

College of Public Health & Health Professions  
PHC 6001  
**Principles of Epidemiology in Public Health**  
Fall 2013

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

Room assignments for labs are by section and will be announced

**Instructor Information**

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

Email: Through Sakai

Phone: 352-273-5934

Office Hours: By Appointment

**Teaching Assistants**

Name: Natalie Kelso

Email: kelsona@phhp.ufl.edu

Office Hours: TBA

Name: Nancy Seraphin

Email: nseraphin@ufl.edu

Office Hours: TBA

**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

## **Course Materials**

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

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**

### **Exams – 90 points each (270 points total; 45% of the course grade)**

There will be three exams, each worth 90 points. The format for these exams varies, including multiple choice questions, matching questions, and short answer questions. You will have one 90 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.

### **9 exercises – 10 points each (90 points total; 15% of the course grade)**

There are 9 student exercises that will be completed as homework and discussed during the lab period. You will be graded on your answers to the questions (10 points per exercise) and you are expected to participate in discussing the homework during lab (see lab participation grade).

### **12 Discussion Boards –10 points each (120 points total; 20% of the course grade)**

There are 12 discussion boards that will be completed as part of the course. Discussion boards are critically graded (see grading rubrics).

### **Lab Attendance and Participation – (60 points total; 10% of the course grade; Broken down as 20 points for attendance and 40 points for participation)**

There are 12 required lab classes during the semester (plus three exams during lab sessions). You may miss one lab session without penalty. However, this includes any absence including one for illness, family emergency, travel to a conference, etc. Therefore you should plan to attend all sessions and not use your “miss” frivolously. For a second missed session you will lose 20 points from your lab score. Missing a third session would result in a failing grade in the course. For each time you arrive in lab late (after the class period has begun) you will lose 2.5 points from your lab score. Arriving more than 20 minutes late is considered to be a missed lab.

You are expected to contribute to discussions in lab. Teaching Assistants will calculate a lab participation grade based on whether you are prepared for the discussion, the significance of your contribution to discussions, and your willingness to voluntarily contribute to discussions.

### **12 Quizzes – 5 points each (60 points total; 10% of the course grade)**

You will complete one syllabus quiz and 11 post-module quizzes during the semester. These are open-book, untimed quizzes that are intended to help reinforce the lecture material and help you judge your understanding of the course content. You should re-take the quiz until you have achieved a score of 100%.

## Grading

Total Course Points (out of 600)	Percent of Course Points (out of 100%)	Letter Grade	Grade Point Equivalent
555 – 600	92.5% - 100%	A	4.00
537 – 554	89.5% - 92.4%	A-	3.67
519 – 536	86.5% - 89.4%	B+	3.33
495 – 518	82.5% - 86.4%	B	3.00
477 – 494	79.5% - 82.4%	B-	2.67
459 – 476	76.5% - 79.4%	C+	2.33
435 – 458	72.5% - 76.4%	C	2.00
417 – 434	69.5% - 72.4%	C-	1.67
399 – 416	66.5% - 69.4%	D+	1.33
375 – 398	62.5% - 66.4%	D	1.00
360 – 374	60% - 62%	D-	0.67
Less than 360	Below 60%	E	0.00

## Topical Outline

Dates	Event	Assigned Reading	Homework
8/27	Lab • Course Intro, Class icebreaker	Ashengrau and Seage, Chapter 1	Start module 1
Module 1 Open 8/21 – 9/3	The Approach and Evolution of Epidemiology	Ashengrau and Seage, Chapter 1	1. Post-module assessment 2. Discussion Boards postings (3 of them)
9/3	Lab Period		
Module 2 Opens 9/4	Measures of Disease Frequency	Ashengrau and Seage, Chapter 2	1. Post-module assessment 2. Discussion Boards posting 3. Lab activity
9/10	Lab Period		
Module 3 Opens 9/11	Comparing Disease Frequencies	Ashengrau and Seage, Chapter 3	1. Post-module assessment 2. Reflection paper 3. Discussion Boards posting
9/17	Lab Period		
Module 4 Opens 9/18	Sources of Public Health Data, Diseases Transmission, Descriptive Epi	Ashengrau and Seage, Chapters 4 and 5	1. Post-module assessment 2. Discussion Boards posting 3. Group Assignment
9/24	Lab Period		

No module			
10/1 - Exam 1			
Dates	Event	Assigned Reading	Homework
Module 5 Opens 10/2	Overview of Epi Study Designs, Experimental Studies	Ashengrau and Seage, Chapters 6 and 7	1. Post-module assessment 2. Journal article assignment
10/8	Lab Period		
Module 6 Opens 10/9	Cohort Studies	Ashengrau and Seage, Chapter 8	1. Post-module assessment 2. Discussion Boards posting 3. Epiville Exercise
10/15	Lab Period		
Module 7 Opens 10/16	Case Control Studies	Ashengrau and Seage, Chapter 9	1. Post-module assessment 2. Discussion Boards posting 3. Case-control Exercise
10/22	Lab Period		
No module			
10/29 - Exam 2			
Module 8 Opens 10/30	Bias and Confounding	Ashengrau and Seage, Chapters 10 and 11	
11/5	Lab Period		
Module 9 Opens 11/6	Causation	Ashengrau and Seage, Chapter 15	
11/12	Lab Period		
Module 10 Opens 11/13	Screening	Ashengrau and Seage, Chapter 16	
11/19	Lab Period		
Module 11 Opens 11/20	Ethics	Ashengrau and Seage, Chapter 17	
11/26	Lab Period		
No module			
12/3 - Exam 3			

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

### **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 Behavior**

Professional and respectful behavior 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 point penalty for arriving to lab late. Students should refrain from having conversations with classmates when the 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.

### **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](http://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.”