

SYLLABUS
Principles of Epidemiology for Public Health
EPID 600, SPRING 2015

Course Description

In this introductory epidemiology course, students will learn and apply basic epidemiologic concepts to multiple domains of public health. We will illustrate and practice using epidemiologic concepts and methods to better understand, characterize, and promote health at a population level. The class will engage the students in collaborative and active learning through team and individual projects, case studies, quizzes, presentations, and team discussions.

Course Objectives

The overall course objectives 1-10* and 11-12** are as follows:

1. Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues.
2. Describe a public health problem in terms of person, place, and time.
3. Apply the basic terminology and definitions of epidemiology.
4. Calculate basic epidemiology measures.
5. Identify key sources of data for epidemiologic purposes.
6. Evaluate the strengths and limitations of epidemiologic reports.
7. Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.
8. Draw appropriate inferences from epidemiologic data.
9. Identify the principles and limitations of public health screening programs.
10. Communicate epidemiologic information to lay and professional audiences.
11. 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.
12. [Engage in] public health-specific communication & social marketing, including technical and professional writing and the use of mass media and electronic technology.

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

** [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.*](#)

Time & Place

Tuesdays 3:30-4:45 pm, Rosenau Auditorium, Rm 0133, Gillings School of Global Public Health, Wed Labs 3:35-5:25 PM and Thurs Labs 4:00PM - 5:50PM, TBA (in Syllabus folder on Sakai).

Dr. Yeatts Office Hours: Wednesdays 3-4pm, or by appointment.

Course Instructors

Lead Instructor

Karin Yeatts, PhD, MS
Research Assistant Professor
Department of Epidemiology
Gillings School of Global Public Health
Email: Karin_Yeatts@unc.edu

Co-Instructor

Lorraine Alexander, DrPH
Clinical Associate Professor
Director of Distance Learning
Department of Epidemiology
Email: Lorraine_Alexander@unc.edu

Teaching Assistants:

Doctoral Student Christina Cordero
 Dept. of Epidemiology
 Email: ccordero@live.unc.edu

Doctoral Student Nan Li
 Dept. of Epidemiology
 Email: nanl@live.unc.edu

Doctoral Student Jaymin Patel
 Dept. of Epidemiology
 Email: jaymin86@email.unc.edu

Doctoral Student Rebecca Yau
 Dept. of Epidemiology
 Email: yaur@live.unc.edu

Assignment Values and Due Dates

Assignment	Individual	Team	Percentage % of Grade
Individual Data Analysis	✓		30
Quizzes (4) (drop lowest)	✓		10
Epi in the News Presentation	✓		10
Lab assignments (10)		✓	20
Team Project (April 28. Final Exam 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.

Quizzes. You will have 4 on-line quizzes on measures of disease occurrence, study design, measures of association, and systematic error.

“Epidemiology in the News” Presentation Each student will create and post a 5 minute presentation on “Epidemiology in the News.”

Lab Assignments and Class Participation You will have ~10 graded labs (often case studies with team members). Your TA will evaluate your contributions.

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.

Course Resources

Course resources are located on the course Sakai website. They include the following: ERIC Notebooks (epidemiology methods periodical); additional handouts and readings; links to journal articles or other readings on the Internet; instructions for labs, individual assignments and project, and team project.

Optional Course Resources

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

Keyes KM. Galea S. Epidemiology Matters. 2013.

Gordis L. Epidemiology, 3rd Ed. Philadelphia, PA. Elsevier Saunders: 2004

Epidemiology the Basic Science of Public Health a MOOC (Massive Open Online Course) developed by course instructors.

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) and your TA.

Course Schedule

Sometimes unexpected events occur (hurricanes, snow storms, power outages, etc.); we reserve the right to modify the syllabus. These modifications will be announced by the Instructor via the Sakai announcement function as quickly as possible so that students can adjust their schedules. The weekly course schedule is provided on the syllabus page in Sakai; assignment due dates are also listed on the main course page.

Teams

You will be assigned to your teams by the end of the first full week of class; they will be listed in the Syllabus section on the Sakai 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. In addition, teams will be comprised of either all undergraduate or graduate students.

Grading

Grades:

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:

The due dates for all assignments will be listed in the course schedule and will be due at **11:55 pm** Eastern Time (ET) 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.

Course Assignment Formatting Requirements

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

Course Design Methods & Structure

Cooperative learning is an instructional technique that brings students together in small, fixed teams to work on structured learning tasks. The faculty and TAs are there to steer your team, as a consultant would, on a path toward reaching your team answers.

Adequate Computer Access and Working Email

Make sure that you have adequate computer access. You should 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, and you will be asked to evaluate your learning. 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.