

# Course at a Glance



**Course Title:** Infectious Disease Epidemiology 2

**Course Number:** PHC 6002

**Dept:** EPB

**Credits:** 3

**Traditional Section:** 314

**Reference Number:** 26966

**Certificate Section:** 510

**Reference Number:** 19198

**Self Fund Section:** 352

**Reference Number:** 27367

**Instructor Name:** Dr. Kathleen O'Rourke, Dr. Aurora Sanchez-Anguiano

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**Course Prerequisites:** **If you have not taken these courses, written permission by the instructor is mandatory.**

**Epidemiology (EPB PHC 6000)**

Biostatistics I (EPB PHC 6050) or equivalent

Infectious Disease Epidemiology (EPB PHC 6002)

**Course Description:**

The purpose of this course is to provide students with an 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, surveillance, GIS, vaccination strategies, etc., as applied to infectious disease. The course assumes familiarity with elementary biomedical concepts and epidemiological terminology and basic research methods, as well as basic biostatistics as it examines specific diseases as they occur in populations, rather than in individual patients.

**Format of content presentation, activities and/or instructional methods:**

This course is divided into eight modules, the majority of which cover 2 weeks of class time. Class participation is expected and measured through the use of a discussion board. Each student will be responsible for the selection of an infectious disease and the completion of assignments relating epidemiological methods to that disease. In addition, there will be other assignments related to the general application of epidemiological methods in infectious disease. Students are expected to complete all assigned readings, watch related videos and taped lectures in a timely manner. Most work will be conducted, individually but there may be occasional group assignments. Grading will be based upon discussion posts, assignments, as well as a midterm and final examination.

**Textbook and Ordering materials:**

**Required Textbooks:**

Kenrad E. Nelson and Carolyn Masters Williams. Infectious Disease Epidemiology Theory and Practice. 2<sup>nd</sup> edition. Jones and Bartlett Sudbury, MA. ISBN-13: 978-0-7637-2879-3.

David L. Heymann, MD. (ed). Control of communicable diseases manual. Nineteen edition. American Public Health Association, Washington, D.C., 2008. ISBN 978-0-87553-189-2

**Recommended Textbooks:**

Johan Giesecke. Modern Infectious Diseases Epidemiology. Second edition. Arnold, A member of the Hodder Headline Group. London. 2002. ISBN 0 340 76423 6

**How to Order Textbooks:**

Purchase your textbook online on the [HSC Bookstore website](http://usfhsc.bncollege.com) (<http://usfhsc.bncollege.com>)

**Other Required Materials:**

Supplemental materials and video links will be posted in Blackboard.

**Course learning objectives:**

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

**Types of assessments and activities in the course:**

- Written exercises on specific topics in Infectious Disease Epidemiology
- Participation in group discussion boards
- Midterm Exam
- Participate in a group assignment
- Final Exam

**Student Expectations:**

- Students are expected to complete all assigned readings as well as any additional video or audio materials.
- Students are expected to actively participate in weekly discussion boards
- Students will be expected to complete individual and group based assignments within a timely manner.

**For more information about the Course, Contact:**

Dr. Kathleen O'Rourke, Dr. Aurora Sanchez-Anguiano

Contact Info: [korourke@health.usf.edu](mailto:korourke@health.usf.edu), [asanchez@health.usf.edu](mailto:asanchez@health.usf.edu)

Note: For problems accessing the course materials and other computer technical problems, click the **Tech Assistance** button in your course website and fill out a "Technical Problem Report Form". Tech Assistance button links to the Technical Assistance page of the Office of Educational Technology & Assessment website at: <http://health.usf.edu/publichealth/eta/techsupport.html>. Students can also receive assistance via telephone at 813-974-6666, Mon-Fri 8am-5pm, or via email at [eta@health.usf.edu](mailto:eta@health.usf.edu).

**Technology Requirements (e.g. software or hardware):**

Visit this website for software requirements and downloads:

[http://health.usf.edu/publichealth/eta/students\\_tech\\_requirements.htm](http://health.usf.edu/publichealth/eta/students_tech_requirements.htm)

**Other technology requirements (hardware and software) specific for this course:**

View hardware & software requirements and downloads for Elluminate Live! sessions

[http://eta.health.usf.edu/technology/illuminate/Elluminate\\_Live10\\_sessions.pdf](http://eta.health.usf.edu/technology/illuminate/Elluminate_Live10_sessions.pdf)

To participate in the virtual 'real-time' sessions you must meet ALL the computer requirements for the Elluminate Live! sessions.

Note: These are in addition to the basic technology requirements for all COPH online courses.

**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 course syllabus released during the first week of classes for any updates to this document.