

MICROBIOLOGY 281

Syllabus and First Half of Laboratory Handouts

Summer Quarter, 2009

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See my web page for illustrations:

http://biology.clc.uc.edu/fankhauser/Labs/Microbiology/Micro_handouts.htm

page in NB:

- _____ 1 Table of Contents I (Mount this page in the front of your Lab Notebook.)
- _____ 2 Course Syllabus, Summer 2009 (Mount this syllabus in front of your text book)
- _____ 3 How to Take a Fankhauser Microbiology Course
- _____ 4 Study Groups: Towards Effective Peer Education
- _____ 5 Microbiology Study Group Report Form
- _____ 6 Wordstems for Microbiology 281, First Half of Quarter
- _____ 7 Wordstems for Microbiology 281, Second Half of Quarter
- _____ 8 Microbiological Cumulative Root Words with Meanings
- _____ **FOR THE LAB NOTEBOOK:**
- _____ 9 Lab Schedule for Microbiology 281, first half of course, Summer 2009
- _____ 10 Microbiology Laboratory Notebook Procedure
- _____ 11 Format for Table of Contents
- _____ 12 Use of Contact Paper for Mounting Handouts
- _____ 13 Sample First Notebook Gradesheet from previous year
- _____ 14 Notebook Illustrations
- _____ 15 Making Root Beer at Home
- _____ 16 Index to Prepared Micro Slides
- a b _____ 17 Binocular Microscope: Its Features and Care; Storage Grade Sheet
- a b _____ 18 Using and Evaluating the Microscope; Bacterial Morphology for Microbiology
- _____ 19 Sample Math Problems for Microbiology
- _____ 20 Use of Oil Immersion Objective
- _____ 21 Equipment for a Microbiology Work Station
- _____ 22 Bacteriological Smear and Staining Protocol
- _____ 23 Buccal Smear
- _____ 24 Bacterial Flora of Teeth
- a b _____ 25 Microbiological Media Preparation: a: Introduction, b: Technique
- a b _____ 26 a: Solid Media Used in This Course; b: Media Used for Phage Growth
- _____ 27 Other Common Microbiological Media
- _____ 28 Autoclave Use
- _____ 29 Bacterial Growth Curve: *E coli* on minimal salts versus complex medium
- _____ 30 Spectrophotometer Use
- _____ 31 Graph Construction
- _____ 32 & 33 three cycle semi-log paper (two sheets, one for practice, one for your notebook)
- _____ 34 Preparation of Wet Mount Slide
- _____ 35 Gram Stain Protocol
- _____ 36 Milk Fermenters
- _____ 37 Dilution Principles with Sample Problems
- _____ 38 Serial Dilution, Pipetting Practice
- a b _____ 39 a: Displacement Pipetters: Their Care and Use; b: Practice Using Pipetter
- _____ 40 Sterile Technique: Delivery of Liquids by Pipet
- _____ 41 Spreading Technique for Plating Out Bacteria
- a b _____ 42 Yeast Plate Count Protocol: a: Introduction, b: Protocol.
- _____ 43 Bacterial Features on Prepared Slides