11/17  Germ Theory and the Therapeutic Revolution

Miasmatism, Epidemics, and Public Health
   Miasmas: malaria = bad air
   Swamps: stagnant water, stagnant air
   Cities: garbage and sewage: the Great Stench, London, 1856
   Interventions: remove garbage, purify water, etc.
   Efficacy of interventions reinforced faith in underlying science

Differential Susceptibility: Why Did Epidemics Spare Some?
   Constitution: good heredity, good upbringing
   Contagion and contingency: exposure
   Morality and behavior

Early Theories of Contagionism
   Hooke and Leewuenuhoek
   Cotton Mather: animalculae
   Fermentation and putrefaction

The Rise of Germ Theory
   Louis Pasteur: from fermentation to spontaneous generation
   Germ theory: disease caused by microbes, which only arise from microbes
   Robert Koch, wound infections, and anthrax: Koch’s Postulates
   New technologies of microbiology
   Mycobacteria tuberculosis, Vibrio cholerae
   Transformation of diagnostic theory: from symptoms to cause
   Universalism and specificity

Germ Theory and Therapeutics
   Pasteur’s successes with anthrax and rabies
   Antitoxins
   Magic bullets: a delayed therapeutic revolution?

Germ Theory and Culture: The Gospel of Germs
   Needed reforms, or marketing fear?