

SYLLABUS
Principles of Epidemiology for Public Health
EPID 600, Spring 2019

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 projects, individual data analysis exams, case studies, quizzes, and lab discussion.

MPH Core Competencies Covered*

1. Apply epidemiological methods to the breadth of settings and situations in public health practice
2. Select **quantitative** and qualitative data collection methods appropriate for a given public health context
3. Analyze **quantitative** and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate
4. Interpret results of data analysis for public health research, policy, or practice

[*From CEPH Accreditation 2016 Criteria,](#)

Course Objectives

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

- Describe a public health problem in terms of person, place, and time.
- Identify key sources of data for epidemiologic purposes.
- Apply the basic terminology and definitions of epidemiology.
- Calculate basic epidemiology measures.
- 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.
- Explain the importance of epidemiology for informing scientific, ethical, economic and political discussion of health issues.
- 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, McGavran-Greenberg PH-Rm 1301, SPH, Wed Lab 3:35-4:50, Thurs Labs 3:30 – 4:45, Locations TBA, on course website, under syllabus tab.

Dr. Yeatts Office Hours Wednesdays 2:30-3:30pm, or by appointment.

Course Instructors/Teaching Team

Lead Instructor

Karin Yeatts, PhD, MS
Clinical Associate Professor
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Co-Instructor

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Teaching Assistants:

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Assignments

Assignment	Individual	Team	Percentage % of Grade
Individual Data Analysis Exams (3)	✓		30
Quizzes (5) (drop lowest)	✓		15
Participation	✓		5
Lab assignments (~12) (drop lowest)			20
Pre-labs (4%)	✓		
Team labs (16%)		✓	
Team Project (3 parts) (Presentations Final Exam Date Tuesday April 30, 4-7pm, Attendance Mandatory)		✓	30
Total			100

Assignment Descriptions

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

Individual Data Analysis Exam (Parts 1,2,3). The intent of this exam 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.

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

Lab Assignments. You will have ~12 labs. Your TA will evaluate your pre recitation/laboratory “pre-labs” based on completion; your team assignments will be evaluated using the team lab grading rubric. The lowest pre lab and team lab grade will be dropped. More detail is provided in the lab instructions document on the syllabus webpage.

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. Three team peer assessments will contribute to your team project grade.

Participation/Attendance. You will be evaluated on your course engagement in lab and lecture. Lab participation is part of your weekly team lab grade. Your lecture participation grade will consist of two parts: participating in weekly lecture questions/polls randomly distributed across the semester and TA and professor evaluation. We might also test newly developed attendance taking software.

Extra credit. There may be a few opportunities in lecture to earn extra credit, at the instructors discretion.

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-free for students); 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, MA: Jones and Bartlett Publishers, 2007,2013 (2nd or 3rd edition) (on reserve at UNC HSL Library)

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

Grading

Letter grades will be assigned according to the following scale:

Undergraduate students: A (94-100%); A- (90-93.99%); 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 (70-93.99); L (50-69.9) 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) 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 Arial font with 1" margins. Page length, font size, and spacing 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.