

University of Florida
College of Public Health and Health Professions
HSC 3057 – Research Methods in the Health Sciences (3 credits)
Spring 2020

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Meeting Times:

Section 14267 Tuesday – 3 rd – 9:35AM – 10:25AM	Communicore C1-15
Section 14269 Tuesday – 5 th – 11:45AM – 12:35PM	Communicore C1-15
Section 14270 Tuesday – 6 th – 12:50PM – 1:40PM	Communicore C1-15
Section 14268 Wednesday – 3 rd – 9:35AM – 10:25AM	Communicore C1-11
Section 14271 Wednesday – 5 th – 11:45AM – 12:35PM	Communicore C1-11
Section 14272 Wednesday – 6 th – 12:50PM – 1:40PM	Communicore C1-11

Course Overview: This course is designed to provide an overview of research design, methods, and ethics for undergraduate students with an emphasis in the social and behavioral sciences. The overarching aims for the course are to provide students with: (1) an overview of the common types of methodological approaches used for health science research; (2) an opportunity to understand how to best present research; (3) a basic understanding of how to critique a research article; and (4) an opportunity to understand how to obtain and decipher evidence-based research. We will use a variety of instructional methods including online lectures, readings, class discussion, and worksheets.

Course Objectives: It is expected that by the end of this course, HSC 3057 students will be able to:

1. Characterize the purpose and need for research in the health sciences
2. Distinguish key ethical issues associated with different methods of health research
3. Compose research questions and hypotheses on a topic of interest
4. Compare and contrast the key features of observational, qualitative, correlational, quasi-experimental, and experimental research designs
5. Identify basic quantitative and qualitative methods so that they align with a given research question
6. Communicate research with others so that the key components and critical decisions are addressed
7. Critique the design, methods, process, and analysis of health sciences research

Course Materials: There is no required textbook for this course however students will be required to read provided materials and view all online material including lectures and videos prior to class. All materials will be accessible via the Canvas course website. Additionally, weekly quizzes will be taken during class via the Canvas Course. Students are required to bring a computer or an electronic device which can access Canvas to class every day. Similarly, students will complete Exam 1 and Exam 2 through Canvas and will be required to bring a computer or electronic device to designated exam dates in the HPNP auditorium. For issues with technical difficulties please contact the instructor or Academic Technology at the following:

Email: learning-support@ufl.edu
Phone: (352)392-HELP – select option 2
Web: <https://lss.at.ufl.edu/help.shtml>

Course Requirements

Exams (Exam 1 - 2/26/20 and Exam 2 – 4/22/20) – 50% of the Final Grade

Students will take 2, 40 question exams. The exams will take place in the HPNP Auditorium at 7PM. You will need to bring a laptop or other device to access the exams via Canvas. Questions will address the content in the online materials as well as class discussions and will be in the form of multiple choice, fill-in-the-blank, matching, and short answer. Exam 1 will be worth **25%** of the final grade and cover course content from weeks 1 through 7. Exam 2 will be worth **25%** of the final grade and cover course content from weeks 8 through 14. The exams will require the lockdown browser provided via Canvas.

Quizzes (Weekly) – 20% of Final grade

There will be weekly in-class quizzes to assess your comprehension of concepts and knowledge of requisite information needed to be successful in this course. The quizzes require you to use a laptop or other device and are in the Canvas course site, are timed, and are directly related to each week's required readings and online presentations. The quiz will open once class begins and close exactly 4 minutes later. Students must be in class to take the quiz. Students who attempt the quiz outside of class will receive a zero for the quiz, and be reported to UF's Dean of Students Office. In total, students will complete 12 quizzes (worth 2 points each), however the lowest two grades will be automatically dropped. All quizzes require the Lockdown browser feature on Canvas.

Class Assignments/Activities – 20% of Final Grade

For each class session, students will participate in either an individual or small group activity (e.g., case study, research problem, or worksheet). Students attending class will upload the products of these activities to Canvas. All activities are worth 2 points each and must be uploaded at the end of class. In total, students will complete 12 class assignments/activities, however the lowest two grades will be automatically dropped. Note: You must be in class to be eligible to upload your assignment product. Students who were not in class but upload an assignment product will receive a zero for the assignment, and be reported to UF's Dean of Students Office. Late submissions will not be accepted without prior approval of the instructor.

Research Proposal Outline (Due 4/10/19) – 10% of Final Grade

You will form into groups of 4 or 5 to complete a research proposal outline over the course of the semester and submit it as a group. A detailed rubric will be provided on the Canvas course site

with explicit expectations for each section. The Research Proposal Outline will include the following sections: An Introduction, a Statement of the Problem, a Purpose of the Study, a Significance Statement, a Research Question, a Methods Section which will include a null hypothesis, a Proposed Analysis, References Page, and be written in APA style. The document should be single spaced, have 1-inch margins, and use 12 point font. The final research proposal outline should be no more than 2 pages, excluding the References Page. Further details of this assignment, along with a rubric, will be available on the Canvas course site.

Grading

Point Distribution:

Exams – Total 50 points (Exam 1 = 25 points; Exam 2 = 25 points)

Quizzes – 20 points

Class Assignments / Activities – 20 points

Research Proposal Outline – 10 points

Grading Scale: The final grade will be computed on the basis of the following assessments:

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

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	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

Policy Related to Late Work

Late work will not be accepted without an approved arrangement with the course Instructor. Failure to do this may result in a zero grade for that assignment.

Policy Related to Class Attendance

- Class attendance is critical to learning the complex content of this course. Although I will not be taking attendance during this course, there will be quizzes and graded assignments that occur during class times. If you encounter extenuating circumstances such as illness or other excused events, please follow-up with the instructor in a timely manner to make arrangements to complete an alternative assignment or quiz.
- 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>

Expectations Regarding Course Behavior

To maximize the use of class time, you are expected to:

1. Look at Canvas for notes and announcements prior to **each** class

2. Complete assigned readings and view online material prior to class and come prepared for discussion
3. The use of computers and other electronic devices in class is limited to class related activities

Communication Guidelines

Please email the instructor directly (email address above) rather than using the messaging tool in Canvas. For digital communication expectations see: *Netiquette Guidelines*: <http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

Academic Integrity: Each student is bound by the academic honesty guidelines of the University that state: "The students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code." And, each student, upon submission of an assignment, implies the pledge:

"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.

SUPPORT SERVICES

Accommodations for Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. The College is committed to providing 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 the 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: <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 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>

BUT – 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.

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Course Schedule

Week	Topic	Required Reading and Video Content	Due Dates
1	Welcome, Syllabus, Canvas	Syllabus	
2	Ethical Decisions & Scientific Methods	Guiding Principles for Ethical Research (PDF) Milgram Video Scientific Methods Video	
3	Forming Questions & Foundational Approaches	Demystifying Ontology and Epistemology in research methods Research Questions (video)	
4	Aligning Research Strategies with Problems, Purposes, and Significance	Creswell: The Selection of a Research Approach Inquiry Types: Causal & Correlational (video) Big Bang MEME THEORY (video)	
5	Constructs	Scott-Sheldon Article Constructs & Variables (video) Operationalizing Constructs (video)	
6	Quantitative Methods	Writing Hypotheses Video Manipulation Video Experimental Video Quasi-Experimental Video Randomization Video Factorial Designs Video Correlational Design Video	
7	Qualitative Methods	Reading and Appraising Qualitative Research Hitler Hates Qualitative Research Video Columbia Drug Study Video Qualitative Methods Video	
8	Sampling	Hennessy article Sampling Concepts Video	Exam 1 HPNP Auditorium (2/26/20) 7PM
9	Interviewing Structured & Qualitative	Structured Interviews Video Interview Skills Video	
10	Self-Completion Questionnaires Asking Questions	Falk, Falk, & Ung - SPQ – Nurse Education Instruments Video Sasquatch video	

11	Structured Observation Focus Groups	<u>A structured observation of the interaction between nurses and patients</u> Focus Group Ex: Video	
12	Quantitative Data Analysis	<u>Read Bolt Site on Types of Data and Variables</u>	
13	Qualitative Analysis	<u>Focus Group Transcript</u> Qualitative Coding Video	Research Proposal Outline Due 4/10/19
14	Research Proposal Workshop		
15	Exam 2 and Reading Days		Exam 2 in HPNP Auditorium (4/22/20) 7PM

Online Faculty Course Evaluation Process

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 feedback in a professional and respectful manner 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/>.

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: www.multicultural.ufl.edu