

College of Public Health & Health Professions
PHC 6001

Principles of Epidemiology in Public Health

Fall 2014

Lab on Tuesdays, either Periods 5 and 6 (11:45-1:40pm) or
Periods 7 and 8 (1:55-3:50pm)

G-312

Instructor Information

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

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Office Hours: By Appointment

Teaching Assistants

Periods 5 & 6

Name: Samantha Sites

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Periods 7 & 8

Name: Shivani Khan

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Course Overview

This course is an introduction to epidemiology for students majoring in 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 his/her public health work using epidemiological principles. This course is not intended to present the epidemiological aspects of the major diseases.

Course Objectives

1. Apply the basic terminology and definitions of epidemiology
2. Calculate basic epidemiology measures
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 the principles and limitations of public health screening programs
8. Describe a public health problem in terms of magnitude, person, time, and place
9. Explain the importance of epidemiology for informing scientific, ethical, economic, and political discussion of health issues
10. Identify basic ethical and legal principles pertaining to the collection, maintenance, use, and dissemination of epidemiologic data
11. Communicate epidemiologic information to lay and professional audiences

Blended Learning Statement

Introduction to Blended Learning

A Blended Learning class uses a mixture of technology and face-to-face instruction to help students maximize their learning. Blended learning typically involves multiple technologies such as E-Learning systems, online video, and web assignments for the communication of information. Knowledge content that would have traditionally been presented during a live class lecture is instead provided online before the live class takes place. This allows more of the face-to-face 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 clinical reasoning.

What Does It Mean for Students?

Students are expected to come to class prepared by completing all out-of-class readings and assignments. The coursework outside of class typically lays a foundation of knowledge or gives students practice needed to engage in higher levels of learning during live class sessions. During the face-to-face class time, 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 face-to-face 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.

Course Materials

Required Text: Essentials of Epidemiology, 2nd Edition by Ann Aschengrau, ScD, and George R. Seage III, DSc. Copyright 2008, ISBN: 0-7637-4025-X

(Note that this is the 2nd Edition of the text. There is a 3rd Edition that you can purchase and use if you'd like but it will probably cost more than buying a 2nd Edition)

Required Book (for Discussion): Toms River: A Story of Science and Salvation, 1st Edition by Dan Fagin. Copyright 2013, ISBN: 9780553806533

Several of the lab sessions will involve the use of a laptop computer or tablet. Students will work in groups so it is possible to participate in lab without a portable computer but it is highly recommended that you have one.

Course Requirements/Evaluation/Grading

12 Post-Module Quizzes – 10% of the course grade (equal weighting for each quiz)

You will complete 12 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. You should re-take the quiz until you have achieved a score of 100%.

2 Exams – 20% of the course grade (equal weighting for each exam)

The format for these exams varies, including multiple choice questions, matching questions, and short answer questions. You will have 60 minutes to complete each exam. Exams are

closed book, closed note, and are not cumulative. You may bring a non-programmable calculator to the exam. You must be present in class to take exams. Make-up exams will not be given except in extreme circumstances.

12 assignments – 25% of the course grade (equal weighting for each assignment)

There are 12 assignments that will be completed as homework. Assignments are weighted equally to each other. A grading rubric will be posted for each assignment.

Professionalism – 10% of the course grade

There are 12 required lab classes during the semester (plus two exams during lab sessions) and attendance at all of those sessions is mandatory. 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 5% of your professionalism score. For each time you arrive in lab late (after the class period has begun) you will lose 2% from your professionalism score. Arriving more than 20 minutes late is considered to be a missed lab so be on time. Students may also lose professionalism points for failing to focus on the course materials during lab (for example, surfing the web or texting during class).

Book Discussion – 5% of the course grade

You are expected to actively participate in a group book discussion. Your TA will take note of your preparation and contributions and will assign participation points worth 5% of your course grade.

Ethics Discussion – 5% of the course grade

You are expected to actively participate in a group book discussion. Your TA will take note of your preparation and contributions and will assign participation points worth 5% of your course grade.

Individual Readiness Assessment – 10% of the course grade (equal weighting for each assessment)

There will be 6 team-based learning (TBL) sessions during the semester. Each of those sessions will start with an Individual Readiness Assurance Test. This is a closed-book, closed-note assessment of your understanding of the material presented in the module lectures. The 6 assessments will be weighted equally to be worth 10% of your course grade. The TBL process will be explained and demonstrated prior to the first TBL session.

Group Readiness Assessment – 10% of the course grade (equal weighting for each assessment)

The second part of each TBL session will be a group Readiness Assurance Test. You will retake the Individual Readiness Assurance Test as a group, still as a closed-book, closed-note

assessment, and agree on one answer for each question. You will get team scores that are equally weighted among the 6 TBL sessions and are worth 10% of your course grade.

Peer 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. Your compiled score from your team is worth 5% of your course grade.

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%	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

Grades will be recorded in Canvas throughout the semester. An example of how to calculate your course grade will be provided by mid-semester.

Percentage or points earned in class	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 equivalent	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

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	Event	Homework
8/26	Lab • Course Intro, Class icebreaker, Intro to TBL	Start module 1
Module 1 Open 8/25 – 9/1	The Approach and Evolution of Epidemiology	1. Post-module assessment 2. Module 1 Assignment
9/2	Lab Period	
Module 2 Opens 9/2	Measures of Disease Frequency	1. Post-module assessment 2. Module 2 Assignment
9/9	Lab Period	
Module 3 Opens 9/9	Comparing Disease Frequencies	1. Post-module assessment 2. Module 3 Assignment
9/16	Lab Period	TBL Session
Module 4 Opens 9/16	Sources of Public Health Data, Disease Transmission, Descriptive Epi	1. Post-module assessment 2. Module 4 Assignment
9/23	Lab Period	
Module 5 Opens 9/23	Screening	1. Post-module assessment 2. Module 5 Assignment
9/30	Lab Period	TBL Session
No module		
10/7 - Exam 1 (Covers modules 1 through 5)		
Module 6 Opens 10/7	Overview of Epi Study Designs, Experimental Studies	1. Post-module assessment 2. Module 6 Assignment
10/14	Lab Period	
Module 7 Opens 10/14	Cohort Studies	1. Post-module assessment 2. Module 7 Assignment
10/21	Lab Period	TBL Session
Module 8 Opens 10/21	Case Control Studies	1. Post-module assessment 2. Module 8 Assignment
10/28	Lab Period	TBL Session
Module 9 Opens 10/28	-Bias -Confounding	1. Post-module assessment 2. Module 9 Assignment
11/4	Lab Period	TBL Session

Dates	Event	Homework
Module 10 Opens 11/4	-Effect Measure Modification -Causation	1. Post-module assessment 2. Module 10 Assignment
11/11 – Veteran’s Day, No Lab		
Module 11 Opens 11/11	Critical Reading of Epi Papers	1. Post-module assessment 2. Module 11 Assignment
11/18 – APHA, No Lab		
Module 12 Opens 11/18	Ethics	1. Post-module assessment 2. Module 12 Assignment
11/25	Lab Period (Causation, ethics)	
No module		
12/2 - Exam 2 (Covers modules 6 through 10, 12)		
12/9	Lab Period (Book Discussion)	

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/>

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity (see Student Conduct Code, the Graduate Student Handbook or this web site for more details: www.dso.ufl.edu/judicial/procedures/academicguide.php).

Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

*We, the members of the University of Florida community,
pledge to hold ourselves and our peers to the
highest standards of honesty and integrity.*

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.

Accommodations for Students with Disabilities

The College and the course instructor are committed to providing reasonable accommodations to assist students' coursework. To obtain academic accommodations, first register with the Dean of Students' Office. The Dean of Students' Office will provide documentation to be given to the course instructor at the time you request the accommodation.

Classroom Demeanor

Professional and respectful demeanor is expected of all students. Students are expected to arrive to class on time and to stay for the duration of the class period. Note that there is a percent penalty for arriving to lab late. Students should refrain from having conversations with classmates when the Instructor or TA is speaking to the class. Phones should ideally be turned off, but may be placed on vibrate if you are a physician who is on call. Phones should be stowed away (out of sight) during class time. Computer work should be related to class activities.

Counseling and Student Health

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the UF Counseling & Wellness Center, 352-392-1575. Visit their web site for more information: <http://www.counseling.ufl.edu/>. They are located on campus at 3190 Radio Road and are open from 8 am to 5 pm Monday through Friday. You can also get emergency walk-in crisis stabilization at the Counseling and Wellness Center's (CERC) on-campus "Crisis and Emergency Response Center" in Peabody Hall.

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, including primary care, women's health care, immunizations, and pharmacy 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 352-294-5700 or check out the web site at: www.health.ufl.edu/shcc

Crisis intervention is always available 24/7 from:

Alachua County Crisis Center:

(352) 264-6789

<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

"BUT – Do not wait until you reach a crisis to come in and talk with us. We have helped many

students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.”