

LABORATORY SYLLABUS
Prof. Lester's Version
BI 203
Spring 2012

<u>Date</u>	<u>Topic</u>	<u>Exercise #</u>
January		
23, 24	Syllabus & Intro; Environmental plate; Lab Basics; and Microscope; Survey: algae, protozoa, yeast, etc	3-1, 2-1 Handout
25, 26	Sterile technique; preparation of smears; simple stains	1-3, 3-4
30, 31	Go over environmental plate; Begin Gram stain	3-6
February		
1, 2	Gram stain continued (turn in for grade)	3-6
6, 7	Acid-fast, spore stains	3-7, 3-9
8, 9	Negative stains; Motility	Quiz 1 3-5, 3-8, 3-10, 5-22
13, 14	Respiration (nitrate, catalase); TBA; Practice Staining	5-4, 5-6, Handout
15, 16	Growth Patterns; micropipettor training; Practice staining.	2-3, 2-4
20, 21	Morphological unknown ***Due Same Day***	Handout-TBA
22, 23	Media: Selective, differential; Bacterial Transformation	4-1, 4-2, 4-4, 4-6; 8-3
27, 28	Temperature, oxygen requirements	2-6, 2-7, 2-8
29, 1	Biochemicals I: starch, lipid, protein	Quiz 2
March		
5, 6	Complete all labs above; Study for practical	
7, 8	PRACTICAL #1	
12-16	Spring Break!!!!	
19, 20	Streak plates (turn in for grade); Biochemicals II: indole, MR/VP, citrate, CHO, H ₂ S, urease	1-4, 5-11, 14, 16 5-2, 3, 7, 12, 17
21, 22	Complete biochemicals; Quantitative plate	6-1
26, 27	Start unknown #2 (staining/streaking)	Handout (9-1,2,3, general idea)
28, 29	Continue unknown.	Quiz 3
April		
2, 3	Chemotherapeutics: disinfectants/antiseptics; Antibiotics	2-12, 7-2
4, 5	Genetics: Gradient Plate	Handout
9, 10	Viruses: Plaque Assay; Quorum Sensing Video	6-3
11, 12	Water-Membrane Filter; Begin Throat/Skin microbe	7-5, 5-20, 5-21
16, 17	Finish water; continue Throat/Skin: coagulase, novobiocin	
18, 19	Finish Throat, skin microbes; Snyder Test – Dental Caries	7-1
23, 24	UV **BIOCHEMICAL UNKNOWNNS DUE**	Quiz 4 8-2
25, 26	Fungi; Parasitic protozoa; Live Protozoa	Handouts
May		
30, 1	TBA; CLEAN OUT DRAWERS. Study for practical.	
2, 3	PRACTICAL #2 (Not comprehensive)	

Some of the TBA time may be used for paper discussions or other activities.