

Biology 470 - Medical Bacteriology (Fall, 2009)

Instructor: Larry Hanne; Holt 328; 898-6298; LHANNE@CSUCHICO.EDU
Office hours: Mon/Wed/Fri 12-1; Tue/Thurs 11-12.
<http://www.csuchico.edu/biol/personnel/Hanne/Hanne.html>

Required: Medical Microbiology 5th Edition, P. Murray, et al. (editors)
Medical Dictionary (Taber, Dorland, or Bantam)
Photographic Atlas of Micro - Leboffe
Biology 470 Laboratory Syllabus (Micro Club)

References: Diagnostic Microbiology - Forbes
Baron's Medical Microbiology on line: <http://gsbs.utmb.edu/microbook/toc.htm>

Learning Objectives:

1. Become literate in medical bacteriology (organismal and molecular)
2. Become proficient at reading and analysis of technical journal articles
3. Become proficient at working with pathogenic bacteria
4. Be able to isolate and identify pathogenic bacteria from clinical specimens

<u>Date</u>	<u>Topic</u>	<u>Reading (Murray Chapters)</u>
Aug	24 Introduction to Infectious Disease	Ch 1
	26 Classification & Physiology	Ch 2/3
	28 Metabolism	Ch 4
	31 Genetics	Ch 5
Sept	2 Antibiotics I	Ch 20
	4 Antibiotics II	
	7 LABOR DAY	
	9 Host Defenses; Mechanisms of Pathogenesis	Ch 11/12/13/14/19
	11 Vaccines; Normal Flora	Ch 9/15
	14 Principles of Diagnosis	Ch 16/17/18/21
	16 Staphylococcus	Ch 22
	18 Streptococcus (pyogenic infections)	Ch 23/24
	<u>Census Day: Last Day to Drop</u>	
	21 Streptococcus (sequelae)	
	23 Acute Bacterial Meningitis Streptococcus pneumoniae	Ch 23
	25 Sexually Transmitted Diseases (STDs) Neisseria I	Ch 30
	28 Neisseria II	
	30 Haemophilus; Pasteurella	Ch 35
Oct	2 Gastrointestinal tract infections (GI) Enterics	Ch 31
	5 Vibrionaceae; ETEC	Ch 32
	7 Campylobacter; Shigella; EPEC	Ch 31/33
	9 Salmonella	Ch 31
	12 Escherichia; Yersinia	Ch 31
	14 Plague	Ch 31
	16 Opportunistic and Nosocomial Infections	
	19 Pseudomonas	Ch 34
	21 Listeria; Corynebacterium	Ch 26/27

Oct	23	Actinomycetales; Nocardia	Ch 28
	26	Mycobacterium I	Ch 29
	28	Mycobacterium II	
	30	Bacillus	Ch 25
Nov	2	Obligate Anaerobes	Ch 41/42
	4	Clostridium I	Ch 40
	6	Clostridium II	
	9	Spirochetes I – Lyme Disease	Ch 43
	11	VETERANS DAY	
	13	Spirochetes II - Syphilis	Ch 43
	16	Rickettsia	Ch 45
	18	Chlamydia; Mycoplasma	Ch 47
	20	Legionella	Ch 38
		Bordetella	Ch 36
		Leptospira; Relapsing fever	Ch 43
	23-27	THANKSGIVING	
	30	Research Approaches to Studying Virulence Factors	
Dec	2	Research on mechanism of action of cholera toxin	
	4	Epidemiology	
	7	Disinfection and Sterilization	Ch 10
	9	DNA probes; PCR; Automation	Ch 17
	11	Laboratory Diagnostic Microbiology	Ch 21
	14	Comprehensive Final Exam 10:00 AM	Ch 1 - 48

Drop Policy: Please note that to drop a course after the end of the fourth week of classes requires a "serious and compelling" reason. Therefore, before you request a late drop for this class, obtain written documentation of your reason for withdrawal. I will not consider any late drops without verification of "serious and compelling."

Attendance: In order to learn medical bacteriology, you must work with the organisms. **If you are absent or late often, your grade will be impacted significantly.** More than 6 absences will result in a failing grade for the course.

Writing proficiency in the major: This is a writing proficiency (WP) course, open only to students who have completed ENGL 130 (or its equivalent) with a grade of C- or higher. You must earn at least a "C-" in Medical Bacteriology to pass the microbiology major writing proficiency requirement for graduation.