<table>
<thead>
<tr>
<th>Date</th>
<th>Laboratory Experiment Number and Topic</th>
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</table>
| Aug. 26 | Safety contract; Orientation  
1.1 Microbes are Everywhere  
1.2 Morphology of Bacterial Colonies (DEMO) |
| 28 | IN PROGRESS: 1.1 (save plate in drawer)  
2.1 Parts of the Microscope  
2.2 Setting up the Microscope  
2.3 Microscopic Observations from Pond Water |
| Sept. 2 | IN PROGRESS: 3.2  
3.1 Loop and Pipette Aseptic Transfer Technique  
3.2 Simple Stain (From 1.1 plate)  
3.3 Morphology of Bacterial Cells (DEMO) |
| 4 | IN PROGRESS: 2.1, 3.2  
4.1 Types of Growth Media (DEMO of enriched, selective, differential)  
4.2 Culture Purification by the Streak Plate Method |
| 9 | 5.1 Gram Stain  
5.2 Metachromatic Granules (DEMO) |
| 11 | 6.1 Endospore Stain  
6.2 Acid Fast Stain (DEMO) |
| 16 | Biochemical tests  
8.1 Degradation of Toxic Hydrogen Peroxidase by Catalase/Peroxidase  
8.2 Carbohydrate Fermentation  
8.3 Exoenzymes (Amylase, Lipase) |
| 18 | IN PROGRESS: 8.2; 8.3  
Biochemical tests  
9.1 Motility  
9.2 Methyl Red Test  
9.3 Citrate Utilization  
9.4 Urease Hydrolysis |
23 IN PROGRESS: 9.1 - 9.4
7.1 Turbidometric Measurement of Bacterial Growth
7.2 Effect of Chemicals on Bacteria

25 IN PROGRESS: 7.1 Data available, 7.2,
**Growth Curve Quiz -Due in one week- October 2**
11.2 Effect of Salt on Bacterial Growth and Meat Preservation

30 IN PROGRESS: 11.2,
11.1 Effect of Heat on Bacteria
11.3 Effect of Ultra-violet (UV) Light on Bacteria

Oct. 2 IN PROGRESS: 11.1, 11.2, 11.3
**Growth Curve Quiz Due at beginning of period (15 pts)**

7 **Unknown #1 (15 points):** Gram stain and set up tests

9 Interpret Unknown #1 Tests. Turn in Identification Report on Unknown #1

14 **Eukaryotic Microbes**
12.1 Eucaryotic Diversity in Pond Water
12.2 Macroscopic and Microscopic Morphology of Terrestrial Fungi
Review for Lab Exam

16 **Lab Exam #1 (30 points)**

21 13.1 Antibiotic Susceptibility Testing
13.2 Minimum Inhibitory Concentration (MIC)

23 IN PROGRESS: 13.1, 13.2
13.3 Isolation and Characterization of Antibiotic Producing Bacteria
14.1 Isolation of a Streptomycin-Resistant Mutant

28 IN PROGRESS: 13.3; 14.1
15.1 Isolation of Skin Micrococci

30 IN PROGRESS: 13.3, 15.1
16.1 Normal Flora of the Human Throat and Mouth
16.2 Hemolysis Reactions
Nov.  4  IN PROGRESS: 15.1 16.1, 16.2  
15.2  Simulated Epidemic  
15.3  Effect of Hand-washing  

6  19.2  Microbial Load in Pasteurized and Unpasteurized Carrot Juice  
Review viable count and calculations  

11  Veterans’ Day. Campus closed  

13  IN PROGRESS: 19.2  
17.1  Hematocrit  
17.2  Blood Smear  

18  **Unknown #2 (15 points)**: Gram Stain and set up tests  

20  Complete Unknown #2  
Interpret Unknown #2 Tests  
Turn in Identification Report on Unknown #2  
Discuss sources of water to be tested Dec. 2  

24-28  Thanksgiving Break  

Dec.  2  19.1  Preparation of Yogurt  
20.1  Water Analysis- Petrifilm  

4  IN PROGRESS: 19.1, 20.1  

9  Laboratory clean up  
Review for Lab Exam  

11  **Lab Exam #2 (30 points)**  

**Basis of Lab Grade-**  

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
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<tr>
<td>Attendance &amp; Participation</td>
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<tr>
<td>Growth Quiz</td>
<td>15</td>
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<tr>
<td>Unknowns (2)</td>
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<td>Lab Exams (2)</td>
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