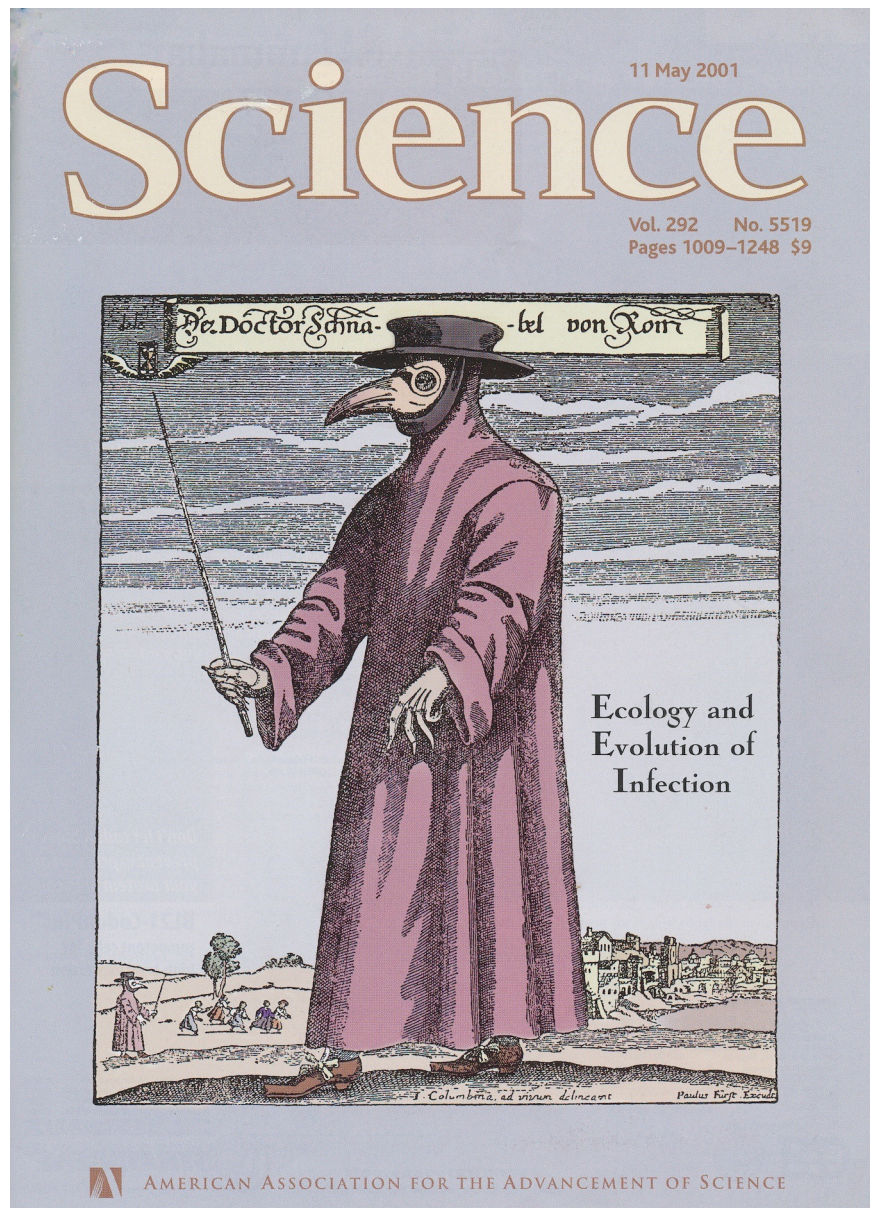


HIS 3495/ZOO 4926

THE HISTORY AND EVOLUTION OF INFECTIOUS DISEASE

"It's not nice to fool Mother Nature" – Chiffon Commercial, 1970's



HIS 3495/ZOO 4926

THE HISTORY AND EVOLUTION OF INFECTIOUS DISEASE Syllabus

Prof. Vassiliki Betty Smocovitis
617 Carr Hall

Fall 2020

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Class Schedule: Tuesdays periods 10-E1 (5:10-8:10 pm)

Office Hours: By Appointment on Skype (bsmocovi) or Facetime

(bsmocovi@gmail.com)

http://people.biology.ufl.edu/bsmocovi/Bettys_Website/Welcome.html

COURSE DESCRIPTION:

This course examines the cultural history of infectious disease from its earliest recorded history to the present. It draws on a broad range of interdisciplinary perspectives including sociology, anthropology, ecology and evolutionary biology, the history of microbiology and public health, as well as more familiar medical perspectives to explore the range of meanings implicit in the phrase “infectious disease.” The course concentrates on historically well-documented examples that include Hansen’s disease, the Black Death, smallpox, yellow fever, cholera, influenza, tuberculosis, venereal diseases, polio, AIDS, and SARS among others to understand the dynamic nature of infectious disease and to explore the social aspects of infectious disease. The goals of the course are 1. to recognize the historical and sociocultural dynamics of infectious disease; 2. to recognize the evolutionary and ecological dimensions of infectious disease; 3. to recognize the operations of race, class, gender and the workings of geopolitical power in infectious disease; 4. to appreciate the ways in which infectious disease has stirred the human imagination. The course closes with a discussion of long-term and short-term solutions to the problems associated with infectious disease. Given the COVID-19 crisis, its relevancy needs no prolonged discussion. The course will be offered as a synchronous on-line lecture course that employs Zoom meetings times. The course will be divided into two unequal halves, the first devoted to lecture and the second to discussion of lecture and reading material with specific reference to the COVID-19 crisis.

REQUIRED TEXTS:

1. J. Hays, *Burdens of Disease: Epidemics and Human Response in Western History*
2. Norman Cantor, *In the Wake of the Plague: The Black Death and the World it Made*
3. David Oshinsky, *Polio: An American Story*
4. Jacques Pepin, *The Origins of AIDS*
5. Randolph Nesse and George C. Williams, *Why We Get Sick. The New Science of Darwinian Medicine.*
6. Additional Readings Available on Canvas as PDF Files.*

*The course will be employing Canvas for its learning platform. Syllabi, readings, announcements and matters pertaining to this course will be found there along with invitations from Zoom meetings for lectures and discussion. We will be recording lectures and discussions only for student use (recordings will be deleted when course is over; please see statement on COVID-19 university policy below).

EVALUATION:

Course evaluation follows the organization of the course that is based on a combination of lecture/discussion. It includes two mid-term examinations worth 20% each for a total of 40% that will be administered by Honorlock over a 24 hour period, and one final “take home” essay exam worth 30% that will be submitted through Canvas. Students are expected to attend all lectures and to complete all reading assignments in time for class so as to keep up with the materials, but also to enable discussion. Discussion will be facilitated by the submission of five two-page reaction/response papers due the day before class discussion out of a possible eight topics (see guidelines and grading policy below). These are worth 20% of the grade in total. The final 10% of the grade will be based on class participation including attendance. Please note: the readings are meant to supplement the lectures as well as stimulate class discussion. Students are expected to do all the readings assigned but will not be examined directly from these books for the mid-term examinations. The final take-home essay exam will be based on lectures *and all the readings assigned because it is cumulative and integrative in nature*. Students will have choice between questions for the final-take home essay exam. Study questions will be distributed in advance of the due date (see schedule below). The mid-term examination format includes short answers, fill in the blanks, and brief essays. The final take home examination will require essay responses for a total of up to 3,000 words (that is two answers of 1,500 words). For an explanation of UF grade scales please consult the following: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

TENTATIVE SCHEDULE OF TOPICS, READINGS, ASSIGNMENTS AND EXAMINATIONS:

Week One, Tuesday September 1: Syllabus Explanation and Class Introduction.
The Magnitude of the Problem. Emerging Pathogens and the Coming Plague.

Week Two, Tuesday September 8:

Disease as Old as Civilization. Early Disease Theory. Plagues in Antiquity.

Stigmatizing Illnesses: Leprosy.

Readings: J. N. Hays, *Burdens of Disease*, Chapters 1 and 2; Thucydides, *The Peloponnesian War*, the “Great Plague of Athens” (pdf file).

Reaction paper 1 due Monday before class for discussion on Tuesday: “What are the parallels between COVID-19 and the description given of the “The Great Plague of Athens”

Week Three, Tuesday September 15: The Black Death.

Readings: J. N. Hays, *Burdens of Disease*, Chapter 3;

Norman Cantor, *In the Wake of the Plague*.

Reaction paper 2 due Monday before class for discussion on Tuesday: What unexpected consequences came out of the Black Death? Are there any parallels with COVID-19?

Week Four, Tuesday September 22: Diseases of Contact I.
Smallpox.

Reading: J. N. Hays, *Burdens of Disease*, Chapter 4.

Week Five, Tuesday September 29: Diseases of Contact II. Syphilis. The Intimate Plague. Venereal Disease and Gender.

Reading: Sheldon Watts, "The Secret Plague: Syphilis in West Europe and Asia, 1492-1965" (pdf file).

Reaction paper 3 due Monday before class for discussion on Tuesday: In what ways are particular groups and minorities singled out as carriers or spreaders of disease? What role does gender play in infectious disease? Travel? The age of "contact"?

Week Six, Tuesday October 6 : Diseases of Development: Yellow Fever and Malaria.

Reading: J. N. Hays, *Burdens of Disease*, Chapter 9; Sheldon Watts, "Yellow Fever, Malaria and Development: Atlantic Africa and the New World, 1647-1928" (pdf file).

Reaction paper 4 due Monday before class for discussion on Tuesday: What role has travel commerce played in the history of infectious disease? How did infectious disease shape slavery, or colonization?

Week Seven Mid-Term Examination Using Honorlock (24-Window)

Week Seven, Tuesday October 13 : The Ills of Modern Society. Diseases of Crowding and Urbanization I. Cholera in the British Empire, the United States and the World.

John Snow and Water Borne Illness.

Readings: J. N. Hays, *Burdens of Disease*, Chapter 7.

Week Eight, Tuesday October 20 : The Ills of Modern Society: II. The Romantic Disease: Tuberculosis.

Reading: J. N. Hays, *Burdens of Disease*, Chapter 8.

Week Nine, Tuesday October 27 : The Rise of Scientific Medicine. The Germ Theory of Disease. The War with Microbes and the Public Hygiene Movement.

Reading: J. N. Hays, *Burdens of Disease*, Chapters 5, 6, and 10.

Week Ten, Tuesday November 3 : Disease and War: Typhus. The Forgotten Diseases: The Spanish Influenza and Diphtheria.

Reading: Susan Kingsley Kent, *The Influenza Pandemic of 1918-1919*, Introduction (pdf).

Reaction paper 5 due Monday for discussion on Tuesday: Many commentators on COVID-19 have stressed the parallels between Spanish Influenza and COVID-19. To what extent is this true, and to what extent is this false?

Week Eleven, Tuesday November 17 : The Perils of Prosperity: Polio. The Politics of Vaccination. Antibiotics and the Apparent End to Epidemics.

Reading: J. N. Hays, *Burdens of Disease*, Chapter 11; David Oshinsky, *Polio: an American Story*

Reaction paper 6 due Monday for discussion Tuesday: How did polio catch epidemiologists by surprise? What lessons have we learned about vaccination campaigns that may shed light on the possible vaccine for COVID-19?

Week Twelve Mid-Term Examination Using Honorlock (24 hour window)

Week Twelve, Tuesday November 24 : The Shock of the New. Colonization, the Environment, and Understanding Emerging Pathogens. The Origins of AIDS.

Reading: J. N. Hays, *Burdens of Disease*, Chapter 12;
Jacques Pepin, *The Origins of AIDS*.

Reaction paper 7 due Monday for discussion Tuesday: What were the contributing elements to the emergence of the HIV virus? How does understanding the conditions that led to the emergence of HIV, and its spread to global populations help us understand COVID-19?

Week Thirteen, Tuesday December 1: Understanding Infectious Disease in Evolutionary and Ecological Terms.

Readings: Randolph Nesse and George C. Williams, *Why We Get Sick. The New Science of Darwinian Medicine*.

Reaction Paper 8 due Monday for discussion Tuesday: What if anything does evolution have to offer us in the way of understanding infectious disease?

Final Exam Study Questions Handed Out and Posted on Canvas

Week Fourteen, Tuesday December 8: Fact, Fiction, Fear and Fantasy. Designer Plagues and Bioterrorism. Pathogens and American Popular Culture! Summation: When Biology Meets History. Surviving COVID-19

Take Home Essay Exam Due Through Canvas Friday December 11th at 5 pm.

POLICIES AND UNIVERSITY ASSISTANCE:

Policy on On-line Class Meetings through Zoom

Class meets synchronously at 5:10 pm, the Zoom conference room opens at 5 pm so that students can enter early to make sure the technology is running before class. The Zoom conference room closes at 8 pm. This is a three-hour, three-credit course, but given the on-line format, the course will be divided into two uneven halves, the first devoted to lecture, and the second to discussion of either the lecture, assigned readings, or COVID-19 weekly events. Students are asked to mute their microphones,

but to turn on their cameras, unless they wish to temporarily turn them off. It is recommended that students enter a profile photograph so that if the camera is turned off, an image remains for identification purposes though this is not a requirement (see UF policy below on recording). Communication in class can be with the controls on Zoom or with a simple hand raise. Chat room conversations are encouraged during the lecture and discussions.

References/Recommendations

Performance in this class will be reflected in the final grade, which will also appear on the UF official transcripts. References may be requested if additional coursework, honors thesis or research is undertaken.

UF Counseling Services

- Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
 - UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
 - Career Resource Center, Reitz Union, 392-1601, career and job search services.
- Many students experience test anxiety and other stress related problems. “A Self Help Guide for Students” is available through the Counseling Center (301 Peabody Hall, 392-1575) and at their web site: <http://www.counsel.ufl.edu/>.

Honesty Policy

Please Note: Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded.

If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared.

As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

- All students registered at the University of Florida have agreed to comply with the following statement: “I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply

with this commitment may result in disciplinary action up to and including expulsion from the University.”

- In addition, on all work submitted for credit the following pledge is either required or implied: “*On my honor I have neither given nor received unauthorized aid in doing this assignment.*”
- If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: <http://www.dso.ufl.edu/judicial/procedures/academicguide.html>.

Accommodation for Students with Disabilities

- Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: <http://www.dso.ufl.edu/drp/services/>.
- It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

Software Use

All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

PLEASE NOTE: *Only approved electronic devices may be used in class. Approved electronic devices are laptop computers (when used to take notes or otherwise participate in classroom activities) and voice recording devices. Unapproved electronic devices include cell phones, video recorders, digital cameras and MP3 players.*

GUIDELINES FOR ASSIGNMENTS AND REACTION PAPERS

You are required to write five class assignments out of the possible eight designated on the syllabus above. The goal of the assignment is to encourage students to engage critically the issues raised by the readings assigned, and to come to class prepared to engage in class discussion. I suspect that there will be some similarities in points of view, but each paper will (I hope) reflect the opinions of each reader and author. I cannot therefore give you a fixed set of standards or any formula for writing papers,

though I can help refine the goals of the assignment and offer the following as guidelines.

Length: Each paper should be a minimum of 2 double-spaced typewritten pages (regular font or 12 points). You may extend the length of your paper to no longer than 4 pages.

Structure: This paper *is not a review* of the readings or any of the books assigned. Do not attempt to write a full-fledged description of the books. Somewhere in the text, you should, however, summarize the “point” of the book. In other words, try to interpret the book in about one paragraph. This could be in your introduction. Your response or reaction to the texts should form the main body of the essay. Feel free to ask critical questions in these essays or point to any shortcomings in the readings or books. Keep in mind, however, that "critical" does not necessarily mean a negative assessment, but a rigorous and thoughtful analysis that brings into relief the issues raised by a particular subject.

Style: Please feel free to use the "I" personal form if you so wish; but try to avoid over-personalized responses. The essay should maintain a scholarly tone, but should also avoid pedantic, pretentious academic-eze. Do not overuse the passive voice; this is not a laboratory write-up, but a critical essay.

Suggestions for reading the texts: Please do not engage the readings as you would of standard textbooks in psychology, chemistry, biology, or astronomy. Jot down notes only when necessary; you do not need to highlight the text, although some notation or highlighting may help. Pay close attention to what the author is trying to achieve by reading the background material if it is included (e.g. preface, foreword, introduction etc.). Familiarize yourself with the author by doing additional research if necessary in the library (you may use any of the biographical sources in the science library or on the internet).

Grading Scheme: The grading scheme is designed to encourage independent thought and opinion, and to reduce subjective evaluation. Papers are either unsatisfactory or satisfactory, and if satisfactory they are given a “check” as a grade. If there is room for improvement, the paper is given a check minus, and if it is very well done it is given a check plus. If a paper is given an unsatisfactory or “U” grade, students have the option to resubmit, within one week.

Directions:

1. Please submit the paper to the Canvas system on the Monday before discussion of the topic. This way it can be read before class discussion.
2. Always number pages.
3. Include a bibliography or reference section if you have relied on additional sources. The formatting is flexible. Be judicious with your reliance on the internet as it is not peer-refereed information.

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SUNDAY, APRIL 17, 2005



Soldiers in Uíge wore biohazard suits while burying two bodies recently, even though the dead were not known to have the Marburg virus. Evelyn Hockstein/Polaris, for The New York Times

Stalking a Deadly Virus, Battling a Town's Fears