



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

Semester: Fall, 2020

Delivery Format: Lectures and synchronous Lab online

Course Website: E-Learning in Canvas

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**Instructor**

Name: Catalina Lopez-Quintero MD, PhD

Zoom: <https://ufl.zoom.us/j/95696459572>

Synchronous session: Tuesdays at 10:40am-12:35pm

Email Address: [catalinalopezqui@ufl.edu](mailto:catalinalopezqui@ufl.edu)

Office Hours: Tuesday - 1 to 2 pm EST

Location: <https://ufl.zoom.us/j/91745931512>

**Teaching Assistants:**

Name: Upuli Dissanayake

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

Office Hours: Wednesday – 2 to 3 pm

Location: <https://ufl.zoom.us/j/98588260904>

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**Preferred course communications:**

**E-mail is the preferred mode of communication.** Use the e-mail function in Canvas, selecting Dr. Lopez-Quintero (and Ms. Dissanayake, if desired) as the recipient(s). Include “PHC 6001:” in the subject line. 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. If you do not receive a response in these stated time frames, re-send the message (with the daily volume of e-mail, messages occasionally get missed). See Communication Guidelines for more information.

Please address me as Dr. Lopez-Quintero or Professor Lopez-Quintero, and let me know how you prefer to be addressed. Email correspondence should follow the etiquette of business emails.

**Prerequisites**

Graduate status or approval of instructor

## PURPOSE AND OUTCOME

### Course Overview

This course is an introduction to epidemiology for students majoring in the health sciences. This course introduces the principles, concepts, and methods of the epidemiologic investigation of health-related events and processes. The purpose of this course is to equip students with a core epidemiologic toolset to explain the place of epidemiology in the general health thinking and to communicate and apply the basic principles of epidemiology. Examples of the use of the principles of epidemiology will be presented so that students 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 his or her own health-related work using epidemiologic principles. This course is not intended to present the epidemiologic aspects of any specific disease or class of diseases.

### Course Objectives and/or Goals

1. Apply the basic terminology and definitions of epidemiology
2. Calculate basic epidemiology measures of frequency and association
3. Identify key sources of data for epidemiologic purposes
4. Draw appropriate inferences from epidemiologic data
5. Evaluate the strengths and limitations of epidemiologic reports
6. Apply basic infectious and chronic disease methods and data
7. Identify common sources of error in epidemiologic research
8. Identify the principles and limitations of public health screening programs
9. Describe a public health problem in terms of magnitude, person, time, and place
10. Explain the importance of epidemiology for informing scientific, ethical, economic, and political discussion of health issues
11. Identify basic ethical and legal principles pertaining to the collection, maintenance, use, and dissemination of epidemiologic data
12. Communicate epidemiologic information to lay and professional audiences

## DESCRIPTION OF COURSE CONTENT

### Course Materials and Technology

Required Text: Essentials of Epidemiology in Public Health, 4th Edition by Ann Aschengrau, ScD, and George Seage III, DSc. Copyright 2020, ISBN: 978-1284128352.

**Completion of assigned readings from this text is mandatory.** Lectures will 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. On the rare occasion when there are discrepancies between the lecture and the textbook, you should rely on the information presented during the lectures.

### ***Online synchronous and asynchronous learning***

The course website is located in Canvas. Our classes will employ a mixture of asynchronous and synchronous instruction to help students maximize their learning. Instructional activities include online video lectures, online quizzes, web assignments, and group discussions and forums. Knowledge content that would have traditionally been presented during a live class lecture is instead provided online before the synchronous class takes place. This allows more time to focus on the higher levels of learning. These rich interactions with the instructor can be used to help students think critically, obtain expertise, and practice critical reasoning.

### **What Does It Mean for Students?**

Students are expected to come to class prepared by completing all out-of-class readings and video lectures. The coursework outside of class typically lays a foundation of knowledge or gives students practice needed to engage in higher levels of learning during the synchronous class sessions. During the synchronous lab session, students practice critical skills used by health professionals – critical thinking, problem solving, collaborating, and/or applying concepts gained from the out-of-class assignments to real-world examples. **If students are not prepared for the synchronous lab sessions, they will likely struggle to reach the higher learning goals of the course.** When students come prepared, they can be active participants throughout the blended learning course experience, which will help them master course material and maintain what they have learned beyond the end of the course.

### ***Computer resources needed***

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:

- [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu)
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

## **ACADEMIC REQUIREMENTS AND GRADING**

### **Course Schedule**

The course is organized in 12 modules, and one module will be covered each week. Weeks for this course are defined as Tuesday through Monday. Assignments, post-module quizzes, and participatory learning forum are due on Monday at 11:59 PM EST, and post-module quizzes will be available Friday–Monday at the end of examination weeks, due Monday at 11:59 PM EST. The course is designed this way to afford students the flexibility to complete coursework and examinations on weekdays or weekends. On the course site, the week’s modules will be published each Tuesday (generally by noon). The announcement and conference features will also be utilized.

## Assignments

### **12 Post-Module Quizzes – 5% of the course grade (equal weighting for each quiz)**

You will complete 12 post-module quizzes during the semester. Individual closed-book quizzes will be conducted using Canvas and Honor lock. These quizzes 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 will have a maximum of three attempts to complete the quiz and your final grade will be the average of all attempts completed. The two lowest grades from post-module quizzes will be dropped from your final grade.

### **12 Participatory Learning Forums (PLF) – 10% of the course grade (equal weighting for each forum)**

You will participate in 12 learning forums for modules 1 to 12 during the semester. As part of this forums and following Bloom's taxonomy (<https://teaching.uncc.edu/services-programs/teaching-guides/course-design/blooms-educational-objectives>) you will formulate a question related to the content of each module, answer the question formulated by other student, and evaluate the answer provided by other student to your own question. Grading for this assignment will be based on the complexity and originality of the questions formulated, the accuracy of the response provided, and the quality of the evaluation given to the student who answered your question (2 points for the question formulated, 2 points for the response provided, and 1 point for the grading to your peer). Questions in the higher domains will receive higher scores. Repeating a question previously formulated in the forum is not allowed. The two lowest grades from the participatory learning forum will be dropped from your final grade.

### **2 Proctored Exams – 50% of the course grade (equal weighting for each exam)**

**Exams are closed book, closed note, and are not cumulative (Midterm Exam – Modules 1 to 5; Final Exam: Modules 6 to 11).** Examinations may include any course content covered in the video lectures, assigned readings, individual and group quizzes, assignments and participatory learning forums. The format for these exams varies, including multiple choice questions, matching questions, and short answer questions. You will have 120 minutes to complete each exam. You will need a non-programmable calculator to complete the exam. Make-up exams will not be given except in extreme circumstances. During examinations, students will be allowed to have a non-programmable, scientific calculator. In addition, students may have blank scratch paper and a pen or pencil during examinations. Read more about the on-line proctoring services below, and refer to the course website for additional resources related to HonorLock.

### **12 Assignments – 20% of the course grade (equal weighting for each assignment)**

There are 12 assignments that will be completed as homework; your highest 10 grades will count toward your grade and the lowest two grades will be dropped. Assignments are weighted equally to each other.

### **10 Group Quizzes – 5% of the course grade (equal weighting for each assessment)**

Ten group open-book, open-note assessment, group quizzes will be completed at every online synchronous session. Grades will be given to only those students participating in the session. Group quizzes are equally weighted to each other. The two lowest grades from the group quizzes will be

dropped from your final grade.

### **Epi in the news – 5% of the course grade**

Your group will prepare a 10 minutes presentation on a current topic in epidemiology that has been in the news recently, and that relates to the material we covered in class within the past two weeks. This might be an update on COVID, an important study or clinical trial result, or a policy or legal issue related to epidemiology studies. You should prepare no more than five slides to accompany your presentation, and all members of your group will present. Groups will be assigned a presentation date after the second lab class.

### **Peer and Instructor Evaluation – 5% of the course grade**

You will actively be working in teams during the semester and your own level of preparation for the lab sessions is critical to your team's success. The peer evaluation component will allow your team members to give you feedback on your contributions.

### **POLICY RELATED TO MAKE-UP EXAMINATIONS OR OTHER WORK**

If you have a scheduling conflict with the date of any of the course examinations, please discuss it with Dr. Lopez-Quintero as soon as you are aware of the conflict. For rare and acceptable situations, arrangements may be made for an alternative time at which to take the examination. These arrangements need to be made as soon as possible in the semester but no later than two weeks prior to the scheduled examination date. Late examinations will only be permitted at the discretion of the instructor (advanced notice in writing required and per applicable University of Florida policies). For unforeseen and exceedingly-rare circumstances, taking a make-up examination after the official closing time may be permitted. Note that any requests for make-up examinations due to technical issues MUST be accompanied by the ticket number when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail Dr. Lopez-Quintero and Ms. Hardemon(hardemont@ufl.edu) within 24 hours of the technical difficulty if you wish to request a make-up.

**To earn any credit, assignments and participatory learning forums must be submitted on time. Late submissions will not be accepted, unless emergent and other unforeseen circumstances occur based on UF policies. Students are advised to access exercise instructions early each week and plan accordingly to ensure timely submission of exercises. It is recommended that students not wait until the last day to submit exercises to account for unforeseen circumstances that may arise. Note that assignments close in Canvas at the stated date and time, and no assignment can be submitted via e-mail after the deadline for any reason.**

Week	Module	Online lecture	In-class activities	Readings	Assignment (deadline – every Monday at 23:59 EST)
01-Sept - 07-Sept	1	The approach and evolution of Epidemiology	Course orientation	Syllabus Text, pages 1 – 32 Text, pages 99 - 116	1. Post-module quiz 2. Module 1 Assignment 3. PLF: Module 1 submission
08-Sept - 14-Sept		Measures of Frequency	Outbreak Investigation group quiz (08-sept)	Text, pages 33 - 56	1. Post-module quiz 2. Module 2 Assignment 3. PLF: Module 1 evaluation & Module 2 submission
15-Sept - 21-Sept	3	Comparing Frequencies	Group 1 – Epi in the news Disease Frequency group quiz (15-Sept)	Text, pages 57- 76	1. Post-module quiz 2. Module 3 Assignment 3. PLF: Module 2 evaluation & Module 3 submission
22-Sept - 28-Sept	4	Sources of Data, Disease Transmission, Descriptive Epi	Group 2 – Epi in the news Measures of association group quiz (22-Sept)	Text, pages 77 – 97 Text, pages 116 - 151	1. Post-module quiz 2. Module 4 Assignment 3. PLF: Module 3 evaluation & Module 4 submission
29-Sept – 5 Oct	5	Screening	Group 3 – Epi in the news Screening group quiz (29-Sept)	Text, pages 419 - 447	1. Post-module quiz 2. Module 5 Assignment 3. PLF: Module 4 evaluation & Module 5 submission
6-Oct - 12 Oct	1 to 5	Modules review	Group 4 – Epi in the news 1-5 modules review		1. PLF: Module 5 evaluation
<b>13-Oct – 19-Oct</b>		<b>Midterm Exam</b>		<b>Modules 1 to 5</b>	
20-Oct – 26-Oct	6	Overview of Epi Study Designs, Experimental Studies	Group 5 – Epi in the news Experimental study group quiz (20-Oct)	Text, pages 153 - 159 Text, pages 181 - 210	1. Post-module quiz 2. Module 6 Assignment 3. PLF: Module 6 submission
27-Oct – 2-Nov	7	Cohort Studies	Group 6 – Epi in the news Cohort study group quiz (27-Oct)	Text, pages 159 - 163 Text, pages 211 - 236	1. Post-module quiz 2. Module 7 Assignment 3. PLF: Module 6 evaluation & Module 7 submission
3-Nov – 9-Nov	8	Case Control Studies	Group 7 – Epi in the news Case-control group quiz (3-Nov)	Text, pages 163 - 180 Text, pages 237 - 266	1. Post-module quiz 2. Module 8 Assignment 3. PLF: Module 7 evaluation & Module 8 submission
10-Nov – 16-Nov	9	Bias & Confounding	Group 8 – Epi in the news Bias and confounding quiz (10-Nov)	Text, pages 267 – 314	1. Post-module quiz 2. Module 9 Assignment 3. PLF: Module 8 evaluation & Module 9 submission
17-Nov – 23-Nov	10	Causation & Effect modification	Group 9 – Epi in the news Effect modification group quiz (17-Nov)	Text, pages 393 - 417 Text, pages 351 – 365	1. Post-module quiz 2. Module 10 Assignment 3. PLF: Module 9 evaluation & Module 10 submission
24-Nov – 30-Nov	11	Critical Reading of Epi Papers	Group 10 – Epi in the news Review of scientific literature group quiz (24-Nov)	Text, pages 367 – 392	1. Post-module quiz 2. Module 11 Assignment 3. PLF: Module 10 evaluation & Module 11 submission
1-Dec – 7-Dec	6 to 12	Ethics	Group 11 – Epi in the news 6 – 12 modules review	Text, pages 449 – 467	1. Post-module quiz 2. Module 12 Assignment 3. PLF: Module 11 evaluation & Module 12 submission
<b>8-Dec – 14-Dec</b>		<b>Final Exam</b>		<b>Modules 6 to 11</b>	1. PLF Module 12 evaluation

## 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	Letter	Grade Point
93% - 100%	A	4.00
90% - 92.9%	A-	3.67
87% - 89.9%	B+	3.33
83% - 86.9%	B	3.00
80% - 82.9%	B-	2.67
77% - 79.9%	C+	2.33
73% - 76.9%	C	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%	E	0.00

Be aware that a C-is not an acceptable grade for graduate students. 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>

## ATTENDANCE

There are 14 required lab classes during the semester (plus two exams during lab sessions) and attendance at all of those sessions is mandatory. It is your responsibility to sign in during class so that your attendance is recorded.

Per the UF Graduate Catalog, "Students are responsible for meeting all academic objectives as defined by the instructor. Absences count from the first class meeting. In general, acceptable reasons for absences from class include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official University activities. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) must be excused. Other reasons also may be approved."

If you are aware that you will need to miss a class session for an approved reason then you must inform the instructor in advance to receive an exception. If you miss a lab session for illness or for serious family emergency then you will be expected to provide a doctor's note after the missed session. Missing a class session without an acceptable reason will result in loss of 3% of your final course grade. Missing three or more lab sessions may result in a failing grade for the course. Arriving more than 20 minutes late is considered to be a missed lab.

Policy Related to Required Class Attendance Please note all faculty 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>

## **EXAMINATION PROCTORING SERVICE**

As this is an online course, examinations will be proctored through HonorLock. This user-friendly service ensures examination integrity and enables administration of remote online examinations. The College of Public Health & Health Professions will pay your proctoring fees, and no pre-scheduling is required. In order to use the HonorLock service, students will need access to a computer to which they have some administrative rights to enable the proctoring service to function. In addition, the computer must have a webcam and microphone as well as the Google Chrome browser installed.

You can take your examination at any time during which the examination is open in Canvas. Plan to allot yourself not only the 120-minute examination period but also extra time during which to connect to the service and manage any technical issues that may arise. You are advised not to wait until the last minute to sit for the examination because you are at risk of the examination closing automatically before the 120 minutes has elapsed, i.e. the examination will close at the time set in Canvas regardless of how many minutes you have been taking the examination. It is recommended that students use a wired internet connection for examinations to ensure a more reliable signal. During the examination, no human proctor will appear. Rather, your camera will record the session. Students must plan to take their examination in an environment free of other people during the administration of the examination. Students should be prepared to show identification and pan the room in which the examination will be taken. Additional instructions will be provided in the examination modules within Canvas. Once you complete the examination, you will submit it and log out of Canvas. Your session will be audited by HonorLock. The recorded examination sessions will be reviewed as part of your final grade. Instances of cheating or inappropriate behavior will be considered violations of the Student Honor Code and will result in disciplinary action.

## **STUDENT ROLES AND OPPORTUNITIES FOR INPUT**

### **Expectations Regarding Course Behavior**

Professional and respectful demeanor is expected of all students. Students are expected to start the session on time and to stay for the duration of the class period.

### **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](http://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://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.**

### **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 through 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.**

### **Mid-course Evaluation**

Students in this course will be provided with the opportunity to provide feedback on the course mechanics and their learning experience. A survey will be made available on the course website in Canvas to solicit such feedback. This evaluation will occur as a way to identify ways in which the course may be improved for this cohort during the semester.

### **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 classroom accommodation 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.”