

# Course at a Glance

## Fall 2015

**Course Title:** Emerging Infectious Diseases

**Course Number:** PHC 4031

**Dept:** GLO      **Credits:** 3

**Section:** 310      **Reference Number:** 89666      Curtis DeVetter      [cdevette@health.usf.edu](mailto:cdevette@health.usf.edu)

**Pre-requisites:** Coursework in Biology/Microbiology recommended.

### Course Description:

In the last century, cultural, environmental, and socioeconomic factors have contributed to the emergence (or re-emergence) and increasing burden of infectious diseases globally, with important impacts on national health care systems, economies, and local communities. This course addresses important infectious diseases which are either newly emergent (e.g. HIV, avian & swine influenza, West Nile virus, Foodborne trematodiasis) or re-emerging in various parts of the world after a period of relative retreat (malaria, dengue, tuberculosis). Some of the diseases occur in relatively remote areas in the United States and worldwide (e.g. filariasis), while others such as new strains of antibiotic-resistant bacteria (e.g. MRSA) are becoming commonplace. The principles of detection, diagnosis, prevention and control of these infectious diseases will be emphasized in a public health context.

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

This course is entirely web-based, with weekly presentations and assigned readings. The course is composed of three blocks covering Emerging Viruses, Emerging Bacteria & Medically Important Parasites. Each block (4-5 weeks in length) is organized into weekly segments. Each week will include a presentation (Flash Player format with audio) accompanied by a reading assignment. Students will be assigned into small groups to develop a narrated PowerPoint presentation (see technology requirements) describing a current EID outbreak (of their choice) that occurs during the semester. Overall, the course is designed to provide a general introduction to selected infectious diseases, reasons for their emergence and their impact on public health. All presentations and assigned readings will be available at the beginning of the block so that you can work ahead.

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

Block Exams (3 x 20%)	= 60%
Group Narrated Presentation	= 25%
Reading Quizzes (3 x 5%)	= <u>15%</u>
	100%

Each block will include one quiz on the reading assignments and a timed exam on the lecture material. Small groups will develop a narrated (with audio) PowerPoint presentation related to a current emerging infectious disease outbreak that occurs during the semester.

### Student Expectations:

1. Students are expected to: watch and take notes on the narrated lectures, read the required readings, and complete the quizzes and exams by the deadline for each block.
2. Students are expected to frequently interact with their group members to develop a narrated outbreak presentation, as grades will be assigned based on the overall group effort (not individual).
3. Students should log on to Canvas at least twice a week (besides the time to review lectures and complete quizzes/exams), to interact with group members and check for any announcements or updates.
4. It is the responsibility of the student to notify the instructor of any emergency or documented excuse that may affect assignment due dates, BEFORE they are due, to avoid receiving a zero. Late assignments will not be accepted. Alternate make-up exams will be allowed only with documented excuses.
5. All technical questions should be directed to ETA through Canvas. BE SURE TO COMPLETE LESSON ZERO so that you are familiar with the technical requirements of the course.

## Textbook and Ordering materials:

### **Required Text:**

Krasner, R. (2010). **The Microbial Challenge: Science, Disease, and Public Health** (3<sup>rd</sup> EDITION) w/ Student Companion Website. Includes CD for interactive content

Publisher: Jones and Bartlett Publishers

Special ISBN: 9780763797782

### **Recommended Text (optional):**

The **recommended** infectious disease study card set for the course is:

Peppler, Mark S (2002). **MicrobeCards: Medical Microbiology and Infectious Diseases Study Cards**. Item Number: 978-1-55581-217-1. Purchase the MicrobeCards (\$24.95) directly through the American Society for Microbiology. The easiest way to order them is by telephone @ 1-800-546-2416 or you can order the cards online @ <http://estore.asm.org/viewItemDetails.asp?ItemID=305>.

### **How to Order:**

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

## Course Topics:

The course is organized into 3 blocks, which will describe 3 types of emerging infectious diseases (Viruses, Bacteria & Parasites). Overall, the course is designed to provide a general introduction to selected infectious diseases, reasons for their emergence and their impact on public health. All presentations and assigned readings will be available at the beginning of the block (you can view the materials for 4-5 weeks at once) so that you can work ahead. However, you will have to complete the required reading quizzes and Block Exams during their scheduled weeks.

Week 1: Course Orientation/ EID Intro

Week 2: Infectious Disease Epi Intro

Week 3: Virus Intro/Emerging Zoonotic Viruses

Week 4: Emerging Viral Hemorrhagic Fevers

Week 5: Emerging Arboviruses

Week 6: Emerging Bloodborne/STI Viruses

Week 7: Emerging Respiratory Viruses (VIRUS EXAM)

Week 8: Multiple Drug Resistant (MDR) Bacteria

Week 9: Emerging Foodborne Bacteria

Week 10: Emerging Vectorborne Bacteria

Week 11: Prions, Bioterrorism, Agroterrorism (BACTERIA EXAM)

Week 12: Emerging Parasitic Helminths (Worms) 1: Trematodes (flukes)/Cestodes (tapeworms)

Week 13: Emerging Parasitic Helminths (Worms) 2: Nematodes (roundworms)

Week 14: Emerging Parasitic Protozoa part 1: Enteric protozoa, Apicomplexans pt.1

Week 15: Emerging Parasitic Protozoa part 2: Apicomplexans pt. 2 (Malaria, *Babesia* spp.), Hemoflagellates

Week 16: PARASITE EXAM

## For more information about the Course, Contact:

See Instructor information at top of document.

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 8:30am-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 to [narrate a PowerPoint Presentation](#)

Note: These are in addition to the basic technology requirements for all CPH 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.