Honors 3900
Diagnosing Disease: Perspectives from the Past and Present

Scott Moore (Medical Laboratory Sciences) and Matt Romaniello (History)

Course Objectives:

1. Explain why diseases cannot always be diagnosed with perfect accuracy
2. Describe the current state/burden/causes of the diseases covered
3. Explain the appropriate clinical presentation, laboratory testing, and complications of the diseases covered
4. Describe challenges to the elimination of influenza and how Donald Ainslie was able to eradicate smallpox
5. Describe emerging threats to health security
6. Identify and explain the change and continuity of the history of medicine from the early modern to modern era
7. Understand that knowledge is culturally constructed and reflects the historical era in which it is produced
8. Interpret and use a variety of primary sources to understand the patient experience
9. Demonstrate historical empathy by understanding the perspective of people in past societies as different than our own.
10. Develop a clear argument using recognized historical methods, and express these ideas in clear expository prose.

Course Description:

The first four weeks lay the groundwork of the course, offering students background in the history of medicine and a simple overview of biostatistics. By drawing upon the expertise of a pathologist and a historian, we offer a grounded approach to the medical humanities. This allows the students to practice methodologies available to historians studying medicine as well as those of modern scientific and diagnostic methods. Over the next nine weeks of the course, we will apply these methodologies to a variety of diseases, presented in “historical” order as they first entered the written record, but alternating between historical records and modern clinical approaches. These case studies, including malaria, smallpox, influenza, and tuberculosis, will allow the students to consider the challenge of studying disease both in its own terms and as a human experience of illness. As the students practice and apply these new methodologies to the case studies, they will be preparing to conduct their own research on an illness currently facing society. This could be diseases with a long history such as cholera that still plagues society or more recently identified diseases including ebola or dengue fever. The final week of the semester will provide the students an opportunity to prepare and then present their research to the community, allowing them to apply the lessons of history to contemporary developments.
**Required Readings:**

- J. N. Hays, *The Burdens of Disease: Epidemics and Human Response in Western History*

There will also be a selection of articles available on the course Canvas site, under “Files,” or accessible through the embedded links.

**Requirements:**

This course is designed to understand and evaluate the challenges created by human disease in the past and present. In doing so, the expectation is that you will develop the skills to employ historical thinking, the ability to evaluate primary and secondary source material, and empathy for a variety of human experiences, both in its universality and its diversity. It is also designed to give you experience writing and thinking critically about the topics we examine.

**Assignment = % of your final grade**
- Participation = 20
- First short paper = 20
- Second short paper = 20
- Research presentation = 15
- Final research paper = 25

**Attendance and Participation:** Your attendance in class is required, and will be an important part of your final grade. You are expected to complete all of your weekly readings before the day listed in the schedule. You are expected to participate in our class discussions; participation includes asking questions, answering questions, and offering opinions or ideas about the topic under discussion.

**Short Papers:** During the semester you will write two short papers (4-5 pages, typed, double-spaced, in a 10 or 12 point font). The first paper will be a primary source analysis that compares the diagnosis of a disease from both its traditional (humoral) depiction as well as modern medical evaluation. The second will be an in-depth analysis of the changing ideas of one of the first four diseases discussed (malaria, plague, syphilis and HIV). Both papers will provide you an opportunity to conduct outside research on a specific topic, as well as practice the various methodologies for diagnosing diseases presented in class. Specific topics will be suggested in class, but your task is to develop your own thesis based on your reading of the books. You may use outside readings (properly cited in your paper), if you desire.

**Final research paper and presentation:** The final project for the class will be an analysis of a disease of your choosing, either by placing it within its historical context or by evaluating its contemporary challenges to society. You should pick your topic no later than week 10, and prepare a bibliography of resources for your project. You will have two opportunities to present your research. The first will be a short, oral presentation in class during the final week of the semester, and the second will be as a research paper (4-10 pages, typed, double-spaced, in a 10 or 12 point font) submitted during
exam week. Further instructions for the paper will be handed out in class following the submission of your second paper.

The grade for an unexcused paper is a zero. Late papers will lose 5 points per day late, starting immediately at the end of class (weekends included). Acceptable excuses include unavoidable family obligations, serious illnesses, court appearances, and incarceration. Students who are absent for any reason should provide a legitimate reason for their absence.

**Course Policies:**

*Professionalism:* This course does not replace professional medical advice nor does it qualify the student to advise others regarding any potential medical treatment. This decision to treat or observe an illness should be left to the patient’s physician.

*Disability Access:* Any student requiring accommodations or services because of a disability should contact the WSU Services for Students with Disabilities Office, located in the Student Services Building, room 181.

*Academic Misconduct:* Plagiarism or other forms of cheating will not be tolerated in this class on any assignment. If you are in any way uncertain about what constitutes plagiarism or cheating, or you have any concerns about the proper citation for references included in your written work, please ask me. As a general rule of thumb, anytime you use two or more words taken directly from a text – you must have a citation.

*Nota Bene:* We reserve the right to make changes to the syllabus. Any such changes will be announced in class and posted on Canvas.

**Schedule of Topics and Readings:**

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<th>Week 1: Classical Medicine (August 26-30)</th>
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<td>T: Introduction</td>
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<th>Week 2: Humoral Science and Early Modern Practice (September 2-6)</th>
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<td>Th: Discussion: primary sources distributed in class</td>
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Week 3: Germ Theory (September 9-13)


Week 4: Analyzing Disease in Past and Present (September 16-20)

T: Discussion: primary sources, excerpts from Joseph Acosta *The Naturall and Morall Historie of the East and West Indies* (1604) and William Berkeley “A Discourse and View of Virginia” (1642); and Campbell, *The Yellow Fever Germ on Coast and Inland* (1879)

Th: Discussion: Medical screening tests with module from Boston University Public Health
http://sphweb.bumc.bu.edu/otlt/mph-modules/ep/ep713_screening/EP713_Screening_print.html

Week 5: Malaria (September 23-27)


Week 6: Plagues in History (September 30-October 4)

T: Discussion: Hays, *The Burdens of Disease*, chap. 3; Primary sources on European and Islamic reactions to the plague from John Aberth, *The Black Death: A Brief History with Documents*


Week 7: Syphilis and HIV (October 7-11)


**Week 8: Nutritional Diseases (October 14-18)**


**Week 9: Smallpox and Inoculation (October 21-25)**


**Week 10: Cholera (October 28-November 1)**


**Week 11: Tuberculosis (November 4-8)**


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<th>Week 12: “Fever” v. Influenza (November 11-15)</th>
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<th>Week 13: Biosecurity: Dengue Fever and Ebola (November 18-22)</th>
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<th>Week 14: Twenty-first century challenges November 25-29)</th>
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<th>Week 15: Student Research Presentations (December 2-6)</th>
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<th>Week 15: Exam week (December 9-13)</th>
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**Final research paper due**