

University of Florida
College of Public Health & Health Professions Syllabus
PHC 6937: Hospital Epidemiology (3 credit hours)
Semester: Spring 2023
Mondays 8:30 am to 10:25 am
Delivery Format: On-Campus; HPNP G-210
Course Website: E-learning in Canvas

Instructor Name: Cindy Prins, PhD, MPH, CIC, CPH
Room Number: CTRB 4237
Phone Number: 352-294-8576
Email Address: capfive@ufl.edu
Office Hours: Tuesdays 11 am to 12 pm, or by appointment
Preferred Course Communications (e.g. email, office phone): Email through UF email please

Prerequisites: PHC 6001–Principles of Epidemiology in Public Health

PURPOSE AND OUTCOME

Course Overview

This course will discuss major topics in Hospital Epidemiology related to research on the control and prevention of healthcare-associated infections. Topics will be presented through online lectures and in-class discussions of journal articles and CDC Guidelines and through experiential learning, including a visit to UF Health Shands and attendance at the Infectious Disease Case Conferences.

Relation to Program Outcomes

- Design epidemiologic research studies and analyze data to answer health-related research questions that are currently relevant to the population (PhD in Epidemiology Student Learning Outcome 1)
- Illustrate a thorough understanding of epidemiology concepts (PhD in Epidemiology Student Learning Outcome 3)
- Apply surveillance, assessment, evaluation, and other foundational epidemiological research designs to all areas of interest (MS in Epidemiology Student Learning Outcome 1)
- Apply epidemiological methods to the breadth of settings and situations in public health practice (CEPH MPH Foundational Competency 1)
- Select quantitative and qualitative data collection methods appropriate for a given public health context (CEPH MPH Foundational Competency 2)
- Interpret results of data analysis for public health research, policy or practice (CEPH MPH Foundational Competency 4)
- Assess potential confounders in epidemiology studies (MPH in Epidemiology concentration Competency 1)
- Apply criteria for identification, prevention and control of infectious agents (MPH in Epidemiology concentration Competency 4)

Course Objectives

Upon successful completion of the course, students will be able to:

- Describe different sources of infection in healthcare settings
- Discuss the major epidemiology study designs used in hospital epidemiology research
- Critically assess hospital epidemiology literature
- Write a scoping review on a hospital epidemiology topic

Introduction to Blended Learning

This course is taught in a blended learning format. Each week, one hour of content will be delivered online and two hours will be delivered in class.

What is blended learning and why is it important?

A Blended Learning class uses a mixture of technology and face-to-face instruction to help you maximize your learning. Knowledge content that, as the instructor, I would have traditionally presented during a live class lecture is instead provided online before the live class takes place. This lets me focus my face-to-face teaching on course activities designed to help you strengthen higher order thinking skills such as critical thinking, problem solving, and collaboration. Competency in these skills is critical for today's health professional.

What is expected of you?

You are expected to actively engage in the course throughout the semester. You must come to class prepared by completing all out-of-class assignments. This preparation gives you the knowledge or practice needed to engage in higher levels of learning during the live class sessions. If you are not prepared for the face-to-face sessions, you may struggle to keep pace with the activities occurring in the live sessions, and it is unlikely that you will reach the higher learning goals of the course. Similarly, you are expected to actively participate in the live class. Your participation fosters a rich course experience for you and your peers that facilitates overall mastery of the course objectives.

Topical Outline/Course Schedule

Date	Topic	Assignments
Week 1 – January 9	Introduction to Healthcare Epidemiology	-None
Week 2 – January 16	No Class - Dr. Martin Luther King Holiday	-Work on Scoping Review topic
Week 3 – January 23	Searching the literature - Guest lecture by Public Health librarians Mary Edwards and Courtney Pyche	-Scoping review topic due 01/20/23
Week 4 – January 30	Surveillance and Reporting of Healthcare-Associated Infections and Adverse Events	-Article Review (all)
Week 5 – February 6	Research Methods in Hospital Epidemiology - Observational Studies	-Article Review (assigned)
Week 6 – February 13	Research Methods in Hospital Epidemiology - Randomized Trials and Quasi Experimental Designs	-Article review (assigned) -Scoping review reference list due 2/13/23
Week 7 – February 20	Central Line-Associated Bloodstream Infections; Urinary Tract Infections	-Article review (assigned)
Week 8 – February 27	Surgical Site Infections; Ventilator-Associated Events	-Article review (assigned)
Week 9 – March 6	Multi-Drug Resistant Organisms (VRE, MRSA, C. difficile and resistant Gram-negatives)	-Article review (assigned)
Week 10 – March 13	Spring Break – No Class	
Week 11 – March 20	Isolation Precautions; Hand Hygiene	-Article review (assigned)
Week 12 – March 27	Cleaning, Disinfection, and Sterilization	-Article review (assigned) -Scoping review 1 st draft due 3/27/23
Week 13 – April 3	-Safety Products -PPE	-Article review (assigned)
Week 14 – April 10	-Epidemiological Investigations in Healthcare Settings	-Article review (assigned)
Week 15 – April 17	-Environmental Aspects of Hospital Epidemiology, including construction	-Article review (assigned)
Week 16 – April 24	Book Discussion	-Scoping review final version due 4/26/23

Course Materials and Technology

There is no required text book for this course. Reading assignments will be posted on the course website at least one week in advance of class.

There is one required non-fiction book - The Checklist Manifesto: How to Get Things Right, by Atul Gawande; Publisher: Picador; ISBN-10: 0312430000. The book is available in multiple formats, including paperback, e-book, and audio book. Students should select the format that they prefer.

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

- helpdesk@ufl.edu
- (352) 392-HELP - select option 2
- <https://helpdesk.ufl.edu/>

Additional Academic Resources

[Career Connections Center](#): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

[Library Support](#): Various ways to receive assistance with respect to using the libraries or finding resources.

[Teaching Center](#): Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

[Writing Studio](#): 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage for more information.](#)

On-Line Students Complaints: [View the Distance Learning Student Complaint Process.](#)

ACADEMIC REQUIREMENTS AND GRADING

Requirements

The class will meet in-person for two hours each week. Class activities may include student-led discussions of the literature and case studies in hospital epidemiology. Students should come to class prepared for that day's topic and activity. Preparation for class includes completing all assigned readings and assignments, and watching video presentations before class. In addition, students will complete a semester project which consists of writing a scoping review. All due dates and requirements will be posted on the course site in Canvas.

Requirement	% of final grade	Due Date
Lead Journal Article Discussions	15%	Weekly
Participate in Journal Article Discussions	5%	Weekly
Journal Article Review Assignments	20%	Weekly
Scoping Review Topic	5%	01/20/23
Scoping Review Reference List	5%	02/13/23
Scoping review 1 st draft	20%	03/27/23

Book Discussion	5%	04/24/23
Scoping Review Final Version	25%	04/26/23

Lead Journal Article Discussions (Individual due dates will be assigned in week 1) – As part of the in-person class meetings there will be a student-led discussion of the literature, based on the topic presented in the online portion of the course that week. Each student will present at least one article over the course of the semester for the student-led discussion portion. Topics and dates will be assigned during the first class and the students will work with the instructor to identify appropriate articles to present. Discussion leaders will develop 8 to 10 discussion questions, due the day before class, which will be posed to students in class as a way to facilitate conversation about the article. In class, discussion leaders will give a short presentation on the context of the article within the field of Hospital Epidemiology, including why they chose the article and other important research studies related to the article, and on the goals of the article itself. Each journal article discussion is expected to last approximately one class period and all students are expected to contribute to the discussions. The discussion leader will be graded on their level of preparation and ability to engage the class in conversation (see *Rubric for Discussion Leader* below). Discussion questions will be submitted as word documents in the Assignments section of the Canvas course site.

Rubric for Discussion Leader (20 pts)	Discussion leader preparation and evaluation elements	Weight (%)	Student Score
Knowledge and explanation of subject matter:	<ul style="list-style-type: none"> • Conveys <i>big picture</i> understanding • Presents the essential information • Is able to provide an accurate description of and respond to questions about facts, procedures, hypotheses, etc. 	15% of the course grade	N/A
Introduction	<ul style="list-style-type: none"> • Has reviewed the authors of the paper and their conflicts of interest, who funded the study • Leads a discussion about the central question addressed by the paper, <i>and</i> its significance • Can provide sufficient background needed to understand the results 	5	
Methods	<ul style="list-style-type: none"> • Gives information necessary to understand results • Can discuss experimental flow/approach if appropriate 	5	
Summary/Conclusion s/Q&A	<ul style="list-style-type: none"> • Guides students to reiterate key findings • Can discuss key findings in terms of relevance to past literature 	5	
Overall organization of discussion	<ul style="list-style-type: none"> • Introduces content/guides discussion in logical, easy-to-follow sequence • Keeps the discussion flowing by posing questions to students 	5	
Total		20	

Participate in Journal Article Discussions Students are expected to attend all classes in person and participate in journal article discussions. This will require careful reading of the article in advance of the class period. The *Rubric for Participation* for grading the journal article discussion participation is below.

Rubric for Participation (20 pts)	Responsibilities/tasks to complete	Weight (%)
-----------------------------------	------------------------------------	------------

Participation in discussions and activities	Contribute to class discussions and activities as detailed below	5% of the whole grade
	• Attends class consistently and on time	10
	• Provides substantive comments that further the class discussion of the article	10
	TOTAL	20

Homework (Due most weeks of the course) – All students will be expected to complete the assigned reading before class and to prepare a one- to two-page summary of the article, due the day before class. The article summary should include:

- a background section that explains the research question or topic
- a summary of the articles findings
- an opinion section that discusses the strengths and weaknesses of the article

Article summaries will be submitted as word documents in the Assignments section of the Canvas course site.

Book Discussion (04/26/23 in class) – We will read Atul Gawande’s book “The Checklist Manifesto” and carry out a discussion of the book in class. Your participation in the discussion is worth 5% of your grade. This will be a student-led discussion but the instructor may pose questions to individual students to assess their preparedness for the discussion. A rubric will be provided to guide the grading of the discussion.

Scoping Review (Multiple due dates) - Each student will select a topic in hospital epidemiology on which to write a scoping review. The review should not just be a summary of the literature on the topic but should also include a critical assessment of the literature. Students will not be required submit their articles to a journal as part of the assignment grade, but they will be encouraged to do so. The scoping review will be submitted as a word document in the Assignments section of the Canvas course site. The breakdown of the scoping review grading can be viewed in the Requirements section. Full details of the project will be discussed in class and a rubric will be provided in the Canvas site. All portions of the scoping review will be submitted as Word documents in Canvas. An example of a scoping review that was written for class and was later published can be found here: <https://pubmed.ncbi.nlm.nih.gov/35649520/>

Grading

The grading scale for this course is as follows:

- 93% - 100% = A (4.00)
- 90% - 92% = A- (3.67)
- 87% - 89% = B+ (3.33)
- 83% - 86% = B (3.00)
- 80% - 82% = B- (2.67)
- 77% - 79% = C+ (2.33)
- 73% - 76% = C (2.00)
- 70% - 72% = C- (1.67)
- 67% - 69% = D+ (1.33)
- 63% - 66% = D (1.00)
- 60% - 62% = D- (0.67)
- Below 60% = E (0.00)

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0 based on 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if based on credits in courses numbered 5000 or higher that have been earned with a B+ or higher.

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

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Communication Guidelines

The best way to communicate with me is by email, either through the Canvas site or through the UF email system. Please give me up to 24 hours during the work week to respond to your email, although I usually reply much sooner. I sometimes check email on the weekend but I do not guarantee that I'll respond during that time. Email correspondence should follow the etiquette of business emails (see UF's [Netiquette Guide for Online Courses](#)). If you would like to meet in person outside of office hours then please make an appointment to see me; this ensures that we will have an uninterrupted time to meet.

Policy Related to Make up Exams or Other Work

Opportunities to make up assignments will only be given in the event of illness that is documented by a physician or at the discretion of the instructor. If you are unable to submit an assignment on time, it is your responsibility to contact the instructor by email as soon as possible to request an alternate arrangement and due date. If an alternate arrangement is not requested or offered then no credit will be given for the assignment. Any approved make-up assignments should be submitted to the instructor through UF email. Please note: Any requests for make-ups due to technical issues MUST be accompanied by the UF Computing help desk (<http://helpdesk.ufl.edu/>) correspondence. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Class Attendance

Please note all faculty are bound by the UF policy for excused absences. Excused absences must be consistent with university policies in the Graduate Catalog

(<https://catalog.ufl.edu/graduate/regulations/#text>). Additional information can be found here:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

If you need to miss class then you should contact the instructor as soon as possible to cite the reason for the absence. Each unexcused absence will result in a deduction of 1% per class period from the overall course average.

Recording within the Course

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

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. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy in its entirety. Link to full policy: <http://facstaff.php.ufl.edu/services/resourceguide/getstarted.htm>

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/>.

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 and in person assistance is available.
- **U 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>
- **University Police Department:** [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website.](#)

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.

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
