University of Florida College of Public Health & Health Professions Syllabus

PHC 6001: Principles of Epidemiology in Public Health (3 credit hours)

Semester: Spring 2022 Delivery Format: Online, asynchronous Course Website: E-Learning in Canvas

Instructor Name: Cindy Prins, PhD, MPH, CIC, CPH

Room Number: HPNP 4108 Phone Number: 352-294-8576 Email Address: capfive@ufl.edu Office Hours: By Appointment

Preferred Course Communications: Email (capfive@ufl.edu)

Teaching Assistants:

Name: Mingjing Chen Name: Jackie Pollack
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Office Hours: TBD Office Hours: TBD

Office hours are held on Zoom

Prerequisites

Graduate status or approval of instructor

PURPOSE AND OUTCOME

Course Overview

This course is an introduction to epidemiology for students studying any aspect of the health sciences. The principles and methods of epidemiology investigation, both of infectious and non-infectious diseases are included. The purpose of this course is to explain the place of epidemiology in the general health thinking and to communicate some understanding of the basic principles of epidemiology. Examples of the use of the principles of epidemiology will be presented so that the student will have sufficient understanding to apply such principles in future health work. It is hoped that the course will allow the student to critically read and evaluate their own public health work using epidemiological principles. This course is not intended to present the epidemiological aspects of the major diseases.

CEPH Foundational Knowledge Covered in this Course

The Council on Education for Public Health (CEPH) is the accrediting body for the College of Public Health & Health Professions. CEPH has outlined the Foundational Public Health Knowledge that all graduates of the college must be grounded in. As a core course for public health graduate programs in the college, this course covers the following CEPH Foundational Knowledge Content:

- 1. Explain public health history, philosophy and values
- 2. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
- 3. List major causes and trends of morbidity and mortality in the U.S. or other community relevant to the school or program
- 4. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
- 5. Explain the critical importance of evidence in advancing public health knowledge
- 6. Explain effects of environmental factors on a population's health
- 7. Explain biological and genetic factors that affect a population's health
- 8. Explain behavioral and psychological factors that affect a population's health

9. Explain how globalization affects global burdens of disease

Course Objectives and/or Goals

- 1. Apply epidemiological methods to the breadth of settings and situations in public health practice
- 2. Select quantitative and qualitative data collection methods appropriate for a given public health context
- 3. Interpret results of data analysis for public health research, policy or practice
- 4. Evaluate the strengths and limitations of epidemiologic reports
- 5. Explain the importance of epidemiology for informing scientific, ethical, economic, and political discussion of health issues
- 6. Identify basic ethical and legal principles pertaining to the collection, maintenance, use, and dissemination of epidemiologic data
- 7. Communicate audience-appropriate public health content, both in writing and through oral presentation

Instructional Methods

- 1. Readings. Reading from the textbook is assigned for each module. If you wish to work ahead, the textbook readings for the entire semester are included in the course schedule. Additional reading will include supplemental materials posted to Canvas. Students are responsible for material included in readings.
- 2. Lectures (including *audio* and slides). Lecture material is intended to complement concepts presented in the course readings. Students are responsible for the material presented during course lectures. Please note that viewing the slides without listening to the lectures is not sufficient to succeed in this course.
- 3. Discussions. Discussion are utilized to reinforce readings and lectures, providing students the opportunity to explore and apply concepts in a real-world context. There will be weeks during the semester during which you will be required to engage in discussions. The expectation is that you participate throughout the week; you may not wait until the day before or the due date to initiate work. This provides your peers ample opportunity to respond in a timely manner.
- 4. Assessment. A variety of methods will be used to assess understanding of the material including post-module quizzes and exercises associated with most modules, and examinations.

What is expected of you?

You are expected to *actively* engage in the course throughout the semester, including active participation in course activities such as discussions. Your participation fosters a rich course experience for you and your peers that facilitates overall mastery of the course objectives.

DESCRIPTION OF COURSE CONTENT

Course Schedule

The course is a synchronous, on-line course, i.e. course content will be released throughout the course according to the schedule; content will *not* be released early. You can view the voice-over-slides presentations at your convenience, and there are no scheduled events to attend each week.

Content is organized into modules. Modules will be released on Wednesdays, generally by noon, and completed the following Tuesday. Assignments are due on Tuesdays at 11:59 PM EDT/EST, and examinations will generally be open Saturday – Tuesday during examination weeks, due Tuesdays at 11:59 PM EDT/EST (EST switches to EDT 14MAR2021).

This schedule is by design to afford students the flexibility to complete coursework and examinations on weekdays or weekends, with each module including days during two calendar weeks and business days following the weekend during which to ask questions.

Course Materials and Technology

Required Text: Essentials of Epidemiology in Public Health, 4th Edition by Ann Aschengrau, ScD, and George R. Seage III, DSc. Copyright 2020, ISBN: 978-443-5000

Completion of assigned readings from this text is mandatory. Lectures will augment and reinforce important aspects of these reading materials. However, students are still responsible for any content from the assigned readings and exercises that is NOT covered in a lecture presentation. Examinations may include any course content covered in assigned readings, exercises, and/or lectures, unless otherwise specified.

The course website is located in Canvas. On the course site, the week's modules will be published each Tuesday (generally by noon). The module will consist of lecture slides and audio. In addition, there may be supplemental reading such as a manuscript posted to the course website as well as links to assignments and additional resources. The announcement and conference features will also be utilized. Students must have a working webcam and microphone to participate in this course. Consult the course website in the Getting Started section for other computing needs and specifications.

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

- (352) 392-HELP select option 2
- <u>helpdesk@ufl.edu</u> (email)
- Helpdesk.ufl.edu (website)

Course Requirements/Evaluation/Grading

Syllabus Quiz - 5% of the course grade

11 Post-Module Quizzes – 15% of the course grade (equal weighting for each quiz)

You will complete 11 post-module quizzes during the semester. These are open-book, untimed quizzes that are intended to help reinforce the lecture material in each module and help you judge your understanding of the course content prior to applying that content in class. You should re-take the quiz until you have achieved a score of 100%. One post-module quiz grade will be dropped from your final grade and the other 10 will count toward the final grade.

2 Exams – 40% of the course grade (equal weighting for each exam)

The format for these exams varies, including multiple choice questions, matching questions, short answer questions, and quantitative problems. You will have 2 hours minutes to complete each exam, but should plan for longer to allow time to log in to the exam and proctoring service. **Exams are closed book, closed note, and are not cumulative.** You may use a non-programmable calculator during the exam.

9 Assignments - 30% of the course grade (equal weighting for each assignment)

There are 9 assignments that will be completed as homework; *your highest 8 scores will count toward your grade and the lowest score will be dropped*. Assignments are weighted equally to each other. A grading rubric will be posted for each assignment.

Epidemiology in the News – 10% of the course grade

You will create a discussion board posting that describes a current topic in epidemiology (other than COVID-19) that has been in the news recently. This might be an outbreak that has occurred, an important study or clinical trial result, or a policy or legal issue related to epidemiology studies. You will only have to create a primary post one time during the semester, but everyone will need to write a substantive response to at least five other classmates' postings within one week of the posting on the discussion board. A schedule for posting and responding will be available in the Canvas course site during the second week of classes.

A substantive response goes beyond acknowledgement of the original posting and deepens the conversation. Here are my expectations of what constitutes a substantive response

https://www.mssu.edu/academics/distance-learning/pdfs/Effectively%20Responding%20to%20a%20Peer.pdf

Policy on Late/Missed Assignments

Students are expected to submit assignments, discussion board postings, quizzes, and exams <u>before the due</u> <u>date posted in the Canvas site.</u> Students are responsible for confirming that they are uploading the correct file (as applicable). If you encounter technical difficulties with an assignment/quiz/exam then you must contact the UF Help Desk and report the issue. Technical difficulties that were not reported to the Help Desk will not be accepted as excuses for late submissions. Late submissions will not be accepted. The lowest assignment grade and the lowest post-module quiz grade will be automatically dropped to account for emergent and other unforeseen circumstances.

Grading

The course requirements are presented in percentages above and add up to 100% of the course grade. Final grades follow the scale in this table:

Percent of Course Points (out of 100%)	Letter Grade	Grade Point Equivalent
93% - 100%	Α	4.00
90% - 92.9%	A-	3.67
87% - 89.9%	B+	3.33
83% - 86.9%	В	3.00
80% - 82.9%	B-	2.67
77% - 79.9%	C+	2.33
73% - 76.9%	С	2.00
70% - 72.9%	C-	1.67
67% - 69.9%	D+	1.33
63% - 66.9%	D	1.00
60% - 62.9%	D-	0.67
Below 60%	Е	0.00

Point system used (i.e., how do course points translate into letter grades).

Percentage or points												
earned in	93%-	90%-	87%-	83%-	80%-	77%-	73%-	70%-	67%-	63%-	60%-	Below
class	100%	92%	89%	86%	82%	79%	76%	72%	69%	66%	62%	60%
Letter Grade equivalent	А	A-	B+	В	B-	C+	С	C-	D+	D	D-	E

Letter Grade	Α	Α-	B+	В	B-	C+	С	C-	D+	D	D-	Е	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

Topical Outline

Dates	Topic	Assignment							
Module 1 Open 1/5/22 – 1/10/22	The Approach and Evolution of Epidemiology	Read the course syllabus and complete the syllabus quiz by 1/10/22 Please introduce yourself to your instructors and peers on our course website							
Module 2 Open 1/11/22 – 1/17/22	Measures of Disease Frequency	Post-module quiz Module 2 Assignment							
Module 3 Open 1/18/22 – 1/24/22	Comparing Disease Frequencies	Post-module quiz Module 3 Assignment							
Module 4 Open 1/25/22 – 1/31/22	Sources of Public Health Data, Disease Transmission, Descriptive Epi	Post-module quiz No assignment this week							
Module 5 Open 2/1/22 – 2/7/22	Screening	Post-module quiz Module 5 Assignment							
Module 6 Opens 2/8/22 to 2/14/22	Ethics	Post-module quiz Module 6 Assignment							
	2/15/22 to 2/21/22 - No module								
	Exam 1 (Covers modules 1 through 6) Open 2/19 - 2/22								
Module 7 Opens 3/22/22	Overview of Epi Study Designs, Experimental Studies	Post-module quiz Module 7 Assignment							
Module 8 Opens 3/1/22	Cohort Studies	Post-module quiz Module 8 Assignment							
	Spring Break – No class								
Module 9 Opens 3/15	Case Control Studies	Post-module quiz No assignment this week							
Module 10 Opens 3/22	-Bias -Confounding	Post-module quiz Module 10 Assignment							
Module 11 Opens 3/29	Causation	Post-module quiz Module 11 Assignment							
Module 12 Opens 4/5	Critical Reading of Epi Papers	Post-module quiz Module 12 Assignment							
	4/12 to 4/18 - No module								
	Exam 2 (Covers modules 6 through 11) Open 4/16 – 4/19								

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Communication Guidelines

The best way to communicate with me is by email. 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. Please copy both of our course teaching assistant on your email to increase the response time.

Please address me as Dr. Prins or Professor Prins, and let me know how you prefer to be addressed, including your preferred pronouns (mine are she/her). Email correspondence should follow the etiquette of business emails.

PHHP 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.

Academic Integrity

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://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Turnitin

Academic integrity is a serious issue that has been a growing problem at Universities. I have a zero tolerance policy for breaches of academic integrity, including plagiarism and cheating. There are multiple video resources posted on our Canvas site that discuss plagiarism and how to properly quote and cite other people's work. With each assignment and exam you complete you are pledging that you hold yourself and your classmates to the highest standards of academic integrity.

I use an online tool called Turnitin to check student work for originality; in other words, your work should be in your own words and not copied from any source. Every student needs to watch the videos on plagiarism and on using Turnitin and needs to check their own Turnitin report, made available through the Canvas site automatically when you submit anything though assignments. You should submit assignments early enough to have time before the due date to make revisions to them if your Turnitin report shows areas of high similarity to online resources. Any student caught cheating or plagiarizing will be reported to the Dean of Students Office and will be subject to academic penalties in the course, at minimum.

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/.

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require course accommodations because of a disability, you must register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. 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.
- 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

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.

Incomplete Grades

Per the University Catalog, "An incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which you have completed a major portion of the course with a passing grade, been unable to complete course requirements before the end of the term because of extenuating circumstances, and obtained agreement from the instructor and arranged for resolution of the incomplete grade. Instructors are not required to assign incomplete grades. If make-up work requires classroom or laboratory attendance in a subsequent term, you must not register for the course again. Instead, you should audit the course and pay course fees. If the make-up work does not require classroom or laboratory attendance, you and your instructor should decide on an appropriate plan and deadline for completing the course. When the course is completed, the instructor will initiate the change of grade. These procedures cannot be used to repeat a course for a different grade. An I grade should not be assigned to a student who never attended class; instead, instructors should assign a failing grade."

"A grade of I* or N* is not considered a failing grade for the term in which it is received, and it is not computed in the grade point average. However, if the I* or N* has not been changed by the end of the next term for which you are enrolled and receive grades, it will be counted as a failing grade and used in computation of your grade point average."