

College of Public Health & Health Professions, & College of Medicine

PHC7000

Epidemiology Seminar II. Critical Evaluation and Methods in Epidemiology.

Spring 2025

Tuesdays 8:30 – 10:30 am

Conducted In-Person at CTRB 4240C

Delivery Format: Seminar Format and Discussions

Canvas: <https://ufl.instructure.com/courses>

Instructor Name	:	Krishna Vaddiparti
Phone Number	:	352-273-5746
Email Address	:	kvaddiparti@ufl.edu
Office Hours	:	Via zoom - by arrangement
Mailing Address	:	Campus Box 100231
Physical Address	:	2004 Mowry Road, Room 4226 Clinical and Translational Research Building Gainesville, FL 32610-0231
FAX	:	352-273-5365
Web	:	epidemiology.phhp.ufl.edu
Skype id	:	krishna_vaddiparti
Preferred Course Communications	:	Email or Phone

Prerequisites

Epidemiology Methods I and Methods II, or an equivalent, at least one semester of biostatistics, or permission from the instructor.

PURPOSE AND OUTCOME

Course Overview

This course is usually taken in the second year of the epidemiology PhD program curriculum, following the Epidemiology Foundations courses (Epidemiology Methods I and II. It is typically taken after Epidemiology Seminar I, but can be taken out of sequence. The seminar series is designed to introduce students to a range of advanced epidemiologic concepts and research methods, to help PhD students advance their dissertation ideas, and help students obtain skills needed for a PhD in epidemiology. The course is for 2 credits.

Course Objectives and/or Goals

Upon successful completion of the course, students should be able to

- Describe 10 or more conceptual and methodologic issues/techniques in epidemiology, explain the issues/techniques in writing and verbally, and provide examples of how the issues/techniques relate to their own area of interest.
- Give a 20 minute “work in progress” presentation that addresses their PhD dissertation ideas and challenges to success.
- Critique an epidemiologic article.
- Skills in developing questionnaires
- Skills in primary data collection

DESCRIPTION OF COURSE CONTENT

Course Materials

Required: none

Each week there will be one or more required readings that could include information from web-based documents, articles, or book chapters provided by the instructor, other students, or guest lecturers. When possible, the articles for the class will be posted on Canvas.

Recommended for Additional Reading:

Rothman KJ, Greenland S. *Modern Epidemiology (3rd Ed)*. Lipincott-Raven, Philadelphia, 2008.

All readings are subject to change. Readings will be published on the Canvas e-Learning website before the class session when they will be needed. 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>

Guest Lecturers. Guest lecturers will engage students in discussions involving specific epidemiologic methods, skills, and research study design intended for all PhD students in epidemiology. Students are encouraged to interact with the guest lecturers and come prepared to the class.

Homework and Class Participation: Students are required to read the assigned readings prior to class. For homework each week, students will be assigned to read up to 3 documents, and will be required to answer specific homework questions that are assigned about the documents. Students are encouraged to use examples from their own research or research interests when possible. Homework responses should not be more than one page long. All articles will be discussed in class, and students will be asked to share their examples.

Work in Progress Presentation.

During the semester, students will be responsible for presenting a Work in Progress to the class. The work-in-progress (WIP) is a formal, 30-minute talk regarding the current status of dissertation project ideas. The talk may focus on 1-2 current issues that a student needs to resolve in order to move forward. Students may choose to focus on a specific project idea that is well thought out, or discuss two or more approaches that they are considering. Each talk should include approximately 8 minutes of background information, including a review of the 2-3 most relevant previous publications on the topic, and a slide that outlines "what is not known" in their area of interest. Next the talk should identify one or more specific research questions that might contribute towards a dissertation. For each question, present a brief study design approach, including the main outcome and predictor variables and how they could be measured. Include at least one slide titled "feasibility" that lists the pros and cons of the approach(es) in terms of feasibility. A grading rubric will be provided to students.

Students should schedule a meeting with the course instructor to review an outline of their proposed talk at least 2 weeks before their talk is scheduled. Students are strongly encouraged to include their research mentors in the planning of this talk, and they are welcome to invite members of their mentoring and advising team to this talk. Students should expect to receive constructive feedback on their presentations.

Journal Article review and critique. Students will receive a journal article to review and they will have one week to prepare a critique of the paper and turn in their critique.

Topical Outline/Course Schedule

Week	Date	Topics	Instructor	Assignment
Week 1	January 14	Introduction, course goals and objectives	Dr. Vaddiparti	
Week 2	January 21	Causation	TBD	Assignment 1 due
Week 3	January 28	P-values and common misconceptions	Dr. Vaddiparti	Assignment 2 due
Week 4	February 04	Path analyses	Dr. Vaddiparti	Assignment 3 due
Week 5	February 11	Cross cultural epidemiology	Dr. Vaddiparti	Assignment 4 due
Week 6	February 18	Developing a Questionnaire 1	Dr. Vaddiparti	
Week 7	February 25	Critical issues in primary data collection 1	Dr. Vaddiparti	Assignment 5 due
Week 8	March 04	Critical issues in primary data collection 2	TBD	Assignment 6 due
Week 9	March 11	Design issues in psychopharmacoeidemiology	TBD	Assignment 7 due
Week 10	March 18	Spring Break		
Week 11	March 25	Journal Critique	Dr. Vaddiparti	Journal critique due
Week 12	April 01	Evaluation of programs	TBD	Assignment 8 due
Week 13	April 08	Developing a Questionnaire 2	Dr. Vaddiparti	Assignment 9 and 10 due
Week 14	April 15	Work in Progress -WIP Presentations by students	Dr. Vaddiparti	Assignment 11 due
Week 15	April 22	Work in Progress -WIP Presentations by students	Dr. Vaddiparti	
		Course discussion		

ACADEMIC REQUIREMENTS AND GRADING

Assignments

Assignment	Requirement	% of Final Grade
1.	Course participation and attendance – 50 points	25%
2.	Homework assignments – each worth 9 points*. Total 100 points	50%
3.	Work in Progress presentation – 40 points	20%
4.	Journal article critique – 10 points	5%

* Assignment 10 is worth 10 points

Course participation and attendance – Students are expected to come prepared with the reading material and participate in class discussions. Attendance is must. Missing more than one class will negatively impact the grade. I will make a note of attendance and participation in each class. Students missing classes without documented reason will lose 3.5 points per class. Similarly, for class participation students will earn 3.5 points for participation per class.

Homework assignments – Homework assignments are due on the day mentioned. Homework assignments are to be submitted through canvas. Points 5 will be deducted for each homework if

submitted past due date (24 hours late). 0 points will be awarded for homework that is submitted past 24 hours due date.

Work in Progress presentation – meet with the instructor ahead of time to discuss the WIP.

Journal critique – critique must be one page long. Single line spaced. Font no less than 11. Assume that you are the peer reviewer of the article and prepare your review as you would respond to the editor. Use of epidemiological terms and concepts are important to justify your arguments in the critique. Be prepared to discuss the review in class.

Point system used.

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 to grade point conversions are fixed by UF and cannot be changed.

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

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>

Policy Related to Make up Exams or Other Work

Assignments are due by midnight on the date specified. Requests for extension should be made before the close of the assignment unless an emergency makes that impossible. Requests due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem.

Policy Related to Required Class Attendance

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>

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

On Campus Face-to-Face

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

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>), please use the UF Health screening system

(<https://coronavirus.ufhealth.org/screen-test-protect/covid-19-exposure-and-symptoms-who-do-i-call-if/>) and follow the instructions on whether you are able to attend class.

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work (<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>)

Online Participation

This course is solely conducted in-person. However, if students are unwell and cannot join the class in-person, they can request to attend the class virtually until they are ready to join in-person. The following are the expectations from students when participating in class virtually - Professional and respectful behavior is expected of all students participating in this online course. Please be aware that all assignments and homework are due on the specified date and time. Late submissions are almost universally not accepted. **High speed internet and a web cam are essential for this online course and ensuring internet connectivity and bandwidth is your responsibility.** Late submissions and inability to participate in discussion boards or inability to take exams due to poor internet connectivity is not accepted. Therefore, please refrain from waiting until the due date to submit your assignments or taking exams as it will be difficult for us to accommodate your requests because of technical problems from your side.

Zoom Professional Behavior: Remote Learning Expectations and Requirements

As graduate students, you are expected to:

- Dress appropriately for attending class on Zoom- just like you would be attending in person. Your upper body is viewable through the webcam.
- Arrive on time for sessions.
- Mute your microphone on entry to Zoom and when not talking. Frame the camera on your face and ensure there is sufficient lighting.
- Keep your webcam on throughout the class- this will ensure that you are prepared when we use breakout rooms.
- Engage actively in class. Active participation includes sharing verbally, typing in the chat box, or sharing your screen with example work or content.
- Attend class in a conducive learning environment. The preferable environment is sitting in a chair at a desk or table. If this is not possible, you may sit on a sofa or bed, but you should not be under covers or lying down unless there are extenuating circumstances (i.e., medical). Maintain a non-distracting background.
- Minimize and prevent distractions by dedicating time and attention to the class and the online learning activities (i.e., do not allow “visitors” in your classroom environment, such as youth or pets, do not attend class in a vehicle; do not multi-task with household chores or by driving during class time).
- Maintain access to notes for reference during the virtual class time.
- Use electronic devices only for classroom activities. Refrain from additional emailing, texting, or browsing the internet during virtual class time.
- Direct conversations to class content and activities while in breakout sessions. The instructor will periodically join your breakout room. Feel free to request assistance at any point.

Citations and Plagiarism

The two key purposes of citation are to: 1) give appropriate credit to the authors of information, research findings, and/or ideas (and avoid plagiarism), and 2) facilitate access by your readers to the sources you use in your research.

Quotations: When directly quoting an outside source, the borrowed text, regardless of the amount, must be surrounded by quotation marks or block quoted. Quoted text over two lines in length should be single-spaced and indented beyond the normal margins. Every quote must include a source—the author, title, volume, page numbers, etc.—whether an internal reference, footnote, or endnote is used in conjunction with a bibliography page.

Paraphrasing or Citing an Idea: When summarizing an outside source in your own words or citing another person's ideas, quotation marks are not necessary, but the source must be included. This includes, but is not confined to, personal communications from other students, faculty members, experts in the field, summarized ideas from published or unpublished resource, and primary methods derived from published or unpublished sources. Use the general concept of “when in doubt – cite.”

Generally speaking, the three keys of acceptable citation practice are: 1) thoroughness, 2) accuracy, and 3) consistency. In other words, be sure to fully cite all sources used (thoroughness), be accurate in the citation information provided, and be consistent in the citation style you adopt. All references should include the following elements: 1) last names along with first and middle initials; 2) full title of reference; 3) name of journal or book; 4) publication city, publisher, volume, and date; and 5) page numbers referenced. When citing information from the Internet, include the WWW address at the end, with the “access date” (i.e., when you obtained the information), just as you would list the document number and date for all public documents. When citing ideas or words from an individual that are not published, you can write “personal communication” along with the person's name and date of communication.

Class Demeanor Expected by the Professor

Students are expected to treat other students and the professor respectfully. This means listening and interacting with peers and the professor. Students using electronic devices for any purpose other than note taking or completing group assignments will be asked to put them away.

Communication Guidelines

All email messages, threaded discussions, chats, and online collaborations should be conducted meeting professional standards. Please be as specific as possible in your comments. (An Odds Ratio of 10.6 vs. large, for instance). Do not use ad hominem arguments. Be kind and responsible. Refer to these Netiquette Guidelines for further guidance on appropriate comments:
<http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

Academic Integrity

Plagiarism is a serious violation of the academic honesty policy of the College. If a student plagiarizes others' material or ideas, UF Policies on Honesty and honor code violations, noted above, will be followed.

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 <https://evaluations.ufl.edu>. 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

<https://evaluations.ufl.edu/results/>. I put these comments to use to improve the course for your fellow students, so please help me know how to do so. In addition, please note that these comments and scores have a direct impact on faculty tenure and promotion.

INCLUSIVE LEARNING ENVIRONMENT

Public health and health professions are based on 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.

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 <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 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 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 available 24/7 from these US resources. Use the Country Code 01:
Alachua County Crisis Line 1-352-264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>
- National Suicide Hotline 1-800-SUICIDE (1-800-784-2433)
- National Suicide Prevention Lifeline 1-800-273-TALK (1-800-273-8255)
- Rumor Control 1-352-264-6557

Do not wait until you reach a crisis to 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.
