Biology 402: Infectious Disease and Global Public Health
Spring Semester 2018

Tues, Thurs 2-3:15 pm   Genome Science Bldg 1374

(the syllabus will be updated as the semester proceeds so check back occasionally)

Make sure to look for dates when we will discuss book readings and research papers! Reading assignments are from diverse online sources, from Mountains Beyond Mountains by Tracy Kidder and from assigned primary research papers--links for these will be found below or on the lecture notes page. Course policies are on the non-Sakai course website.

READINGS NEED TO BE COMPLETED BEFORE THE LECTURE TO WHICH THEY ARE ASSIGNED

Date and Lecture:

Jan 12 An introduction to Global Public Health (MP)

http://www.youtube.com/watch?v=xJpZnUjtorI

Jan 16 A Brief History of Haiti (MP)


Jan 18 Introduction to Tuberculosis/First Book Discussion (BD)  Mountains Beyond Mountains, Part I pp. 1-44

http://www.cdc.gov/tb/topic/basics/default.htm

Jan 23 The TB bug (MP)

http://www.mayoclinic.org/diseases-conditions/tuberculosis/basics/definition/con-20021761

(read all the sections on this mayo site on TB)

http://www.nature.com/ng/journal/v45/n10/full/ng.2744.html

Jan 25 TB treatment, Part 1/First Paper Discussion (MP)

http://en.wikipedia.org/wiki/Rifampicin

Jan 30 TB treatment, Part 2 (MP)

Molecular biology: Antibiotic re-frames decoding (download and read PDF)

Feb 1 Conjugative DNA transfer and antibiotic resistance (MP)


Feb 6 HIV and AIDS (BD)/Second Book Discussion

Mountains Beyond Mountains pp. 45-95

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2753265/

Feb 8 Exam 1 (Material through Feb 1)

Feb 13 HIV and AIDS continued (BD)

Mountains Beyond Mountains pp. 96-134

http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(10)70186-9/fulltext

Feb 15 An introduction to retroviruses (BD)

http://www.youtube.com/watch?v=RO8MP3wMvqg


Feb 20 How does HIV kill T cells? scientific paper discussion (BD)

Feb 22 Developing antiretroviral drugs Part 1 (BD)


Feb 27 Developing antiretroviral drugs II (BD)


March 1 The economics of treating HIV world-wide and Access to Essential Drugs as part of the fulfillment of the Right to Health (MP)

March 6 Exam (Material Feb 6 through March 1)

March 8 Human Rights continued (MP)

Essential Drugs List

http://humanrights.wikia.com/wiki/First_Generation_Human_Rights


March 10-18 Spring Break

March 20 1st set of student posters

March 22 Student posters continued

March 27 How HIV evades the immune response (BD)

March 29 How HIV evades the immune response (MP)

April 3 Promise and Challenges of an HIV Vaccine (BD)
April 5 Student posters continued

April 10 Student posters continued

April 12 Guest Lecture: Dr. David Margolis, UNC Department of MicroBiology and Immunology

April 17 Final Student posters

April 19-26 TBA

Final Monday May 7 Noon=Exam 3
(Covers ALL material after Exam 2)