

**SYLLABUS**  
**Principles of Epidemiology for Public Health**  
**EPID 600, Fall 2015**

**Course Description**

Epidemiology is the study of distribution and determinants of disease (or more broadly health outcomes) in the population. In this introductory class, student will learn and apply basic epidemiologic concepts within a population-based framework. Student will engage in collaborative and active learning through team and individual projects, case studies, quizzes, and lab discussion.

**Course Goals\***

1. Apply concepts, methods, and tools of public health data collection, analysis and interpretation, and the evidence-based reasoning and informatics approaches that are essential to public health practice.
2. [Engage in] public health-specific communication including technical and professional writing and the use of electronic technology

\*Critical content areas [from the Association of Schools of Public Health \(ASPH\) Framing the Future: The Second 100 Years of Education for Public Health, A Master's Degree in Public Health for the 21st Century.\\*](#)

**Course Objectives**

The overall course objectives 1-10\*\* are as follows:

- Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues.
- Describe a public health problem in terms of person, place, and time.
- Apply the basic terminology and definitions of epidemiology.
- Calculate basic epidemiology measures.
- Identify key sources of data for epidemiologic purposes.
- Evaluate the strengths and limitations of epidemiologic reports.
- Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.
- Draw appropriate inferences from epidemiologic data.
- Identify the principles and limitations of public health screening programs.
- Communicate epidemiologic information to lay and professional audiences.

\*\*[From the Association of Schools of Public Health \(ASPH\) discipline-specific competencies in epidemiology from the MPH Core Competency Model version 2.3 2006.](#)

**Time & Place**

Tuesdays 3:30-4:45 pm, Rosenau Auditorium, Rm 0133, Gillings School of Global Public Health, Wed Lab 3:25-5:25pm, Thur Labs 4:00 - 5:50pm, TBA (will be posted in syllabus folder on Sakai). Office Hours Wednesdays 2-3pm, or by appointment.

**Course Instructors**

*Lead Instructor*

Karin Yeatts, PhD, MS  
Research Assistant Professor  
Department of Epidemiology  
Email: [Karin\\_Yeatts@unc.edu](mailto:Karin_Yeatts@unc.edu)

*Co-Instructor*

Lorraine Alexander, DrPH  
Clinical Associate Professor  
Department of Epidemiology  
Email: [lorraine\\_alexander@unc.edu](mailto:lorraine_alexander@unc.edu)

*Teaching Assistants:*

Doctoral Student Humberto Parada  
 Dept. of Epidemiology  
 Email: [hparada@live.unc.edu](mailto:hparada@live.unc.edu)

Doctoral Student Nat MacNell  
 Dept. of Epidemiology  
 Email: [macnell@unc.edu](mailto:macnell@unc.edu)

Doctoral Student Nelson Pace  
 Dept. of Epidemiology  
 Email: [nelson@unc.edu](mailto:nelson@unc.edu)

**Assignments**

Assignment	Individual	Team	Percentage % of Grade
Individual Data Analysis	✓		30
Quizzes (6) (drop lowest)	✓		15
Participation	✓		5
Lab assignments (~12) (drop lowest)		✓	20
Team Project (Presentations Final Exam Date, Dec. 10 <sup>th</sup> 4-7pm. Attendance Mandatory)		✓	30
Total			100

**Assignment Descriptions**

Students will work individually on assignments unless indicated assignment is team-based.

Individual Data Analysis Assignment, (Parts 1,2,3). The intent of this assignment is for you to integrate epidemiologic concepts and calculations. Using Epi Info software and a data set, you will compute measures of occurrence, association, and assess potential confounding. Due on Fridays.

Quizzes. You will have 6 on-line quizzes, two of which you take \*before\* lecture. The quizzes will cover measures of disease occurrence, measures of association, study design, and systematic error.

Lab Assignments. You will have 12 graded labs. Your TA will evaluate your team assignments based on the lab grading rubric.

Team Project, (Parts 1,2,3). With your teammates you will design and conduct a small cross-sectional epidemiologic study and present the results to the class at the end of the semester. Two team peer assessments will contribute 10% to your team project grade.

Participation. You will be evaluated on your course engagement in lab and lecture. The participation grade is comprised of two peer evaluations on lab contributions, and input from your TA and instructor.

*Extra credit.* There will be a few opportunities in lecture sessions to earn extra credit.

## Course Design Methods & Structure

We emphasize active and cooperative learning to bring students together in small, fixed teams to work on structured learning tasks. The faculty and TA are there to steer your team, as a consultant would, on a path toward reaching your team answers.

## Teams

Given the course emphasis on collaborative learning, we expect each team member to contribute meaningfully and team members to hold each other accountable. Students will be assigned to teams by the end of the first full week of class; these teams will be listed within the Syllabus tab on the course website. Teams will each have approximately five members, with a mixture of students from different disciplines in the Gillings School of Global Public Health.

## Course Resources

Course resources are located on the course Sakai website. They include the following: instructions for labs, individual, and team project assignments; ERIC Notebooks (epidemiology methods periodical); course handouts; links to journal articles or other readings. Your TA and professor are course resources and available to answer questions-when emailing them, keep [these points](#) in mind.

## Optional Course Resources

Aschengrau A & Seage GR. Essentials of Epidemiology in Public Health. Sudbury, Massachusetts: Jones and Bartlett Publishers, 2007 or 2013 (2<sup>nd</sup> or 3<sup>rd</sup> edition) (on reserve at UNC HSL Library)

Gordis L. Epidemiology, 3<sup>rd</sup> Ed. Philadelphia, PA. Elsevier Saunders: 2004

## Grading

Letter grades will be assigned according to the following scale:

Undergraduate students: A (94-100%); A- (90-93.9%); B+ (87-89%); B (83-86%); B- (80-82%); C+ (77-80%); C (73-76%); C- (70-72%); D+ (67-70%); D (63-66%); D- (50-62%); and F (<50%)

Graduate students: H (94-100%); P (65-93.9); L (50-64.9) and F (<50%)

### *Due Dates:*

Due dates for all assignments will be listed in the course schedule and on the main "course materials" page. All assignments are due at **11:55 pm** Eastern Standard Time (EST) on the date listed.

### *Late Penalties:*

Late individual and team assignments will have 10 % of total value deducted for every day that they are late.

## Time Commitment for this Course

This course requires **\*approximately 9 to 12 hours per week.\*** If you decide to withdraw from the course at any time, please notify Dr. Yeatts ([Karin\\_Yeatts@unc.edu](mailto:Karin_Yeatts@unc.edu)) and your TA.

### **Course Schedule**

Sometimes unexpected events occur (hurricanes, snow storms, power outages, etc.); we reserve the right to modify the syllabus and assignment due dates. Dr. Yeatts will announce any changes via the Sakai announcement function as quickly as possible so that students can adjust their schedules.

### **Course Assignment Formatting Requirements**

Use single space 12 point font Arial with 1" margins. Page length will be indicated in assignment instructions.

### **Adequate Computer Access and Working Email**

Make sure that you have adequate computer access. Check the course Sakai site at least every other day or so for announcements. Email will be sent 2-3 times a week from your TA and professor.

### **Valuing, Recognizing, and Encouraging Diversity**

This class will follow principles of inclusion, respect, tolerance, and acceptance that support the [values of diversity](#).

### **Course Evaluation**

Your constructive feedback on specific modules, class sessions, and assignments is important to us. In each module there is an **anonymous** feedback survey link. We will have both mid-term and end of course evaluations. The School uses an **anonymous** on-line evaluation system which opens for a two week period that ends the last day of classes.

### **Writing Resources for Course Assignments**

*Writing assistance:* The UNC Writing Center provides [resources sheets](#) and one-on-one [writing assistance](#). If you are unfamiliar with scientific writing, please review this [web resource](#) to better understand the structure and appropriate content.

*Citations formatting:* In this course, we would like you to use the American Medical Association's [AMA Manual of Style \(10th edition\) : A Guide for Authors and Editors](#) Section 1 Part 3 for formatting references.

*Using Wikipedia as a primary reference:* We request you **NOT** use Wikipedia as a primary reference. Please use the online health science resources (such as [Pubmed](#)) that you have available to you as part of taking this course.

### **Plagiarism**

[Plagiarism](#) is the act of copying or using someone else's work or writing and presenting it as your own work. While you will use and present information from the peer review literature and official websites, you need to **cite** the source of that information.

### **Honor System**

As part of the UNC Honor Code, students pledge to maintain ideals of academic honesty, personal integrity, and responsible citizenship. Please review the [UNC Honor System](#) and make sure you understand and adhere to these policies in this course.