

History of Disease CTY Course Syllabus

Reading:

Giblin, Jane Cross. When Plague Strikes: Black Death, Smallpox and AIDS. New York: Harper Trophy. 1997.
 Karlen, Arno. Man and Microbes. New York: Simon & Shuster. 1996.
 Johnson, Steve. The Ghost Map. New York: Riverhead books. 2006.

Excerpts from:

Amelang, James. A Journal of the Plague Year: The Diary of the Barcelona Tanner Miquel Parets. Oxford: Oxford University Press. 1991.
 McNeil, William H. Plagues and Peoples. New York: Doubleday. 1989.
 Sontag, Susan. Illness as a Metaphor. New York.: Picador. 1978.

Date	Session	Concepts	Activities
July 28, 2008 Students Arrive			
July 29, 2008 Introduction	Morning	<ul style="list-style-type: none"> ▪ Introduction/Rules ▪ Respect ▪ Asking challenging questions is more important than knowing the answers ▪ Challenge yourself and work toward your personal goals rather than comparing yourself to others ▪ Allow other people time to think before responding ▪ Focus on intellectual stimulation rather than grades ▪ What does the concept of disease mean? history? ▪ What do we define as a disease? 	1) Introduction 2) Lecture 3) Ice breakers 4) What is disease? What is history? 5) How do we conceptualize disease? 6) Name all the diseases you can think of activity 7) The etymology of disease names 8) Read in group of 4: <i>Separating Friend from Foe Among the Body's Invaders</i> 9) Group discussion, then class discuss 10) Timeline group activity 11) Divide into groups of 6, read 12) <i>Possessed; what can a rare disorder tell us about human behavior?</i> or <i>The Itch</i> . Discuss with group and then present to class. Audio: <i>The family that couldn't sleep</i> : (http://www.npr.org/templates/story/story.php?storyId=6503414)
	Afternoon	<ul style="list-style-type: none"> ▪ Pre-assessment ▪ Reading and essay for tomorrow 	Test Reading: MM: Chapter 2, 3 and questions <i>Evolutionary, historical and political economic perspectives on health and disease, Armelogos</i> Essay on curiosities, goals and hopes for the course

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July 30, 2008 Ancient Peoples and Disease (TB/Leprosy)	Morning	<ul style="list-style-type: none"> ▪ Hunters and gatherers vs. populations that cultivate food ▪ Epidemiological transitions ▪ Archeological remains that show disease patterns ▪ TB/mummies ▪ Biology and relationship between TB and Leprosy ▪ Latent vs. infectious TB 	1) Continue reading and questions from above 2) In groups of 2, create a table where you compare and contrast the disadvantage and advantages of being a hunter/gatherer. Which would you choose? 3) Debate in groups of six : my way is better (hunters vs. gatherers). Which better in terms of long time survival and good health? 4) Wrap-up of hunters and gatherers and vocabulary
	Afternoon	<ul style="list-style-type: none"> ▪ Basic Biology of TB and Leprosy, (statistics, transmission, diagnosis, symptoms, history) 	5) Lecture on TB and Leprosy 6) Deadly Diseases activity research in computer lab – this became larger research project on an outbreak (In groups, research a particular country which has experienced infectious disease outbreaks. They will be looking at factors specific to the country and to the disease that made, or makes, it possible for it to thrive in that area) The plan is to create a poster explaining these factors and present to the group)
July 31, 2008 Greeks' conception of disease and medicine vs. our understanding of disease and medicine	Morning	<ul style="list-style-type: none"> ▪ Greek philosophy of illness ▪ Aristotle, Galen & Hippocrates ▪ Avicenna ▪ Hygeia and Asclepius ▪ What disease means in our culture and others ▪ How is our conception of disease different? 	1) Quiz 2) Review and lecture on Greek understanding of disease 3) Quick write: What would your life be like without modern medicine? Describe if myths or philosophy were used instead of modern evidence-based medicine. 4) Reading and discussion on <i>Bloodsuckers: How the leech made a comeback</i>
	Afternoon	<ul style="list-style-type: none"> ▪ Medieval medicine influenced by Greek teachings ▪ Leprosy and social exclusion ▪ Representation of cancer and TB in literature. 	4) Lecture on Microbes 5) Create own microbe poster activity Reading: WPS: Chapters 6, 8, 9 Movie: <i>Molokai</i>
August 1, 2008 Basic science and science history (Smallpox)	Morning	<ul style="list-style-type: none"> ▪ Scientific method ▪ Cell biology ▪ Germ theory ▪ Microbiology/disease etiology ▪ Host, agent, vector ▪ Modes of transmission ▪ Humeral Response/immunology ▪ Jenner and smallpox ▪ Inoculation and vaccination ▪ Vaccines and the eradication of smallpox 	1) Finish up activities from yesterday 2) <u>Illness as a Metaphor</u> , Sontag Essay: Compare and contrast societal response to leprosy to societal response to AIDS 3) Present own microbe 3) Lecture: Review Scientific concepts 4) Immunity Role Play: Antigen, macrophage, B cell, Helper T cell.

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	Afternoon	<ul style="list-style-type: none"> ▪ Immunity/humeral response ▪ Vaccination and how it works 	6) Follow up to Immunity Role Play and comparison to a country which has different systems for protection activity 7) Lecture on Small Pox 8) Rx for survival Smallpox clip and vaccines and how they work. 9) Work on outbreak project Turn in journal Reading WPS: 7,10
August 3, 2008	Evening	Review scientific concepts, including <ul style="list-style-type: none"> ▪ Criteria for definition of living thing ▪ Germ theory vs. spontaneous generation ▪ Natural selection, Darwin and Malthus ▪ Reading and radio program on malaria and miasma 	Lecture <i>The Mosquito Killer</i> This American Life: <i>Ladies and Germs</i> http://www.thislife.org/Radio_Episode.aspx?episode=112 Reading GM: pgs 2-22
August 4, 2008 Malaria and Miasma Disease blocks development? (Malaria and Arthropod-borne diseases)	Morning	<ul style="list-style-type: none"> ▪ Interpreting scientific articles ▪ Famous scientists: Koch, Pasteur, Morgan, Watson, Crick, Darwin, Ludwig, ▪ Natural selection ▪ The theory of life ▪ Miasma theory of disease ▪ Malaria – origin, areas of prevalence, ▪ Other arthropod-spread illnesses: West Nile, Yellow Fever. Etc. ▪ DDT and malaria, weighing the risk. Which is worse? ▪ Yellow fever in the U.S. during colonial times 	1) Scientist research and presentation/chain activity (need computer time) 2) In groups of 3 interpret scientific articles and present the article to the class. 3) Natural selection activity 4) Don't drink the water activity
	Afternoon	<ul style="list-style-type: none"> ▪ Epidemiological methodology ▪ Independent research on epidemics 	5) Lecture: Malaria and Miasma 6) Miasma vs. germ theory research and debate (can't use evidence from after 1850) or debate on malaria and DDT or malaria blocks development 8) Work on projects GM: 113-136 (miasma) MM: Chapter 4 and 5
August 5, 2008 Plague through the ages	Morning	<ul style="list-style-type: none"> ▪ Finish up malaria, ethical issues related to DDT usage ▪ Justinian plague during Roman times and the fall of the Roman empire ▪ Black Death in medieval Europe, influencing faith, feudalism, and church control. ▪ Life during the time of plague epidemics 	1) Debate on Malaria and DDT (after finishing up reading and Rx for Survival) 2) Lecture: Plague 3) Reading and discussion: <u>A Journal of a plague year</u>

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	Afternoon	<ul style="list-style-type: none"> ▪ The experience of the plague 	1) Create skit in groups of 4 on what it was like to live in Spain during the plague 2) Computer time for Outbreak projects 3) Reading: <i>A Better Place: what if the Muslim armies hadn't stopped at the French border?</i> <u>Medieval Iberia: Market Regulations in Muslim Spain</u> MM: Chapter 6
August 6, 2008 Spanish history and disease Golden Age of Spanish history: Multiculturalism and Moorish influences on medicine. Old world, new world: Cortez, smallpox, and the Amerindian populations (Smallpox and syphilis)	Morning	<ul style="list-style-type: none"> ▪ Finish plague/life during plague epidemics ▪ Muslim Spain ▪ Historical hygiene ▪ Epidemiological Imperialism and the Columbian exchange 	1) Quiz 2) Present skits 3) Lecture: Moorish Spain 4) Read and Discuss <i>Market Regulations</i> Reading: MM: Ch 7 WPS: Ch. 7
	Afternoon	<ul style="list-style-type: none"> ▪ Health and hygiene in Moorish Spain 	5) Create promotional poster with recommendation for urban hygiene and sanitation practices in Medieval Spain 6) Essay: write a letter to the Pope Reading: GM: pgs 26-55 and 139-160 WPS: Chapter 1-5
August 7, 2008		<ul style="list-style-type: none"> ▪ Epidemiological Imperialism and the Columbian exchange ▪ Patterns of disease spread ▪ Geospatial analysis of disease patterns 	1) Lecture on conquest, colonialism and the spread of disease 2) Finish Essay assignment 3) Mapping origin of disease activity on yellow fever, syphilis, smallpox and the plague
			4) Presentations on outbreak 5) Catch up on reading
August 8, 2008 John Snow and the epidemiology of Cholera	Morning	<ul style="list-style-type: none"> ▪ Principles of epidemiology ▪ Working up an I.D. epidemic: Case definitions, epidemic curve differential risk, number of cases vs rate, frequency/statistics, incubation period, prevention and control of I.D. ▪ Urban sanitation reform ▪ Water-borne diseases 	1) Lecture: water borne disease/epi 2) Tropical water-borne disease case study 3) Reading and discussion on J. Snow 4) Make up five questions for jeopardy 5) presentations 6) Life in the time of Cholera activity (students learn about the way the 1832 cholera epidemic in New York affected urban life and reflected issues such as immigration and social class in the growing city. They then take part in a collaborative writing exercise in which they have a "conversation on paper" about various documents related to urban life during the Industrial Revolution)

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	Afternoon		7) John Snow Case study group activity – mapping differential risk 8) Reading: Paul Farmer, Mckoewn, Porter, social medicine <i>Plagues of New York: How epidemics helped shape the modern metropolis.</i> <u>Typhoid Mary</u> – just ended up summarizing in lecture, and using to research for debate
August 10, 2008	Evening		Catch up on reading Assign final project
August 11, 2008 Socioeconomic factors and disease Sanitation and urban reform movements (Nutritional Deficiency Diseases & polio)	Morning	<ul style="list-style-type: none"> ▪ Malthus and McKoewn ▪ Social reform movements ▪ Social ills and disease in literature (Dickens, Camus) ▪ Typhoid Mary ▪ FDR and polio ▪ Sanitation/hygiene ▪ Structural violence ▪ Socioeconomic roots of disease 	1) Lecture 2) Discuss Mckeown- determinants of health-impact of public health on mortality vs modern medicine/technology. 3) Essay arguing for or against socioeconomic improvement vs medical advancement as most important part of modern defeat of infectious disease 4) Typhoid Mary debate: human rights vs. public good (could use Andrew Speaker instead) 6) Rx for survival, the campaign to eradicate polio
	Afternoon		Work on and turn in rough draft of epidemic project
August 12, 2008 Influenza yesterday and today	Morning	<ul style="list-style-type: none"> ▪ Influenza 1918 ▪ Avian flu ▪ Modes of transmission ▪ Susceptibility and virulence ▪ War and infectious disease ▪ Military medicine 	1) Lecture 2) Make a board game related to the history of diseases. Include quarantine, risk factors, vaccination, drugs as parts of the game. 3) For the Birds activity master chart that displays the origins, transmission, symptoms, and socio-historical impact of each virus.
	Afternoon	<ul style="list-style-type: none"> ▪ Influenza ▪ Individual research on the history of disease 	Reading: WPS: Ch. 11-17 Work on historical epi projects
August 13, 2008 Contemporary history and disease - emerging infections (HIV/AIDS, Ebola, Hanta, West Nile, Rift Valley Fever, prion diseases, SARS)	Morning	<ul style="list-style-type: none"> ▪ Eradication efforts vs. current perspectives on infectious disease ▪ Origin of AIDS ▪ Zoonosis ▪ Factors associated with emergence ▪ Antibiotic resistance ▪ Media representation of SARS/Avian Flu vs. actual burden of disease 	1) Lecture 2) Prairie Dog Prognosis activity 3) (students discuss the transmission of diseases from exotic pets to humans. They then research different aspects of particular zoonotic diseases from the perspectives of the animal vector, the parasite, the infected human, the carrier human, and the investigating doctor and compile books that represent various angles on the diseases) 4) Draw AIDS quilt 5) Rx for Survival Excerpts on AIDS

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	Afternoon	<ul style="list-style-type: none"> ▪ Emerging infections in Africa and the Carribean ▪ Societal anxiety and consequences of outbreaks 	Work on historical epi presentations Movie: <i>Outbreak!</i> Reading: <i>Social inequalities and emerging infectious disease</i> (Farmer, Chapter 2, <u>Infections and Inequalities</u>)
August 14, 2008 Outlier diseases: rare and unusual, mental illness, chronic illnesses, genetic diseases, occupational and environmental diseases	Morning	<ul style="list-style-type: none"> ▪ The outbreak narrative and anxiety ▪ The rise of chronic illness in the 20th century, causes and consequences ▪ Global lifestyles, consumerism, and chronic disease ▪ Genetic and environmental disease ▪ Our conception of disease relative to antecedents. 	1) Quiz 2) Viral replication calculations 3) Break the chain activity 4) Outbreak discussion and activity 5) (write a public service announcement, pretending you work for the CDC during the Motabo virus outbreak) 6) Timeline activity
	Afternoon	<ul style="list-style-type: none"> ▪ Outlier diseases 	Work on presentations Reading: Break into groups of three, and read either: <i>Stress Test, The Worm Turns, or Kuru in the 21st century-an acquired human prion disease with very long incubation periods</i>
August 15, 2008 Epidemic Powerpoints and Presentations	Morning	<ul style="list-style-type: none"> ▪ Review what we have learned from the course 	1) Evaluations 2) Presentations 3) poison picnic 4) create your own case study 5) fling the teacher/Beat da bomb online game 6) Reading
	Afternoon		Jeopardy and go to other classrooms to see their work