

Emerging Infectious Diseases: A Global Challenge

Course Syllabus

Course Information

Assessment

Policies

Course Expectations

Course Information

Course Description

In 1967 the United States Surgeon General announced that it was "time to close the book on infectious disease". Antibiotics had been introduced in the 1940's, there was an ever-lengthening list of diseases for which immunization was available, and many world health officials imagined a future free of infectious diseases. Yet, as we enter the second decade of the twenty-first century, infectious diseases are still the leading cause of death in the world. Why? How do we begin to understand the emergence of AIDS, Ebola virus, Lyme disease or Hantavirus? How can we explain the worldwide reemergence of tuberculosis, a disease that was nearly relegated to history books?

In this online course we will seek answers as we study the nature of microbes and the complex, often interrelated factors that contribute to their ability to challenge us even as we pit our science and technologies against them. We will examine such factors as population growth, urbanization, ecological disruption, human migration, antibiotic misuse, and the impact that policy decisions have on the control and re-emergence of diseases. In 1996 the Director-General of the World Health Organization announced, "We stand on the brink of a global crisis in infectious diseases." Clearly the case on infectious disease remains wide open, and this class aims to examine the evidence.

Course Learning Goals

After completing this course, you will be able to:

- Discuss the global challenge of emerging infectious diseases by drawing upon course materials, assigned readings and independent research
- Identify at least one infectious disease emerging somewhere in the world
- Describe at least three contributing factors to its emergence.

Course Competencies

In this course, you will develop the following competencies:

Competence	Competence Statement and Criteria
H5	Can analyze issues and problems from a global perspective
S3B	Can assess health care practices based on an understanding of the biological and social factors that contribute to definitions of health
S2D	Can describe, categorize, and analyze the interactions and exchanges between living organisms and their physical environments

Choice of Assignments

At the end of most units, there will be an assignment. Also, some units contain online discussions, so you can share knowledge and communicate with your virtual classmates. If you are taking two competencies, you need to complete Assignment 9.1 (the research paper) **plus your choice of any 3 assignments** from the remaining nine.

Course Resources

There is **NO REQUIRED** textbook for this course.

Books: A sampling of potential resources available in libraries or from online bookstores.

Pendergrast, Mark. (2010). *Inside the Outbreaks: The Elite Medical Detectives of the Epidemic Intelligence Service*

Diamond, Jared M. (1997). *Guns, Germs, and Steel: The Fates of Human Societies*

Drexler, Madeline. (2003). *Secret Agents: The Menace of Emerging Infections*. Penguin, USA.

Eberhart-Phillips, Jason. *Outbreak alert: Responding to the Increasing Threat of Infectious Diseases*

Garrett, Laurie and Wolinsky, Steven M. (2001). *Betrayal of Trust: The Collapse of Global Public Health*. Hyperion

Garrett, Laurie. (1995). *The Coming Plague: Newly Emerging Diseases in a World Out of Balance*. New York, NY: Penguin.

Henig, Robin. (1993). *A Dancing Matrix*. New York, NY: Knopf discusses emergent disease in terms of the social, environmental & economic forces that direct their progression)

Karlen, Arno. (1996). *Man and Microbes: Disease and Plagues in History and Modern Times*. Touchstone Books.

Kolata, Gina. (1999). *Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused It*. New York: Farrar, Straus and Giroux.

Miller, Judith. (2001). *Germs: Biological Weapons and America's Secret War*. NY: Simon & Schuster

Oldstone, Michael. (1998). *Viruses, Plagues, and History*. New York, NY; Oxford: Oxford University Press.

Peters, C.J. & Otshaker. (1998). *Virus Hunter: Thirty Years of Battling Hot Viruses*. New York, NY: Doubleday.

Regis, Ed. (1996). *Virus Ground Zero: Stalking the Killer Viruses With the Centers for Disease Control*. New York, NY: Pocket Books.

Rhodes, Richard. (1997). *Deadly Feasts: Tracking the Secrets of a Terrifying New Plague*. New York, NY: Simon & Schuster.

Ryan, Frank. (1993). *The Forgotten Plague: How the Battle Against Tuberculosis Was Won – and Lost*. Boston, MA: Little Brown.

Ryan, Frank. (1997). *Virus X: Tracking the New Killer Plagues Out of the Present and Into the Future*. Boston, MA: Little Brown.

Thompson, Kimberly M, et. Al. (2003). *Overkill: How Our Nation's Abuse of Antibiotics and Other Germ Killers is Hurting Your Health and What You Can Do About It*. Rhodale Press.

Tucker, Jonathon B. (2001). *Scourge: the Once and Future Threat of Smallpox*. New York, NY: Atlantic Monthly Press.

Wills, Christopher. (1997). *Yellow Fever Black Goddess: The Coevolution of People and Plagues*. Reading MA: Addison-Wesley Pub.

General Web Sites:

<http://www.sciam.com>

<http://www.cdc.gov>

http://www.cdc.gov/ncidod/id_links.htm (excellent resource links)

<http://www.who.int/csr/don/en/>

<http://www.worldwatch.org>

Assigned Web Sites:

Modules 3 through 10 (week 3 through end)

- Factors in the Emergence of Infectious Diseases
<http://www.cdc.gov/ncidod/EID/vol1no1/morse.htm>
- Emerging and Re-Emerging Infectious Diseases: A Global Problem
<http://www.actionbioscience.org/newfrontiers/morse.html#primer>
- Emerging and Re-Emerging Infectious Diseases: The Perpetual Challenge
<http://www.milbank.org/reports/0601fauci/0601fauci.html>

Module 5 (week 5)

- Travelers' Health
<http://www.cdc.gov/travel/>
<http://www.bt.cdc.gov/>
<http://www.whitehouse.gov/administration/eop/ostp/nstc/biosecurity>
<http://www.MayoClinic.com>

Module 7 (week 7)

- Global Warming and Infectious Disease
<http://www.bvsde.paho.org/bvsacd/cd68/AKhasnis.pdf>
- Global Climate Change and Infectious Disease
<http://www.nejm.org/doi/full/10.1056/NEJMp0912931>

Module 9 (week 9)

- The WHO Antimicrobial Resistance Fact Sheet
<http://www.who.int/mediacentre/factsheets/fs194/en/>
- CDC Antimicrobial Resistance page
<http://www.cdc.gov/drugresistance/index.html>
- The Guinea Worm Eradication Effort: Lessons for the Future
<http://www.cdc.gov/ncidod/eid/vol4no3/hopkins.htm>
- Cross Learning from Guinea Worm Eradication to Malaria
<http://www.theglobalhealthblog.org/2010/05/24/cross-learning-from-guinea-worm-eradication-to-malaria-programs/>

Course Grading Scale

A = 95 to 100	A- = 91 to 94	B+ = 88 to 90
B = 85 to 87	B- = 81 to 84	C+ = 77 to 80
C = 73 to 76	C- = 69 to 72	D+ = 65 to 68
D = 61 to 64	F = 60 or below	INC

For SNL courses taken for Pass/Fail, a “Pass” represents a grade of “A” for purposes of financial aid and employer reimbursement.

Students wishing to declare a Pass/Fail option must do so before the end of the 2nd week of the quarter.

Course Structure

This course consists of 10 modules. The estimated time to complete each module is 1 week.

To see course due dates, click on the Checklist link on the top navigation bar. This page contains module-specific checklists and due dates for the work due in the course.

[Back to Top](#)

Assessment

Course Grading Criteria

If you are taking one competency, you will do Assignment 9.1 only (90% of grade) and participate in the weekly discussions (10% of grade)

If you are taking two competencies, you will do Assignment 9.1 (60% of grade) *plus* your choice of any three assignments (at 10% of grade each) and participate in the weekly discussions

For two competencies:

Assignment 9.1 (Research Paper)	60%
First chosen assignment	10%
Second chosen assignment	10%
Third chosen assignment	10%
Discussion participation	10%
Total	100%

General Criteria for Evaluation of Performance

1. Demonstration of competence
2. Accuracy and completeness
3. Clear language and easy-to-follow reasoning
4. Timeliness of submissions
5. Following of prescribed formats
6. Thoughtfulness, reflection, and integration of theory and experience
7. Note: you are graded for participation in the forums, not on your opinions.

Grading Policies and Practices

To complete the course, you must complete each of the assignments as described in the course and submit them to your instructor by the assigned deadline. In addition, you must participate in the course discussion forum by responding to all instructor requests and by interacting with fellow classmates as necessary.

Points are deducted for late work.

General Assessment Criteria for All Writing Assignments

All writing assignments are expected to conform to basic college-level standards of mechanics and presentation.

Consider visiting the Writing Center to discuss your assignments for this course or any others. You may schedule appointments (30 or 50 minutes) on an as-needed or weekly basis, scheduling up to 3 hours worth of appointments per week. Online services include Feedback-by-Email and IM conferencing (with or without a webcam). All writing center services are free.

Writing Center tutors are specially selected and trained graduate and undergraduate students who can help you at almost any stage of your writing. They will not do your work for you, but they can help you focus and develop your ideas, review your drafts, and polish your writing. They can answer questions about grammar, mechanics, different kinds of writing styles, and documentation formats. They also can answer questions and provide feedback online, through IM/webcam chats and email.

Obviously, the tutors won't necessarily be familiar with every class or subject, but they are able to provide valuable help from the perspective of an interested and careful reader as well as a serious and experienced student-writer.

Schedule your appointments with enough time to think about and use the feedback you'll receive.

Quick Links:

- To schedule Real-time conversations with IM and/or webcam:
<http://condor.depaul.edu/writing/appointments/im.html>
- To request Feedback by Email:
<http://condor.depaul.edu/writing/appointments/fbe.html>
- For more information, visit:
<http://condor.depaul.edu/writing/>

[Back to Top](#)

Online Discussion

Discussion Boards

Discussion Boards are a forum for discussion and sharing information among students. Your instructor may create one or more discussion boards related to the topics you are studying each week.

At the beginning of the quarter, your instructor will set up two discussion boards. These two discussions will help you and your classmates get off to an immediate start on the course, by providing conversational spaces for necessary, ongoing social and administrative activities. These discussions are:

- Introductions
- Course Q&A

The Q&A discussion is where the management and administrative tasks of the course are conducted, and where you can ask 'process' questions and receive answers. Your instructor will add additional discussion boards as you move through the modules.

Online Discussion Instructions

You are expected to actively participate in informal online discussions with your classmates and the instructor when they are required by the syllabus. "Active participation" means that you read and contribute to the online discussions. This discussion is "informal" in the sense that it is meant to encourage interested discussion. You are expected to follow accepted standards of English spelling, grammar, and usage, although you will not be assessed for these particular characteristics when you are on

the discussion board. These discussions are a place for you to exchange your reflections with the others in the class about what you are learning.

The discussions will be organized into forums around the particular assignment you are studying each week. You may be asked by the instructor to take leadership in a certain group for a certain time of the course. Further instructions you will then receive from the instructor. There is no grading in the discussion forum, but participation is required for all student. The majority of the forums will be open only for one week.

You should contribute your responses to the particular assignment for that particular discussion heading which will be posted. Directions are provided with each assignment. They must be followed according to the due dates given. Principles of good practice for participating in online discussions should be adhered to when it comes to responding to the contributions of other people in the class. These "principles" will be provided in the Online Participation Guidelines section in this study guide.

Online Participation Guidelines

The following guidelines may encourage you to be active and critical in your participation, only together we will make this course a significant and pleasant learning experience:

- Participation is essential, so please connect to the course every day or at least every second day.
- Post your main comment in the first part of the week, in the second part of the week post comments to the other students.
- Discuss critically, give support to your peers, provide own ideas and experiences, challenge the ideas of others or just make a comment that you read the posting.
- The role of the instructor is to facilitate your activity, to make it easy for you to interact, to promote significant discussion, to give feed back on your postings and offer help where needed.
- This is not an independent study course, but a paced online group learning experience. This study guide indicates 6 to 11 hours per week of your time should be spent on this course for each of ten weeks.
- Please accept the challenge to work with others, to construct knowledge in negotiation with others. Working individually on the assignments and just posting them might not lead to significant knowledge and skills.

Some difficulties at the beginning of an online course are quite normal; solving them is part of every distance learning experience.

[Back to Top](#)

Policies

Academic Integrity

DePaul University is a learning community that fosters the pursuit of knowledge and the transmission of ideas within a context that emphasizes a sense of responsibility for oneself, for others and for society at large. Violations of academic integrity, in any of their forms, are, therefore, detrimental to the values of DePaul, to the students' own development as responsible members of society, and to the pursuit of knowledge and the transmission of ideas.

Violations include but are not limited to the following categories: cheating; plagiarism; fabrication; falsification or sabotage of research data; destruction or misuse of the university's academic resources; alteration or falsification of academic records; and academic misconduct. Conduct that is punishable under the Academic Integrity Policy could result in additional disciplinary actions by other university officials and possible civil or criminal prosecution. Please refer to your Student Handbook or visit <http://studentaffairs.depaul.edu/homehandbook.html> for further details.

Plagiarism:

Plagiarism is a major form of academic dishonesty involving the presentation of the work

of another as one's own. Plagiarism includes but is not limited to the following:

- The direct copying of any source, such as written and verbal material, computer files, audio disks, video programs or musical scores, whether published or unpublished, in whole or part, without proper acknowledgement that it is someone else's.
- Copying of any source in whole or part with only minor changes in wording or syntax, even with acknowledgement.
- Submitting as one's own work a report, examination paper, computer file, lab report or other assignment that has been prepared by someone else. This includes research papers purchased from any other person or agency.
- The paraphrasing of another's work or ideas without proper acknowledgement.

Plagiarism, like other forms of academic dishonesty, is always a serious matter. If a instructor finds that a student has plagiarized, the appropriate penalty is at the instructor's discretion.

[Back to Top](#)

Disability Accommodations

Reasonable accommodations will be provided for students with disabilities on an individualized and flexible basis. The Office of Students with Disabilities (OSD) determines appropriate accommodations through consultation with the student. For certain learning disabilities and/or attention deficit disorders, the Productive Learning Strategies Program (PLuS) determines the appropriate accommodations. See the instructor for more information or call OSD at 773-325-7290 (phone) or 773-325-7296 (TTY); or call PLuS at 773-325-1677.

Incomplete Grades

The intent of the Incomplete grade is to allow students extra time to complete their final assignments. This need arises because, in the closing weeks of the course, they have an event of significant magnitude that adversely affects their ability to complete the course, e.g. serious illness, death in the family, overseas deployment, or natural disaster.

You must request an incomplete grade in writing two weeks before the end of the quarter. Incomplete grades will be considered only after you have satisfactorily completed at least 75 percent of the coursework, and you have such an unexpected, uncontrollable event that prevents you from completing your course. Do not assume that you will qualify for an incomplete. Students who are failing the course at the point where they request an incomplete will not receive one, nor will they be granted after the end of the quarter. Incomplete grades are given at the discretion of the instructor.

If you do receive permission from the instructor to take an incomplete in the course, you will be required to complete a contract with the instructor, specifying how you will finish the missing work within the next two quarters (excluding summer). Incompletes not finished by the end of the second quarter (excluding summer) will automatically become an F grade on your transcript.

Instructors may not change incomplete grades after the end of the grace period without the permission of a college-based Exceptions Committee.

NOTE: In the case of a student who has applied for graduation and who has been approved for an Incomplete in his or her final term, the incomplete must be resolved within the four week grace period before final degree certification.

[Back to Top](#)

Protection of Human Subjects

For more information see: <http://research.depaul.edu/>

Demonstrating the acquisition of competencies in this course can involve "interactions"—interviewing and or observing other people—discussing those interviews or observations with other class members and writing them up in one or more final report(s). As such,

these activities qualify as "research" with "human subjects" and are subject to University and Federal guidelines. Because it takes place in the context of this course, your research is exempt from approval by the School for New Learning's Local Review Board only under the following conditions:

- The information you collect is EXCLUSIVELY for the purpose of classroom discussion and will NOT be used after the term is over. If there is any possibility that you will EVER use it in further research or for publication, you must obtain approval from the Local Review Board before you begin.
- You assess and ensure that no "harm"—physical, mental, or social—does or could result from either your interviews and/or observations or your discussion and/or reports.
- The privacy and confidentiality of those that you interview or observe must be protected. Unless you receive specific permission, in writing, from the person(s) you interview or observe, please change their names, and make sure that their identity cannot be readily ascertained from the information you provide.
- If you want to use real names and relationships, they must sign an "informed consent" document. For information on creating an "informed consent document" see, for example, <http://www.research.umn.edu/consent>

[Back to Top](#)

Course Expectations

Time Management and Attendance

SNL's online courses are not self-paced and require a regular time commitment EACH week throughout the quarter.

You are required to log in to your course at least four times a week so that you can participate in the ongoing course discussions.

Online courses are no less time consuming than "face to face" courses. You will have to dedicate some time every day or at least every second day to your studies. A typical four credit hour "face to face" course at SNL involves three hours of classroom meeting per week, plus at least three to six hours of study and homework per week.

This course will require at least the same time commitment, but your learning activities will be spread out through the week. If you have any problems with your technology, or if you need to improve your reading or writing skills, it may take even longer.

The instructor should be notified if your life events do not allow you to participate in the course and the online discussions for more than one week. This is particularly important when there are group discussions or you are working as part of a team.

If you find yourself getting behind, please contact the instructor immediately.

Your Instructor's Role

Your instructor's role in this course is that of a discussion facilitator and learning advisor. It is not their responsibility to make sure you log in regularly and submit your assignments. As instructor, s/he will read all postings to the general discussion forums on a daily basis but may not choose to respond to each posting. You will receive feedback to assignments.

The instructor may choose to designate "office hours" when s/he will be online and available and will immediately respond to questions. Depending on the instructor, this response may be by e-mail, instant messenger or telephone. Otherwise, you will generally receive a response to emailed or posted queries within 48 hours.

Your Role as a Student

As an online student, you will be taking a proactive approach to your learning. As the course instructor's role is that of a learning guide, your role is that of the leader in your own learning.

You will be managing your own time so that you can complete the readings, activities and assignments for the course, and you will also be expected to take a more active role in peer learning.

Credits

This course was designed and produced by Toby Glickn, Siobhán NíBhuachalla and staff at SNL Online of the School for New Learning of DePaul University.

©2010 School for New Learning, DePaul University. All Rights Reserved by SNL during contractual interval with the Author.

Printed in the USA.

[Back to Top](#)