

Course at a Glance

Epidemiology Methods

INFECTIOUS DISEASE

Course Title: Epidemiological Methods in Infectious Diseases

Course Number: PHC 6006

Department: Epidemiology
and Biostatistics

Credits: 3 Credit hours

Message From the Department:

- The content is central for those interested in deepening their infectious diseases knowledge.
- Skills on applicable epidemiological methods in the study of infectious diseases will improve.
- Professionals will apply their epidemiological methods knowledge along their careers.
- Those specialized in infectious diseases will increase their research skills.

Pre-requisites:

[PHC 6588 \(History and Systems\)](#), and
[PHC 6756 \(Population Assessment I\)](#)

or

PHC 6000 Epidemiology and
PHC 6050 Biostatistics
(*PHC 6010-Epidemiology Methods I preferable*).

Course Description:

In depth understanding of the implication of epidemiological methods within the context of infectious disease. Focus will be on the application of methods such as study design, as applied to infectious disease.

Course Objectives:

1. Describe past and current issues in infectious disease epidemiology, and determine areas of needed research in infectious disease epidemiology.
2. Identify the use of appropriate study design in presenting an epidemiological description of an infectious disease.
3. Understand of how Geographic Information Systems (GIS) have been used in the epidemiology of infectious diseases, as well as potential future uses of GIS.
4. Identify the role of vaccination and nutrition within the context of infectious disease.
5. Analyze the evidence for and against specific public health recommendations for interventions, within the context of a specific infectious disease.
6. Understand the different surveillance methods currently used in infectious disease epidemiology, and explore how computer surveillance systems are being developed to enhance surveillance.
7. Learn how mathematical modeling is used in outbreak investigations.
8. Determine the appropriateness of creating interventions based upon differing transmission methods for infectious diseases.

Course Structure:

Web-based with narrated presentations, bi-weekly modules, discussion boards, peer reviews, quizzes, individual and group assignments due 11:59pm on Sundays, few Synchronous Online sessions for presentations.

Types of Assessments:

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| <input checked="" type="checkbox"/> Quiz/Exam | <input type="checkbox"/> Web Quest | <input checked="" type="checkbox"/> Journal/Blog | <input checked="" type="checkbox"/> Discussion Board |
| <input checked="" type="checkbox"/> Written Assignments | <input type="checkbox"/> Poster Presentation | <input checked="" type="checkbox"/> Individual Project | <input checked="" type="checkbox"/> Individual Presentation |
| <input checked="" type="checkbox"/> Group Project | <input checked="" type="checkbox"/> Group Presentation | <input checked="" type="checkbox"/> Case Study | <input checked="" type="checkbox"/> Research Paper |
| <input checked="" type="checkbox"/> Demonstration/Simulation | <input type="checkbox"/> Midterm/Final Exam | <input type="checkbox"/> Other (specify) | |

Student Expectations:

Students are required to log in to Canvas at least twice a week, students should contribute content to the course, students are expected to participate in meaningful discussion, submit assignments on time, contact instructor about special requests ahead of time, maintain e-netiquette.

Technical Requirements: *(in addition to the [standard technical requirements](#) for all online courses)*

- Software- Microsoft Office (Word, Power point). Adobe acrobat.
- Hardware. Headset.

All online courses receive 24-hour support by the Office of Educational Technology and Assessment. Contact the ETA department by using the [Tech Assistance](#) link in your course. Students can also receive assistance via telephone at 813-974-6666, Mon-Fri 8:30am – 5pm, or via email at eta@health.usf.edu

Please Note: The information on this document is subject to change. The course instructor has the right to change any information posted in this document. Students should check the official syllabus released during the first week of classes for any updates to this document. For more information on this course or academic programs, please contact the [COPH Department](#) directly.