# HISTORY OF MODERN MEDICINE

The making of scientific medicine from the anatomy theatre to the human genome project and beyond

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Fall 2017 Tuesdays and Thursdays, 3.30 – 4.50 pm, HSS 1330 Office hours, after lecture, 5-6, HSS 4040

In the last few decades, medicine and the life sciences have become the locus for some of society's most extravagant hopes and acute anxieties. History of Modern Medicine is aimed at students who would like to uncover the history behind the headlines and take the 'longer view' of some of these questions. We will investigate the origins of aspects of contemporary life familiar to us all, from the vitamins we swallow down with breakfast to giving birth in hospital, bringing a historical perspective to bear on topics such as American health care reform, the politics of the pharmaceutical industry, and the new genetic and neurological determinism.

The textbook for the course is Roy Porter's *The Greatest Benefit to Mankind: a medical history of humanity*. There is no need to buy this book, as all the required chapters will be uploaded to the TritonEd site, along with additional primary sources readings, but you may wish to invest in the text, which has much in it not covered in the course.

# **Learning Objectives**

By the end of this course students should demonstrate:

- 1. Mastery of the broad outlines of the history of scientific medicine;
- 2. Historical understanding of contemporary issues;
- 3. Improvement in their powers of written expression;
- 4. An understanding of the difference between primary and secondary sources;
- 5. The capacity to analyze primary sources in their written work;
- 6. A grasp of scholarly research methods;
- 7. An ability to use scholarly citation technique.

# What your grade will be based on

Your task in this class is to *learn to write the history of medicine* using a combination of primary and secondary sources. There will be three assignments, all of them takehome. First will be a take-home midterm in which you will incorporate analysis of three primary sources into an essay about medicine in the nineteenth century. This will be 1,500 to 2,500 words, and will count towards 40% of the final grade. It will be due on Tuesday of sixth week.

On Tuesday of ninth week, you will come to class with a contemporary primary source of your own choosing, accompanied by a paragraph of explanation of its historical significance, to be turned in. This assignment will be graded pass/no-pass.

There will be a take-home final, in which you will be asked to incorporate the rest of the primary sources from the class readings, plus your chosen primary source, into a narrative about medicine in the twentieth and twenty-first centuries. Alternatively, students may write a research paper, in consultation with me. This will be 3,500 to 5,000 words, same format as the midterm, and will count towards the remaining 60% of the grade. This will be due on Wednesday of finals week.

Students are required to comply with the academic integrity rules of this university, and will be required to turn in an electronic copy of their take-home exams to turn-it-in.com, the plagiarism software on the TED site. Anyone found to be in violation will be reported to the academic integrity office, with no exceptions.

# **Course Outline and Readings**

The class is organized chronologically: first week will be devoted to early modern medicine; week two to the eighteenth century; weeks three, four and five to the nineteenth century; weeks six, seven, eight and nine to the twentieth century. The last few decades, covering the period of your lifetimes, is yours to define. You will decide what constitutes the most historically significant development in medicine since the mid-1990s, and will identify a contemporary primary source to furnish you with the ending of your final essay.

#### Early modern medicine

#### FIRST WEEK

Greatest Benefit, Ch. 8, Renaissance, Ch. 9, 'The New Science'

- 1. Early modern disease and the theory of the humors
- 2. The Islamic Hospital and the Renaissance Anatomy Theatre

#### The eighteenth century

#### SECOND WEEK

Greatest Benefit, Ch. 10, 'Enlightenment'

Laennec, Rene. 1829. A Treatise on Diseases of the Chest and On Mediate Auscultation. Trans. John Forbes M.D., London: Thomas & George Underwood

- 3. Enlightenment medicine
- 4. The Paris Hospital and the French Revolution

#### The nineteenth century

#### THIRD WEEK

Greatest Benefit, Ch. 11, 'Scientific Medicine in the 19th Century'

Snow, John. 1855. 'On the Mode of Communication of Cholera,' excerpted from *Snow on Cholera*, Harvard University Press, 1949.

Louis, Pierre Charles. 1836. *Researches on the Effects of Bloodletting in Some Inflammatory Diseases*. Trans. C. G. Putnam. Boston: Hilliard Gray and Co., pp. 55-70.

- 5. Clinical Trials, Epidemiology, and the Sanitary Police
- 6. Medical Education

#### FOURTH WEEK

Greatest Benefit, Ch. 12. 'Nineteenth-Century Medical Care'

Bernard, Claude. 1865 (1949). *An Introduction to the Study of Experimental Medicine*. Trans. Henry Greene. New York: Henry Schuman Inc., pp. 5-26.

Beaumont, William. 1833. *Experiments and Observations on the Gastric Juice and the Physiology of Digestion*. Plattsburgh: F. P. Allen, pp. 9-23.

#### 7. Anaesthesia

#### 8. Ghastly kitchens

#### FIFTH WEEK

Greatest Benefit, Ch. 19, 'Surgery'

Huxley, T. H. 1881. "An Address on the Connection of the Biological Sciences with Medicine." *British Medical Journal*, August 13th, 1881, pp. 273-281

Pasteur, Louis. 1881. 'An Address on Vaccination in Relation to Chicken Cholera and Splenic Fever. *British Medical Journal*, August 13th, 1881, pp. 283-284

#### 9. Microbes

### 10. Surgery and Asepsis

#### The twentieth century

### SIXTH WEEK

Guttman, P., and Ehrlich, P. 1891. "On the Action of Methylene Blue on Malaria" in *The Collected Papers of Paul Ehrlich*, ed. F. Himmelweit. London: Pergamon Press, 1960.

# 11. The industrial roots of drug production \*\*[MIDTERM DUE]\*\*

# 12. Imperial Medicine and WWI

#### SEVENTH WEEK

Watson, John. 1917. 'Practical and Theoretical Problems in Instinct and Habit,' in *Suggestions of Modern Science Concerning Education*. ed. H. S. Jennings, New York: Macmillan.

Van De Velde, T. H. 1930. *Ideal marriage: its physiology and technique*, pp.11-19.

#### 13. Medicalization

#### 14. Racial hygiene

#### EIGHTH WEEK

Bush, Vannevar. 1945. 'Science, the Endless Frontier: a report to the President' pp. 10-16.

Illich, Ivan. 1976. Medial Nemesis: the Expropriation of Health, pp. 3-36.

#### 15. WWII and the war on disease

# Thanksgiving, no lecture

#### NINTH WEEK

Kramer, Larry. 1983. '1,112 and Counting.' New York Native, March 14<sup>th</sup>-27<sup>th</sup> 1983

16. AIDS
\*\*[PARAGRAPH DUE]\*\*

# 17. Human Genome Project

# **Contemporary Issues**

#### **TENTH WEEK**

- 18. Frontiers of Neuroscience
- 19. Our Transhuman Future?

\*\*[FINAL ESSAY DUE WEDNESDAY OF FINALS WEEK]\*\*