

UNC Department of Epidemiology



Epidemiology 759

Course Information and Sample Schedule

Course Instructors	<i>Lead Instructor: Karin Yeatts, PhD Co-Instructor: Lorraine Alexander, DrPH</i>
Contact	Lorraine_Alexander@unc.edu
Course Materials	<i>No textbook, all materials are online</i>
Course Modality	<i>Online</i>

Module 1: Introduction and Overview (3 Weeks)

LiveMeeting: Course Introduction and Welcome

The faculty will host this optional online LiveMeeting. Come and get familiar with the course topics and the faculty.

Lectures

1. Introduction
2. John Snow (with Interactive Case Study)
3. Introduction to Epi Info Software

No Required Readings for This Module

There are, however, readings that correspond to the case studies. Please see the Case Studies folder in Sakai.

Part of Group Project (Icebreaker) Due

Introduce yourself on the forum. Get to know your team's members.

Epi Info Help Session

This optional LiveMeeting will be held online. Bring your questions about the Epi Info software.

7 Case Studies Due

1. Make View and Enter Data
2. Display Data
3. List Data
4. Analyze Data
5. Epi Curves
6. Tables
7. Reading Excel in Epi Info

Group Project (Outbreak Document) Due

Group Project Peer Evaluations Due

Module 2: Outbreak Detection and Generating Hypotheses (2 Weeks)

LiveMeeting: Study Design

This approximately hour-long optional online LiveMeeting (Karin Yeatts) will focus on the topic of study design.

Lectures

1. Outbreak Detection Part I
2. Outbreak Detection Part II
3. Generating Hypotheses Part I
4. Generating Hypotheses Part II
5. Generating Hypotheses Part III

Required Readings

1. Outbreak Investigations—A Perspective
2. Embarking on an Outbreak Investigation
3. Case Finding and Line Listing: A Guide for Investigators
4. Epidemic Curves Ahead
5. Hypothesis Generation
6. Hypothesis-Generating Interviews
7. Incidence and Prevalence
8. Common Epidemiologic Measures

2 Case Studies Due

1. Outbreak Detection
2. Generating Hypotheses

Module 2 Quiz Due

(take and submit the quiz via the “Tests and Quizzes” tab in Sakai)

No Group Project for This Module

Module 3: Testing Hypotheses (3 Weeks)

LiveMeeting: Epidemiologic Measures

This optional, approximately hour-long online LiveMeeting beginning at will focus on epidemiologic measures.

Lectures

1. Study Design: Testing a Hypothesis Part I
2. Study Design: Testing a Hypothesis Part II
3. Data Collection Part I
4. Data Collection Part II
5. Analyzing Epidemiologic Data Part I
6. Analyzing Epidemiologic Data Part II

Required Readings

1. Selecting a Study Design
2. Cohort Studies for Outbreak Investigations
3. Case-Control Studies for Outbreak Investigations
4. Developing a Questionnaire
5. Interviewing Techniques

6. Data Analysis Basics: Variables and Distribution
7. Data Analysis: Simple Statistical Tests
1 Case Study Due
1. Data Collection
2 Case Studies Due <input type="checkbox"/>
1. Study Design: Testing a Hypothesis <input type="checkbox"/>
2. Analyzing Epidemiologic Data
Group Project (Questionnaire Critique) Due
Module 3 Quiz Due (take and submit the quiz via the “Tests and Quizzes” tab in Sakai)
Group Project Peer Evaluations Due

Individual Project 1: (2 Weeks)

Individual Project 1, parts 1 through 7, Due

The project is divided into seven parts. As you complete and submit each part, you will automatically receive information to complete the next part.

Module 4: Defining Hypotheses and Implementing Control Measures (2 Weeks)

TA Evaluation Due
LiveMeeting: Potpourri This approximately hour-long optional online LiveMeeting will be a potpourri of course-related topics.
Lectures
1. Laboratory Studies Part I
2. Laboratory Studies Part II
3. Environmental Health Studies I
4. Environmental Health Studies II
5. Outbreak Control Measures
Required Readings
1. Environmental Health Investigations: Conducting Traceback Investigations
2. Environmental Health Investigations: Conducting Environmental Health Assessments
3. Collecting Specimens in Outbreak Investigations
4. Laboratory Diagnosis: An Overview
5. Laboratory Diagnosis: Molecular Techniques
6. Laboratory Diagnosis in Outbreak Investigations
Part I of Group Project (Traceback) Should Be Completed
Part II of Group Project (Traceback) Due The specific date and time for your group’s meeting with faculty will be determined later, but the available meeting times will span three days.
Part III of Group Project (Traceback) Due
2 Case Studies Due

1. Laboratory Studies
2. Environmental Health Studies

Group Project Peer Evaluations Due

Module 4 Quiz Due

(take and submit the quiz via the “Tests and Quizzes” tab in Sakai)

Module 5: Other Issues in Managing an Outbreak (2 Weeks)

LiveMeeting: Outbreak Response

This approximately hour-long optional online LiveMeeting will look at an example of an outbreak response (NC State fair *E. coli* outbreak 2011)

Lectures

1. Risk and Crisis Communication (I is for Investigation)
2. Incident Command Systems for Public Health

Required Readings

1. Constructing the Argument of a Scientific Manuscript
2. Performance Indicators for Response to Selected Infectious Disease Outbreaks: A Review of the Published Record

2 Case Studies Due

1. Crisis Communication
2. ICS in Action

No Group Project for this Module

Module 5 Quiz Due

(take and submit the quiz via the “Tests and Quizzes” tab in Sakai)

Individual Project 2: (2 Weeks)

Individual Project 2, parts 1 through 5, Due