 before Midnight)	Group Assignment	Assignment #1 Due Day of Class Before Midnight
Week 5 In-Person	Observational Designs (Internal Validity) Critiquing a Research Article: Assessing Bias (Internal Validity) Quiz 4 (Complete by Sunday 1/30 before Midnight)	Group Assignment	Assignment #2 Due Day of Class Before Midnight
Week 6 No Class	Assembly Exam 1: THURSDAY, 2/10, 7p, HPNP Auditorium		
Week 7 In-Person	Association/Correlational Designs Sampling Strategies (External Validity) Quiz 5 (Complete by Sunday 2/13 before Midnight)	Quiz 5 Group Assignment	Assignment #3 Due Day of Class Before Midnight
Week 8 In-Person	Significance Testing (Statistical Conclusion Validity) Confidence Intervals (Statistical Conclusion Validity) Effect Size (Statistical Conclusion Validity) Quiz 6 (Complete by Sunday 2/20 before Midnight)	Quiz 6 Class Discussion	Discussion #3 Due Day of Class Before Midnight

	Before Class	During Class	After Class
Week 9 In-Person	Choosing the Correct Statistical Test (Statistical Conclusion Validity) Critiquing a Research Article: Statistics (Statistical Conclusion Validity) Quiz 7 (Complete by Sunday 2/27 before Midnight)	Group Assignment	Assignment #4 Due Day of Class Before Midnight
Week 10 No Class	<i>Spring Break</i>		
Week 11 In-Person	Measurement Scales (Construct Validity) Types of Data Quiz 8 (Complete by Sunday 3/13 before Midnight)	Class Discussion	Discussion #4 Due Day of Class Before Midnight
Week 12 No Class	Assembly Exam 2: TUESDAY 3/22, 7p, HPNP Auditorium		
Week 13 In-Person	Formulating Qualitative Research Questions Qualitative Theories Conducting Interviews or Focus Groups Quiz 9 (Complete by Sunday 3/27 before Midnight)	Class Discussion	Discussion #5 Due Day of Class Before Midnight
Week 14 In-Person	Research Ethics Video: Stanford Prison Experiment Quiz 10 (Complete by Sunday 4/3 before Midnight)	Class Discussion	Discussion #6 Due Day of Class Before Midnight
Week 15 In-Person	Forming Clinical Questions - PICO Using Databases for Clinical Questions Quiz 11 (Complete by Sunday 4/10 before Midnight)	Class Discussion	Discussion #7 Due Day of Class Before Midnight
Week 16 No Class	Assembly Exam 3: TUESDAY 4/19, 7p, HPNP Auditorium		