#### HISTORY OF SCIENCE/HISTORY OF MEDICINE 212 THE PHYSICIAN IN HISTORY Spring 2005

Instructors:

Tom Broman Dept. of History of Science 7133 Social Sciences Bldg. 263-1562/262-1406 Office hours: Tuesday 10:00 - 12:00

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#### **COURSE DESCRIPTION**

This course presents an introductory survey of the history of medicine during the past 2500 years. Given the immense scope of the topic, it is necessary to restrict our coverage somewhat and therefore we shall be focusing on three principal themes. The first theme, titled "The Cause of Illness," examines how thinking about health and illness has evolved between the time of the ancient Greeks 2500 years ago and today. As you will see, the changes have not all been for the better! The second unit, "The Physician in Society," could as well have been titled "The Rise and Fall of the Medical Profession." It studies how the physician's identity as an actor in society has evolved from the time of the Middle Ages to today. In particular, it is concerned with how medicine rose to a position of preeminence among modern professions in the early 20th century and it describes the challenges of "deprofessionalization" that some branches of medicine face today. Finally, our third unit will examine "Health and Disease As Social and Political Problems." This unit covers public health, the area of medicine concerned not with why individuals fall ill and how to treat them, but instead with illness and health in society taken as a whole. This unit too begins in the Middle Ages and it continues through the horrifying conditions of public health in the 19th century to the contentious problem of paying for health care today. Public health has transformed from the problem of how to keep people from dying prematurely to how to insure an adequate level of health care for the population as a whole.

The basic format for our meetings will be two lectures and one small group discussion per week. Typically, you should expect from lecture a description of the general situation at a given point in the course, for which the readings provide detailed information. The discussion sections are NOT optional, and as you can see from the grade distribution (below), they will carry a considerable weight in your final grade. So it will be worth your while to prepare for them by doing the reading. Each week during the semester, I will distribute a reading guide for that week, which will provide some background information to the readings, if any is needed, and suggest issues in them that we want you to pay particular attention to.

There is no required textbook for the course but there is a packet of xeroxed readings, which is available for purchase in the History of Science office, 7143 Social Science. It costs \$25.00, cash or check, <u>and there are no refunds</u>! Once you've bought it, it's yours to keep and cherish forever. A copy of the reading packet is also available on reserve in College Library.

# COURSE REQUIREMENTS AND GRADING

This course has no in-class hourly exams and no final exam. Instead you will write a 5-6 page essay after each unit in the course. Unlike in previous years, 212 is no longer a Comm-B course, which means that you will not be required to bring in rough drafts, have them critiqued and then re-write them. However, you are strongly urged to bring drafts to Tom or Andrew for suggestions and criticism.

And *please*, do not your send papers in as e-mail attachments! This practice tends to make the grader cranky!

The grading of your essays will depend on the following factors:

- The formulation of a clear thesis in your introduction. Remember, an essay of this kind is an exercise in persuasion. You are attempting to *convince* the reader that what you have to say on this topic is correct. So write with that goal in mind, by making a clear statement about what you are claiming.
- The organization of the essay into a clear and logical argument, in which each paragraph is clearly connected to the one preceding and following it. Here's a thought experiment: If I can cut up your paper into individual paragraphs, rearrange them any way I choose, and have that *not* make any difference in the overall sense or coherence of the essay, then the paper lacks the structure it ought to have.
- The use of evidence, *drawn mainly from the readings* and never from sources not directly connected with the course, in making your point.
- The care taken in proofreading to remove typographical, grammatical and other errors. This is college, not high school. You are expected to produce polished essays that have been edited.

If you do all of these things pretty well, that will get you a high "B". To get an "A", you have to do one more thing:

 Say something original by showing that you are not merely repeating what you have heard in lecture or seen in the readings. In other words, you have to take your thinking beyond what has been presented to you.

Late papers will be assessed penalties as follows: If turned in by Friday afternoon following the due date, 1/4 of a grade point on a 4-point scale. If turned in by the following Wednesday, ½ grade point. After that, 1 full grade point.

Final grades will be weighted as follows:

25% for each essay (total for 3 essays, 75%) 25% discussion

One final point about grading and paper-writing. You will be asked to cite your sources in writing your essays and giving proper credit for the source of both your ideas and your information. We will help you do this properly, but you should also look at the information presented at the following web site:

http://www.wisc.edu/writing/Handbook/QuotingSources.html.

Failure to adhere to these guidelines constitutes plagiarism, which is a serious academic offense. A plagiarized paper will be given an "F".

# ACCOMMODATION OF STUDENT NEEDS

Extensions to the due date for assignments will only be granted if requested before the due

date. Legitimate reasons include religious observances, illness or family emergency or an unusually crammed examination schedule. The sudden death of a printer, however beloved it may be, is not a legitimate reason for an extension.

Additionally, we will make every effort to honor requests for reasonable accommodations made by students with disabilities. If you think you may qualify for such accommodations, contact the McBurney Disability Resource Center at 263-2741 to establish your eligibility. The earlier you make a request, the more easily it can be accommodated, so please do try to plan ahead.

# SCHEDULE OF LECTURES AND READINGS

WEEK 1

Jan. 19 -Course Introduction: The Problem of Health & Health Care Today

## UNIT I: The Cause of Illness

WEEK 2

- Jan. 24 The Principles of Hippocratic Medicine
- Jan. 26 Hippocratic Medicine in the Ancient and Medieval Worlds

Reading: Hippocrates, "Airs, Waters, Places," "Prognosis," and "Aphorisms."

WEEK 3

- Jan. 31 Medical Theory in the Scientific Revolution
- Feb. 2 Surgery and pathological anatomy

Reading: Broman, "The Medical Sciences" Gelfand, "Gestation of the Clinic"

WEEK 4

- Feb. 7 Laboratory Medicine and the Germ Theory
- Feb. 9 Germs, Epidemics and Vaccination
- Reading: Pasteur, "On the Extension of the Germ Theory to the Etiology of Certain Common Diseases"

Koch, "The Aetiology of Tuberculosis"

Worboys. Spreading Germs, pp. 20-42, 193-233.

## WEEK 5

- Feb. 14 The Origins of Immunology
- Feb. 16 Conclusion to Unit I: The Body Sickens Itself
- Feb. 16: Distribution of First Essay Assignment
- Reading: Silverstein, "Pasteur, Pastorians, and the Dawn of Immunology" Rosenberg, "The Therapeutic Revolution"

UNIT II: The Physician in Society

#### WEEK 6

- Feb. 21 Medieval Physicians and the Universities
- Feb. 23 Physicians and Other Healers in Pre-Modern Society
- Feb. 23: First Essay Assignment Due in Class
- Reading: Kibre, "The Faculty of Medicine at Paris" Lindemann, *Medicine and Society in Early Modern Europe*, pp. 193-230.

## WEEK 7

- Feb. 28 Medical Practice in Early 19th-century America, Part I
- Mar. 2 Medical Practice in Early 19th-century America, Part II
- Reading: Leavitt, "A Worrying Profession" Keeney et al., "Sectarians and Scientists" Numbers, "Public Protection and Self-Interest"

## WEEK 8

- Mar. 7 Hospitals and Health Care from the Middle Ages to the 19th Century
- Mar. 9 Doctors and Nursing in the 20th-Century Hospital
- Reading: Atwater, "Women, Surgeons, and a Worthy Enterprise" Rosenberg, *The Care of Strangers*, pp. 212-261

## WEEK 9

- Mar. 14 Medical Education in the 19th and Early 20th Centuries
- Mar. 16 Graduate Medical Training and the Growth of Medical Specialties
- Reading: Ludmerer, Time to Heal, pp. 79-101

Howell, Technology in the Hospital, pp. 103-132

## WEEK 10

#### SPRING BREAK

## WEEK 11

- Mar. 28 Physicians as the Conquerors of Disease
- Mar. 30 Conclusion to Unit II: 21st-Century Physicians in a Post-Heroic World
- Mar. 30: Distribution of Second Essay Assignment
- Reading: Hansen, "America's First Medical Breakthrough" Lewis, *Arrowsmith*, pp. 256-306.

## UNIT III: Health and Disease As Social and Political Problems

WEEK 12

- Apr. 4- The Black Death and the Origins of Public Health
- Apr. 6 Health and Social Welfare After the Reformation
- Apr. 6: Second Essay Assignment Due in Class
- Reading: Carmichael, "Contagion Theory and Contagion Practice in Fifteenth-Century Milan"

WEEK 13

Apr. 11 - Mortality, Political Arithmetic and the Origins of Vaccination

Apr. 13 - Medical Police: Health and the Regulation of Behavior Reading: Rusnock, *Vital Accounts*, pp. 92-106.

Carroll, "Medical Police and Public Health"

WEEK 14

- Apr. 18 Urbanization and Public Health in 19th-Century Europe
- Apr. 20 Sanitation and the Control of Epidemic Disease
- Reading: Eyler, "William Farr and the Cholera" Wohl, *Endangered Lives*, pp. 80-116.

WEEK 15

Apr. 22 - The Germ Theory and the Practice of Cleanliness

Apr. 24 - The Control of Epidemics

Reading: Tomes, "The Private Side of Public Health" Leavitt, "Politics and Public Health" Gamble, "Under the Shadow of Tuskegee"

WEEK 16

- May 2 Paying for Health Care
- May 4 Conclusion: Health and Illness in Today's World
- Reading: Starr, "Transformation in Defeat"

Fein, "Medical Care, Medical Costs"

#### HISTORY OF SCIENCE/HISTORY OF MEDICINE 212 THE PHYSICIAN IN HISTORY

#### **Reading Packet Table of Contents**

- 1 "Airs, Waters, Places," "Prognosis," and "Aphorisms." In G.E.R. Lloyd (ed.), *Hippocratic Writings* (New York: Penguin, 1978), pp. 90–101, 112–119, 206–213, 216–223.
- 20 Thomas H. Broman, "The Medical Sciences." In David C. Lindberg and Ronald L. Numbers (eds.), *The Cambridge History of Science*. Vol. 4, "Eighteenth-Century Science," ed. Roy Porter. (Cambridge: Cambridge Univ. Press, 2003), pp. 463—84.
- 33 Toby Gelfand, "Gestation of the Clinic." Medical History 1981, 25:169-180.
- 39 Louis Pasteur, "On the Extension of the Germ Theory to the Etiology of Certain Common Diseases," Robert Koch, "The Aetiology of Tuberculosis." In David J. Rothman et. al., (eds.), *Medicine and Western Civilization* (New Brunswick, N. J.: Rutgers Univ. Press, 1995,). pp. 252—257, 319—329.
- 49 Michael Worboys, *Spreading Germs: Disease Theories and Medical Practice in Britain*, 1865–1900 (Cambridge: Cambridge Univ. Press, 2000), pp. 20–42, 193–233.
- 85 Arthur M. Silverstein, "Pasteur, Pastorians, and the Dawn of Immunology: The Importance of Specificity." *History and Philosophy of the Life Sciences* 2000, 22:29–41.
- 99 Charles Rosenberg, "The Therapeutic Revolution: Medicine, Meaning and Social Change in Nineteenth-Century America." In Morris J. Vogel and Charles E. Rosenberg, (eds.), *The Therapeutic Revolution: Essays in the Social History of American Medicine* (Philadelphia: Univ. of Pennsylvania Press, 1979), pp. 3—25.
- 113 Pearl Kibre, "The Faculty of Medicine at Paris, Charlatanism, & Unlicensed Medical Practices in the Later Middle Ages." *Bulletin of the History of Medicine* 1953, 27:1–20.
- 125 Mary Lindemann, *Medicine and Society in Early Modern Europe* (Cambridge: Cambridge Univ. Press, 2000), pp. 193–230.
- 146 Judith Walzer Leavitt, "'A Worrying Profession': The Domestic Environment of Medical Practice in Mid-Nineteenth Century America." *Bulletin of the History of Medicine* 1995, 69:1–29.
- 161 Elizabeth Barnaby Keeney et al., "Sectarians and Scientists: Alternatives to Orthodox Medicine," and Ronald L. Numbers, "Public Protection and Self-Interest: Medical Societies in Wisconsin." In Ronald L. Numbers and Judith Walzer Leavitt (eds.), *Wisconsin Medicine: Historical Perspectives* (Madison: Univ. of Wisconsin Press, 1981), pp. 47—104.
- 193 Edward Atwater, A "Women, Surgeons, and a Worthy Enterprise: The General Hospital Comes to Upper New York State." In Diana Elizabeth Long and Janet Golden (eds), *The American General Hospital: Communities and Social Contexts* (Ithaca and London: Cornell Univ. Press, 1989), pp. 40—66.

- 209 Charles Rosenberg, *The Care of Strangers: The Rise of America''s Hospital System* (New York: Basic Books, 1987), 212–261, 395–408.
- 243 Kenneth M. Ludmerer, *Time to Heal: American Medical Education from the Turn of the Century to the Era of Managed Care* (Oxford: Oxford Univ. Press, 1999), pp. 79–101, 418–425.
- 261 Joel D. Howell, *Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century* (Baltimore and London: Johns Hopkins Univ. Press, 1995), pp. 103–132, 287–298.
- 285 Bert Hansen, "America's First Medical Breakthrough: How Popular Excitement about a French Rabies Cure in 1885 Raised New Expectations for Medical Progress." American Historical Review 1998, 103: 373—418.
- 333 Sinclair Lewis, Arrowsmith (New York: Signet Classic, 1995), 256-306.
- 360 Ann G. Carmichael, "Contagion Theory and Contagion Practice in Fifteenth-Century Milan." *Renaissance Quarterly* 1991, 44:213—256.
- 405 Andrea Rusnock, Vital Accounts: Quantifying Health and Population in Eighteenth-Century England and France (Cambridge: Cambridge Univ. Press, 2002), pp. 92—106.
- 415 Patrick E. Carroll, "Medical Police and Public Health." Medical History 2002, 46:461-494.
- 433 John M. Eyler, "William Farr and the Cholera: The Sanitarian''s Disease Theory and the Statistician''s Method." *Journal of the History of Medicine and Allied Sciences* 1973, 28:79–100.
- 445 Anthony S. Wohl, *Endangered Lives: Public Health in Victorian Britain* (Cambridge, Mass.: Harvard Univ. Press, 1983), 80—116.
- 465 Nancy Tomes, "The Private Side of Public Health: Sanitary Science, Domestic Hygiene, and the Germ Theory, 1870–1900." *Bulletin of the History of Medicine* 1990, 64:509–39.
- 481 Judith W. Leavitt, "Politics and Public Health: Smallpox in Milwaukee, 1894—1895." *Bulletin of the History of Medicine* 1976, *50*:553—568.
- 490 Vanessa Northington Gamble, "Under the Shadow of Tuskegee: African Americans and Health Care." *American Journal of Public Health* 1997, 87:1773—1778.
- 497 Paul Starr, "Transformation in Defeat: The Changing Objectives of National Health Insurance, 1915– – 1980." In Ronald L. Numbers (ed), *Compulsory Health Insurance: The Continuing American Debate* (Westport, Conn.: Greenwood Press, 1982), pp. 115–143.
- 513Rashi Fein, "Medical Care, Medical Costs: The Search for a Health Insurance Policy." In William G. Rothstein (ed), *Readings in American Health Care* (Madison: Univ. of Wisconsin Press, 1995), pp. 307–313.