

Bioterrorism & Emerging Infectious Diseases

HON/BIO 215 - Spring 2010



*When you are really down,
a good friend may ask you
to count your blessings.*

*This course
will help you appreciate
how lucky you really are.*

Face lesions on boy with smallpox. Public Health Images
Library (PHIL) ID #3. Source: CDC/Cheryl Tyron

Never forget that we are but one species and that it is a small world.

SARS	Rabies	Avian Flu	Malaria	Escherichia coli O157:H7	Lyme Disease
HIV/ AIDS	Smallpox	Polio	Mad Cow Disease	Diphtheria	Tuberculosis
West Nile Virus	Botulism & BOTOX	Anthrax	Cholera	Hepatitis	Ebola & Marburg

So many perspectives; students from all disciplines are encouraged to participate in this course.

Natural Disasters	Biological Mechanisms	Personal Tragedy
World Geography & Globalization	The Spread of Diseases	Economic Impact of EIDs
History of Bioterrorism	Agents of Bioterrorism	The Financial Markets
Laws & Rights: Quarantines	BioSafety Levels & Facilities	WHO, CDC, and Other Agencies
Ecology of Agents and Vectors	Health & Human Services	Are You Prepared?

HON/BIO 215 Course Description

Bioterrorism & Emerging Infectious Diseases - 3 credits

Ebola, anthrax, Lyme disease, SARS, polio, smallpox, the Plague, mad cow disease and West Nile virus continue to attract the attention of the human species. These are either emerging infectious diseases (EIDs) or the agents responsible for the diseases that plague our kind. In some cases, EIDs and bioterrorism go hand in hand. This course will cover the biological mechanisms of a diversity of diseases, the ecology of disease agents and vectors, the impact of globalization on the spread of EIDs, agencies (*e.g.*, CDC) involved in fighting the spread of diseases, bioterrorism in the past, present and future, and the socioeconomic impact of EIDs and bioterrorism. Lectures, debates, book discussions, films, and projects will be integral parts of this course. Examinations are included to allow you to test your grasp of the subject matter. Prerequisite: A genuine interest in learning more about emerging infectious diseases and bioterrorism; students from all disciplines are encouraged to participate in this course.

Website: http://www2.cedarcrest.edu/academic/bio/hale/bioT_EID.htm

Instructor: Dr. Alan Hale [SC134; abhale@cedarcrest.edu; x3510]

Office Hours: Stop by during open times [[my schedule](#)] or send me an email. If my door is closed, leave me a note. Setting up an appointment is also an option. Be sure to suggest a possible time.

Prerequisites: A genuine interest in learning more about emerging infectious diseases and bioterrorism; students from all disciplines are encouraged to participate in this course.

Class Time/Location: MWF 8 AM, Science Center 139

Readings: There are four books that will be discussed during class; these readings will bring out the medical, political, social, legal, financial and personal aspects of emerging infectious diseases and bioterrorism. Please do not pass up the opportunity to see life through the eyes of others.

Johnson, S. 2006. *The Ghost Map: The Story of London's Most Terrifying Epidemic - and How It Changed Science, Cities, and the Modern World*. Riverhead Books. 299pp.

Peters, C.J. and M. Olshaker, 1997. *Virus Hunter: Thirty Years of Battling Hot Viruses Around the World*. Anchor Books. 323pp.

Barry, J.M., 2004 (or more recently). *The Great Influenza: The Epic Story of the Deadliest Plague in History*. Penguin Books. 546pp.

Shilts, R., 1988. *And the Band Played On: Politics, People and the AIDS Epidemic*. St. Martin's Press. 630pp.

Helpful and Informative Links

<u>Lecture Schedule</u>	<u>Readings</u>	<u>Book Discussions</u>	<u>Debates</u>
<u>Debate Teams</u>	<u>Course Project</u>	<u>Presentation Schedule & Project Summaries</u>	<u>Learning Outcomes & Assessment</u>
<u>Terminology</u>	<u>Online Sources & Grades</u>	<u>Recommended Films</u>	<u>Current & Past Classes</u>