

General Science 201 – Honors/Biology, The Search for Order

A study of major themes from the natural sciences selected to develop understanding of historical perspectives, current interactions and future potentials of earth, physical and biological sciences. The theme of Boomer's version of this course will be the top infectious disease killers in the world - the science of the agents and disease and their enduring and ongoing impact (with an emphasis on geography and notable history). Major sections of class will involve reading, writing, researching, and discussing aspects of these disease events, including reading case studies about notable current outbreaks. Each student will also complete an individual research assignment (both research and writing) about a non-infectious cancer that has a known genetic component.

Required Texts and Supplies

EXTENSIVE use of on-line materials and journal articles; students will need regular access to internet, Adobe Acrobat (for PDF downloading), Word, and their WOU email account.

Professor

Dr. Sarah Boomer

Office: NS219; office hours to be announced or by appointment (none Mondays, Fridays)

Contact me: phone (8-8209) or email (boomers@wou.edu)

Class Website: locate by finding WOU Biology, Faculty, and Boomer

Lecture and Lab Schedule

Lecture: T/R, 12:30-1:50*

Lab Times: R, 2-3:50

**Lecture time will vary, with most Tuesdays featuring 30-60 minutes of lecture and 30-60 minutes of writing/discussion or video and most Thursdays featuring 30-60 minutes of lecture, 20-30 minutes of pre-lab lecture, and 2-3 hours lab.*

Lecture Exams

There are three in-class lecture/lab exams, and a semi-comprehensive lab/lecture final. Each lecture exam is over a group of related organisms/topics (e.g. eukaryotes, prokaryotes, viruses/immunology). The final covers complex disease syndromes (respiratory, GI) that involve mixed pathogens from all groups. Exam questions are based on lecture notes, lab, and assigned/indicated case study readings. 30% exams are multiple choice; 70% are definition, problems, and essays. Images from lab may be shown for sight-identification. Not attending lecture and lab will have a negative impact on your grade and there is no way to make up labs or discussion assignments held during class.

Grading

<u>Exams</u> 3X80 pt. in-class exams 100 pt. final exam	<u>Lab & Homework</u> 4X30 pt. Lab Assignments = 120 Presentation/Paper = 55 5X17 pt. Homework/Discussion = 85	A = 90-100%; B = 80-89% C = 65-79%; D = 55-65% F = 54% or less
Total = 340 pts	Total = 260	Grand Total = 600

Syllabus - Fall, 2006

Date	Lecture	Lab
T 9/26	Introduction/Multicellular Parasites I	
Th 9/28	Multicellular Parasites II	1. Microscopes/Eukaryotes
T 10/3	<i>All Parasite Homework /Discussion</i>	
Th 10/5	All Protozoa	2. Bacteriology Part One
T 10/10	Syphilis <i>All Protozoa Homework /Discussion</i>	
Th 10/12	Exam 1: All Parasites and Protozoa <i>Don't forget case study reading!</i>	Bacteriology Part Two
T 10/17	Tuberculosis	
Th 10/19	Tetanus, Pertussis, Bacterial Meningitis	Bacteriology Wrap-Up
T 10/24	Bacteria Wrap-Up <i>All Bacteria Homework /Discussion</i>	
Th 10/26	Virology - HIV I, Immunology	3. Virology/DNA
T 10/31	Virology - HIV II	
Th 11/2	Exam 2: All Bacteria Lecture/Lab <i>Don't forget case study reading!</i>	Virology/DNA Wrap-Up
T 11/7	Hepatitis B and Measles, Vaccines	
Th 11/9	Virology Wrap-Up <i>All Virus Homework /Discussion</i>	4. GI/Respiratory Agents/Unknowns
T 11/14	GI Agents I	
Th 11/16	GI Agents II and Lower Respiratory Agents I	All GI/Rspiratory Wrap-Up
T 11/21	Exam 3: Virology/Immunology/DNA <i>Don't forget case study reading!</i>	No Labs - Thanksgiving
Th 11/23	Holiday - Thanksgiving	
T 11/28	Lower Respiratory Agents II	Presentations
Th 11/30	All GI/Respiratory Wrap-Up <i>All Respiratory/GI Homework /Discussion</i>	

80% Final Will Cover All GI/Respiratory Syndromes and Case Study Readings
Agents will include multicellular parasites, protozoa, bacteria, and viruses - be prepared to know and sort for diversity in addition to understanding diseases.

20% Final Will Be Comprehensive