

# HSC 3057

## RESEARCH METHODS IN THE HEALTH SCIENCES

Instructor: Dr. Mike Moorhouse  
Office: HPNP, Room 4137  
Office Hours: By Appointment

Office Phone: 352-273-6564  
Email: [mmoorhou@php.ufl.edu](mailto:mmoorhou@php.ufl.edu)

Teaching Assistant: Allison Bates

Email: [allisonbates@ufl.edu](mailto:allisonbates@ufl.edu)

CLASS NUMBERS 13949/29088	WEDNESDAY	2 <sup>ND</sup>	8:30AM-9:20AM	HPNP G101
CLASS NUMBERS 13945/29085	WEDNESDAY	3 <sup>RD</sup>	9:35AM-10:25AM	HPNP G101
CLASS NUMBERS 13948/29086	WEDNESDAY	6 <sup>TH</sup>	12:50PM-1:50PM	HPNP G101

### Course Overview

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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

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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

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**Textbook** There is no required textbook for this course however students will be required to view all online material including lectures, videos, and podcasts 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](mailto:learning-support@ufl.edu), or
- Going to [lss.at.ufl.edu/help.shtml](https://lss.at.ufl.edu/help.shtml)

## Requirements/Evaluation

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**"About Me" Survey** (1 Point, 1% of Total Grade) Students will complete a brief survey about them and their comfort level with research methods. Students will be required to submit the survey but will not be required to answer any question if they choose not to.

**Syllabus Quiz** (4 Points, 4% of Total Grade) Students must complete an 8-question syllabus quiz and earn 100%. Students will be allowed to retake the quiz as many times as necessary to earn 100%.

**Exams** (16 Points Each, 48% of Total Grade) Students will take 3, 32 question multiple choice exams. All questions will be taken directly from lecture, videos, podcasts, and class discussion; and each question is worth .5 points. Exams will be administered via Honorlock on Wednesday at 7pm. Each exam is closed note and students are to work independently. *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) By each Sunday before the week of class (excluding exam weeks), 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. There is no time limit for the quizzes and students can refer to the slides, their notes, lecture, etc. to complete the quiz. Quizzes must be submitted by 11:59 on Sunday and missed quizzes cannot be made up.

**Opinion Papers** (3 Points Each, 12% of Total Grade) Five times throughout the semester, the class will engage in a discussion relative to that week's topic. Following the discussion, students will be prompted to provide their opinion regarding a specific aspect of the conversation. Opinion papers must be a minimum of 150 words and do not require any outside sources (you only need to provide your opinion). Opinion papers are worth 3 points each and must be uploaded before midnight of the day of class. Only 4 of the 5 opinion papers will be needed to fulfill the total points toward your grade, and no extra credit will be given to students who complete all opinion papers. Note: You must attend class to be eligible to upload your opinion paper. *Students who do not attend class but upload an opinion paper 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.*

**Group Assignments** (3 Points Each, 15% of Total Grade) Six times throughout the semester, the class will be randomly assigned to work together in small groups to solve various problems related to that week's topic (online worksheets will be provided). Following 15-20 minutes, the class will reconvene to discuss the problems. While students work in groups, each student must upload their own worksheet before midnight of the day of class. Group assignments are worth 3 points each. Only 5 of the 6 group assignments will be needed to fulfill the total points toward your grade, and no extra credit will be given to students who complete all group assignments. Note: You must attend class to be eligible to upload your group assignment. *Students who do not attend class but upload a group assignment 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.*

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## Point Breakdown / Grading Scale

About Me Survey	1 Point	A	93-100 Points	=	4.00
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Syllabus Quiz	4 Points	A-	90-92.9 Points	=	3.67
Exam 1	16 Points	B+	87-89.9 Points	=	3.33
Exam 2	16 Points	B	83-86.9 Points	=	3.00
Exam 3	16 Points	B-	80-82.9 Points	=	2.67
Check-In Quizzes (x11)	20 Points Total (1 drop)	C+	77-79.9 Points	=	2.33
Opinion Papers (x5)	12 Points Total (1 drop)	C	70-76.9 Points	=	2.00
Group Assignments (x6)	15 Points Total (1 drop)	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

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### Professionalism

Students are expected to conduct themselves in a professional manner in all communication with the course instructor and teaching assistants that assist with this course. 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. This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Students must utilize designated seats and maintain appropriate spacing between one another. Please do not move desks or stations.
- C. 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.
- D. 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.
- E. 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.
- F. 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/](http://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 during class discussions, including cell phones, computers, tablets, etc., 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 based upon 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](http://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](http://www.counseling.ufl.edu). Online and in-person assistance is available.
- U Matter, We Care website: [www.umatter.ufl.edu/](http://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/](http://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](http://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**

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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

**Before Class**

**During Class**

**Due Wednesday by 11:59p**

Week 1

Course Overview

Week 2	<p>Complete Syllabus Quiz</p> <p>Complete "About Me" Survey</p> <p>Watch Quantitative and Qualitative Research &amp; The Quantitative Research Process</p> <p>Watch Primary Research Variable for Quantitative Research</p> <p>Watch Scientific Studies: Last Week Tonight with John Oliver</p> <p><b>Complete Week 2 Quiz by Sunday, 11:59p</b></p>	<p>Class Discussion</p>	<p><b>Reaction Paper #1</b></p>
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Week 3	<p>Watch Formulating Quantitative Research Questions</p> <p>Watch Writing a Hypothesis</p> <p>Listen Revisionist History: McDonalds Broke My Heart</p> <p>Listen Revisionist History: The Basement Tapes</p> <p><b>Complete Week 3 Quiz by Sunday, 11:59p</b></p>	<p>Class Discussion</p>	<p><b>Reaction Paper #2</b></p>
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Week 4	<p>Watch General Overview of Quantitative Research Designs (Internal Validity)</p> <p>Watch Quantitative Research Designs: Experimental and Quasi-Experimental Studies</p> <p><b>Complete Week 4 Quiz by Sunday, 11:59p</b></p>	<p>Group Assignment</p>	<p><b>Group Assignment #1</b></p>
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Week 5	<p>Watch Quantitative Research Designs: Comparative, Association, &amp; Descriptive</p> <p>Watch Threats to Internal Validity</p> <p><b>Complete Week 5 Quiz by Sunday, 11:59p</b></p>	<p>Group Assignment</p>	<p><b>Group Assignment #2</b></p>
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Week 6	<p><b>No Class - Exam 1 (Assembly Exam Wednesday @7pm via Honorlock)</b></p>		
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	Before Class	During Class	Due Wednesday by 11:59p
Week 7	<ul style="list-style-type: none"> <li>Watch Sampling (External Validity)</li> <li>Watch Threats to External Validity</li> <li><b>Complete Week 7 Quiz by Sunday, 11:59p</b></li> </ul>	Group Assignment	<b>Group Assignment #3</b>
Week 8	<ul style="list-style-type: none"> <li>Watch Measurement Scales</li> <li>Watch Instrumentation</li> <li><b>Complete Week 8 Quiz by Sunday, 11:59p</b></li> </ul>	Class Discussion	<b>Reaction Paper #3</b>
Week 9	<ul style="list-style-type: none"> <li>Watch Developing Items/Questions</li> <li>Watch Administering Surveys</li> <li>Watch Conducting Interviews or Focus Groups</li> <li><b>Complete Week 9 Quiz by Sunday, 11:59p</b></li> </ul>	Group Assignment	<b>Group Assignment #4</b>
Week 10	<ul style="list-style-type: none"> <li>Watch Significance Testing, Confidence Intervals, Effect Size</li> <li>Watch Choosing the Correct Statistical Test (Statistical Conclusion Validity)</li> <li><b>Complete Week 10 Quiz by Sunday, 11:59p</b></li> </ul>	Group Assignment	<b>Group Assignment #5</b>
Week 11	<b>No Class - Exam 2 (Assembly Exam Wednesday @7pm via Honorlock)</b>		



	Before Class	During Class	Due Wednesday by 11:59p
Week 12	Watch Formulating Qualitative Research Questions Watch Qualitative Theories Watch Data Analysis Watch Qualitative Validities <b>Complete Week 12 Quiz by Sunday, 11:59p</b>	Class Discussion	<b>Reaction Paper #4</b>
Week 13	Watch Research Ethics Watch Stanford Prison Experiment <b>Complete Week 13 Quiz by Sunday, 11:59p</b>	Class Discussion	<b>Reaction Paper #5</b>
Week 14	Watch PICO Watch Levels of Evidence <b>Complete Week 14 Quiz by Sunday, 11:59p</b>	Group Assignment	<b>Group Assignment #6</b>
Week 15	<b>No Class - Exam 3 (Assembly Exam Wednesday @7pm via Honorlock)</b>		