Evolution of Epidemiologic Ideas, Sander Greenland, Ed.
Call (617) 244-1200 to order this text directly from Epidemiology Resources.

Reading packet, available from Pequod Copy on Somerset Street, New Brunswick
Call (732) 214-8787 in advance to order a packet.

This course is designed to familiarize the student with classic papers in public health in general
and epidemiology in particular from Hippocrates to the present. A classic paper is defined as a
work or group of works that have had significant impact on public health, public health policy,
the practice of medicine, or personal health behaviors. The reading packet is not exhaustive and
additional readings may be added if there is interest in a specific topic.

There are no examinations for this course. Grading is based on:

1. Class or individual discussion of the assigned readings with the instructor.
2. Completion of the government documents assignment at the Library of Science
   and Medicine.
3. Completion of the Internet assignment on public health resources.
4. A book review of one of the following books:
   b. Leavitt, Judith W. and Ronald L. Numbers, eds. Sickness and Health in
      America: Readings in the History of Medicine and Public Health.
   d. Mullan, Fitzhugh. Plagues and Politics: The History of the United States

Students who find books or articles of interest are encouraged to share them with the
instructor and/or the class. On the following dates, you should have read and be prepared to
discuss the following:

Week 1: Introduction to the course. Read and discuss in class:
Hippocrates (500BCE) The Oath; Airs, Waters, and Places
Lillienfeld and Lillienfeld (1977) What Else Is New?
Week 2: Bull (1959) The Historical Development of Clinical Therapeutic Trials
Graunt (1662) Natural and Political Observations Made Upon the Bills of Mortality
Lind (1772) A Treatise On The Scurvy
Jenner (1798) An Inquiry Into the Causes and Effects of the Variolae Vaccine
Voelker (1993) Scientist Still Debate the Fate of Smallpox Virus
Panum (1846) Observations Made During the Epidemic of Measles on the Faroe Islands in the Year 1846

Week 3: Shattuck (1850) Report of the Sanitary Commission of Massachusetts
Jarvis (~1850) Report on Insanity and Idiocy in Massachusetts
Snow (1855) On the Mode of Communication of Cholera

Week 4: Nightingale (1859) Sanitary Condition of Hospitals and Hospital Construction
Semmelweis (1861) The Etiology, the Concept and the Prophylaxis of Childbed Fever
Introduction to Essays of Robert Koch
Koch (1880) On Bacteriological Reseach
Flexner (1910) A Medical Education In the United States and Canada
Burton (1946) Hospital Survey and Construction Act
Spock (1945) Baby and Child Care


SMOKING
Wynder and Graham (1950) Tobacco Smoking as a Possible Etiologic Factor in Bronchiogenic Carcinoma
Doll and Hill (1950) Smoking and Carcinoma of the Lung
Doll and Hill (1956) Lung Cancer and Other Causes of Death in Relation To Smoking
Cornfield et al. (1959) Smoking and Lung Cancer: Recent Evidence and a Discussion of Some Questions
Doll (1955) Mortality From Lung Cancer in Asbestos Workers
Week 6:

POLIO TRIALS
Salk (1955) *Vaccination Against Paralytic Poliomyelitis Performance and Prospects*
Francis et al. (1955) *An Evaluation of the 1954 Poliomyelitis Vaccine Trials*
Nathanson et al. (1955) *The Cutter Incident*
Robbins (1993) *Eradication of Polio in the Americas*
Foege (1993) *A World Without Polio*

Week 7:

Gordon (1957) *Mortality Experience Among the Japanese in the United States*
Haenszel (1961) *Cancer Mortality Among the Foreign-Born in the United States*
Haelvi et al. (1971) *Cancer Mortality and Immigration to Israel*
Alter et al. (1978) *Migration and Risk of Multiple Sclerosis*

Week 8:

DIET STUDIES
McCullom et al. (1922) *Studies on Experimental Rickets*
Haenszel (1958) *Variation in Incidence of and Mortality From Stomach Cancer, with Particular Reference to the United States*
Armstrong and Doll (1975) *Environmental Factors and Cancer Incidence and Mortality in Different Countries, With Special Reference to Dietary Practices*
Wynder et al. (1987) *Association of Dietary Fat and Lung Cancer*
Willett et al. (1987) *Dietary Fat and the Risk of Breast Cancer*
Cohen (1987) *Diet and Cancer*

Week 9:

Complete Internet and library assignments. Select and read one of the books listed for review.

Week 10:

SHOWING CAUSE IN EPIDEMIOLOGY - Greenland (All of Part I)

Week 11:

DRUG STUDIES
Mellin and Katzenstein (1962) *The Saga of Thalidomide*
Stromland and Miller (1993) *Thalidomide Embryopathy: Revisited 27 Years Later*
Herbst and Scully (1970) *Adenocarcinoma of the Vagina In Adolescence*
Herbst et al. (1971) *Adenocarcinoma of the Vagina. Association of Maternal Stilbestrol Therapy With Tumor Appearance In Young Women*
Week 12:

BIRTH COHORTS, METHODS ISSUES

Frost (1941 posthumous) *Papers of Wade Hampton Frost*

Fox et al. (1971) *Herd Immunity: Basic Concept and Relevance To Public Health Immunization Practices*

Berkson (1946) *Limitations of the Application of Fourfold Table Analysis to Hospital Data* (In Greenland pp. 86-93)


Roberts et al. (1978) *An Empirical Demonstration of Berkson’s Bias*

Lee and Lin (1990) *Age-Period-Cohort Analysis of Pancreatic Cancer Mortality in Taiwan, 1971-1986*

Week 13:

Greenland pp. 94-147

Week 14:

Miettinen (1970) *Estimation of Relative Risk From Individually Matched Series*

Cole and MacMahon (1971) *Attributable Risk Percent in Case-Control Studies*

Miettinen (1972) *Standardization of Risk Ratios*

Miettinen (1974) *Proportion of Disease Caused or Prevented by a Given Exposure, Trait or Intervention*

Week 15:

Greenland pp. 148-190

Week 16:

Library, Internet, and book review discussions.