MICROBIOLOGY FOR HEALTH PROFESSIONS, 34-BIOL- 2031C-009
SYLLABUS, FALL SEMESTER, 2015-2016

David.Fankhauser@UC.EDU
http://biology.clc.uc.edu/Fankhauser
Office Hours: McD, M&W, 10:15-11:15 AM

David B. Fankhauser, Ph.D.
Professor of Biology & Chem
U. C. Clermont College, Batavia OH 45103

COURSE OBJECTIVES: To learn about microorganisms: their anatomy, physiology, taxonomy, genetics, how to control their growth, their medical significance, their epidemiology, the body's protective responses to their challenge (both non-specific and immune), exogenous antimicrobial agents, and etymology of nomenclature microbiological subjects.

TEXT: Bauman, Microbiology with Diseases by Taxonomy, 4th Edition, Pearson. ISBN-10: 0-321-81931-4

Please fasten this calendar inside the front cover of your text, bring the text to class daily.

	MONDAY		WEDNESDAY
24-Aug 1 - 25 26-53	Introduction to Course Early History of Microbiology (Review Chemistry on your own)	26-Aug 7 - 11	Applying Microbiology to answer questions about Spontaneous Generation
31-Aug 13-22 414-416	Germ Theory of Disease Koch's Postulates	2-Sep 94-121	Microscope: History and Principles Principles and Uses of Stains **QUIZ 1 (Given at 12:15 PM after 50 min lecture.)**
7-Sep	LABOR DAY	9-Sep 59-63	Prokaryotic Anatomy I: Capsules, Flagella, Pili
14-Sep 63-74	Prokaryotic Anatomy II: Cell Wall Structure; Sporulation.	16-Sep 124-133	Enzymology, Metabolism, Biochemistry **QUIZ 2 (Given at 12:15 PM after 50 min lecture.)**
21-Sep 133-136 142-148	 Glycolysis Microbial Fermentation versus Respiration	23-Sep 163-192	What is Required for Microbial Growth?
28-Sep 258-271	Controlling Microbial Growth I: Physical Means	30-Sep 271-314	Controlling Microbial Growth II: Chemical Means **NOTEBOOKS I DUE** **QUIZ 3 (Given at 12:15 PM after 50 min lecture.)**
5-Oct 193-235	Microbial Genetics	7-Oct 315-343	Microbial Taxonomy Intro to Gram positive bacteria
12-Oct 538-549	Staphylococcus, Streptococcus	14-Oct	**MICROBIOLOGY MIDTERM**
19-Oct	Midterm returned, discussed.	21-Oct 550-553	Spore forming, Gram positive bacteria: Bacillus and Clostridium
26-Oct 553-559	Clostridium: the "Rogue's Gallery" of bacteria: Tetanus, Botulism, Gas Gangrene, C. difficile!	28-Oct 558-573	Gram positive bacteria concluded: Mycoplasma, Mycobacteria **QUIZ 4 (Given at 12:15 PM after 50 min lecture.)**
2-Nov 574-582	Intro to Gram negative bacteria: Neisseria and intro to Enterobacteriaceae	4-Nov 582-605	Escherichia, Salmonella, Pseudomonas, etc. Rickettsia, Chlamydia , Spirochetes, Vibrio
9-Nov 632-688	Medically Important Fungi Eukaryotic Parasites	11-Nov	ARMISTICE DAY
16-Nov 378-404 689-714	Viruses I: DNA Viral Diseases: Pox viruses, Herpes, CMV, Papilloma, Hepatitis B **QUIZ 5 (Given at 12:15 PM after 50 min lecture.)**	18-Nov 715-755	Viruses II: RNA Viral Diseases: Influenza Rhino-, Polio-, Encephalitis, Rubella, HIV, Measles, Rabies
23-Nov 405-437	Disease Patterns Epidemiology **NOTEBOOKS II DUE**	25-Nov 438-462	Host Defenses: Non-specific and specific
30-Nov 463-537	Immunology: Mech. of the Immune Response Problems when Immune System goes rogue… **QUIZ 6 (Given at 12:15 PM after 50 min lecture.)**	2-Dec	CATCH UP DAY
7-Dec	**FINAL EXAM, 1:30-3:30 (Stay tuned, the time may change…)**		