**Tentative Lecture Schedule- *update 4/16/19***

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| **Date** | **Topic** | **Chapters** |
| M, 1/28 | Why are microbes so fascinating?  **APO-1** | 1 |
| W, 1/30 | **Prerequisite entrance quiz**  Just what are microbes made of? | 4 |
| M, 2/4 | Microbial structure (continued) and microscopy | 3-4 |
| W, 2/6 | Metabolism: what you already know | 5  Appendix A |
| M, 2/11 | Metabolism: the fun stuff microbes can do  **APO-2** | 5 |
| **W, 2/13** | **EXAM 1** |  |
| **M, 2/18** | PRESIDENT’S DAY HOLIDAY |  |
| W, 2/20 | How do microbes survive? | 6 |
| M, 2/25 | How do we control microbial survival?  **APO-3** | 6-7 |
| W, 2/27 | Genetics: one code rules us all | 8 |
| M, 3/4 | The special power of microbial genetics | 8-9 |
| W, 3/6 | The new threat: antibiotic resistance and the 21st century | 20 |
| **M, 3/11** | **EXAM 2**  (Assign organisms for student presentations) |  |
| W, 3/13 | Naming and classification of microbes  **APO-4** | 10 and Bergey’s Manual |
| M, 3/18 | Student presentations |  |
| W, 3/20 | Student presentations |  |
| **3/25- 3/29** | **SPRING BREAK** |  |
| M, 4/1 | Complete presentations; Review |  |
| **W, 4/3** | **Microbial diversity quiz** |  |
| M, 4/8 | The field of epidemiology, or how we study disease | 14 |
| W, 4/10 | How do microbes cause disease? | 15 |
| **M, 4/15** | **CANCELLED** |  |
| W, 4/17 | Innate Immunity: our bodies fight back | 16 |
| M, 4/22 | The power of Adaptive Immunity | 16-17 |
| W, 4/24 | Putting immunity to work: vaccinations and immunological applications | 18 |
| M, 4/29 | When the immune system backfires: autoimmunity, hypersensitivities and immunodeficiencies | 19 |
| W, 5/1 | **EXAM 3**  **APO-5 DUE** |  |
| M, 5/6 | Case studies: skin and eye diseases | 21 |
| W, 5/8 | Case studies: nervous system and cardio/lymphatic diseases | 22-23 |
| M, 5/13 | Case studies: respiratory and digestive diseases | 24-25 |
| W, 5/15 | Case studies: urinary and reproductive diseases | 26 |
| M, 5/20 | Catch up day |  |
| **W, 5/22** | **EXAM 4 (and make-up cumulative final)** |  |

**Tentative Lab Schedule- *update 4/16/19***

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| **Date** | **Topic** | **Lab number** |
| M, 1/28 | Introduction: Lab Safety, Protocols, and Techniques  Microscopy | 1, 2 |
| W, 1/30 | Aseptic Technique  Microbes Ubiquity | 3, 4 |
| M, 2/4 | Pure Culture Techniques  The Smear and Simple Staining | 5, 6 |
| W, 2/6 | The Gram StainMotility | 7, 10 |
| M, 2/11 | Practice Gram Staining | 7 |
| W, 2/13 | Differential and Special Staining: Acid-Fast, Negative and Spore Stains | 8a, 8b, 9 |
| **M, 2/18** | **PRESIDENT’S DAY HOLIDAY** |  |
| W, 2/20 | Using the Spectrophotometer/ Exam Review | 11a |
| **M, 2/25** | **LAB ASSESSMENT 1** |  |
| W, 2/27 | Growth Curve | 11b |
| M, 3/4 | Effects on Growth: oxygen, pH and temperature | 12, 13, 14 |
| W, 3/6 | Growth Control: Temperature and UV | 15, 16 |
| M, 3/11 | Growth Control: Alcohol, Antiseptics and Antibiotics | 17, 18, 19 |
| W, 3/13 | DNA fingerprinting : Restriction Digest and Gel Electrophoresis | 21 |
| **M, 3/18** | **LAB ASSESSMENT 2** |  |
| W, 3/20 | Bacteriophage: Therapeutic Phage Typing of *E. coli*  Transformation Lab | 20, 22 |
| **3/25- 3/29** | **SPRING BREAK** |  |
| M, 4/1 | Minor Unknown: Morphological and Cultural Characteristics | 24a |
| W, 4/3 | Minor Unknown: Carbohydrate Metabolism | 24b |
| M, 4/8 | Minor Unknown: Proteins, Lipids and Multi-Test Media | 24 c,d |
| W, 4/10 | Complete minor unknown Staphylococcus, Streptococcus, and Enteric Unknowns | 25, 26, 27 |
| **M, 4/15** | **CANCELLED** |  |
| W, 4/17 | **LAB ASSESSMENT 3** |  |
| M, 4/22 | Continue SSE |  |
| W, 4/24 | Complete SSE  Begin Major Unknown | 29 |
| M, 4/29 | Continue Major Unknown |  |
| W, 5/1 | Continue Major Unknown  Water Quality and Colilert  **SSE Lab Report Due** | 31 |
| M, 5/6 | Continue Major Unknown/ **Major Unknown Quiz** |  |
| W, 5/8 | Continue Major Unknown  Dental Microbiology- the Snyder Test | 32 |
| M, 5/13 | Continue Major Unknown |  |
| W, 5/15 | Continue major unknown |  |
| **M, 5/20** | **FINAL LAB ASSESSMENT 4** |  |
| **W, 5/22** | **Major Unknown Lab Report Due** |  |