Epidemiology 759
Course Information and Sample Schedule

**Course Instructors**
- Lead Instructor: Karin Yeatts, PhD
- Co-Instructor: Lorraine Alexander, DrPH

**Contact**
- Lorraine_Alexander@unc.edu

**Course Materials**
- No textbook, all materials are online

**Course Modality**
- Online

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

**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.

**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)

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**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)

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**Individual Project 2: (2 Weeks)**

**Individual Project 2, parts 1 through 5, Due**