**Applied Microbiology**

**CLASS SCHEDULE**

Welcome to Applied Microbiology! Our first class meeting is Wednesday Jan 13, when we will be meeting for lecture.

**IMPORTANT!!**Always look at this Class Schedule *at least* two weeks in advance, and note due dates! Assignments will not be accepted after their last due date!

**GENERAL COURSE MATERIALS**

SEE THE *COURSE SYLLABUS* FOR INFROMATION ON HOW THIS CLASS WORKS. SEE MOODLE FOR LINKS TO OUR ONLINE COURSE MATERIALS.

**SCHEDULE**

**WEEK #1 (1/13 & 1/15)**

**REMINDERS & ANNOUNCEMENTS:**

* Every week of class includes two lectures (one Wednesday and one Friday) AND a lab on Friday.
* IF YOU MISS THE FIRST CLASS LECTURE YOU MAY HAVE DIFFICULTY UNDERSTANDING HOW THIS CLASS WORKS. THERE IS NO MAKEUP FOR A MISSED LECTURE. IF YOU MISS THE FIRST CLASS, READ BOTH THE SYLLABUS AND SCHEDULE THOROUGHLY, MAKE SURE YOU KNOW HOW TO ACCESS OUR MOODLE, THEN SEE ME IF YOU HAVE ANY QUESTIONS.
* LAB EXERCISE: Laboratory #1 takes place this week, on Friday, before lecture.
* There will be no Lab Quiz for Lab #1.
* ***FLIPPED CLASS WEDNESDAY!!!!*** LECTURES: [Prokaryote Cell Structure & Function Main Page](http://www.scienceprofonline.org/vmc/prokaryotic-cell-main.html). & [Eukaryotic Cell Structure & Function Main Page](http://www.scienceprofonline.org/vmc/eukaryotic-cell-main.html). During lecture on 1/20, after we finish History of Microbiology, we will have a group participation exercise to demonstrate and reinforce your understanding of Cell Structure and the Missing Microbes Book by Dr. Martin Blaser. PLEASE BE PREPARED TO PARTICIPATE WHEN YOU COME TO LECTURE! Points will be available. You will want to go over the Cell Structure Lectures before we meet, and listen to the [Missing Microbes Interview](http://www.npr.org/2014/04/14/302899093/modern-medicine-may-not-be-doing-your-microbiome-any-favors) Associated with the Assignment (which is due 1/22).

**COURSE MATERIALS:**

* LECTURE: [Intro to Microbiology Main Page](http://www.scienceprofonline.org/vmc/intro-microbiology-main.html)
* LECTURE: [History of Microbiology Main Page](http://www.scienceprofonline.org/vmc/history-microbiology-main.html)
* LAB #1: [Microscopy Basics: How to Use a Compound Microscope](http://www.scienceprofonline.org/vmc/vmc-lab/vmc-laboratory-microscopy.html)
* TEXTBOOK READING: Chapters 1 & 3.

**HOMEWORK:**

* Carefully read the SYLLABUS and CLASS SCHEDULE. Record due dates in your calendar. See me with any questions during our next class meeting.

**WEEK #2 (1/20 & 1/22)**

**REMINDERS & ANNOUNCEMENTS:**

* ***FLIPPED CLASS WEDNESDAY!!!!*** LECTURES: [Prokaryote Cell Structure & Function Main Page](http://www.scienceprofonline.org/vmc/prokaryotic-cell-main.html). & [Eukaryotic Cell Structure & Function Main Page](http://www.scienceprofonline.org/vmc/eukaryotic-cell-main.html). During lecture on 1/20, after we finish History of Microbiology, we will have a group participation exercise to demonstrate and reinforce your understanding of Cell Structure and the Missing Microbes Book by Dr. Martin Blaser. PLEASE BE PREPARED TO PARTICIPATE WHEN YOU COME TO LECTURE! Points will be available. You will want to go over the Cell Structure Lectures before we meet, and listen to the [Missing Microbes Interview](http://www.npr.org/2014/04/14/302899093/modern-medicine-may-not-be-doing-your-microbiome-any-favors) Associated with the Assignment (which is due 1/22).

**COURSE MATERIALS**

* Finish LECTURE: [History of Microbiology Main Page](http://www.scienceprofonline.org/vmc/history-microbiology-main.html)
* ***FLIPPED!*** LECTURES: [Prokaryote Cell Structure & Function Main Page](http://www.scienceprofonline.org/vmc/prokaryotic-cell-main.html) & [Eukaryotic Cell Structure & Function Main Page](http://www.scienceprofonline.org/vmc/eukaryotic-cell-main.html)
* LECTURE: [Biological Classification Main Page](http://www.scienceprofonline.org/vmc/biological-classification-main.html)
* LECTURE: [Prokaryotes - Meet the Microbes Main Page](http://www.scienceprofonline.org/vmc/prokaryotes-bacteria-types-main.html)
* LAB #2: [Gram Staining & Isolation Streak Plate Method](http://www.scienceprofonline.org/vmc/vmc-lab/vmc-laboratory-gram-stain-isolation-streak.html)
* TEXTBOOK READING: Chapters 4 & 13.

**HOMEWORK**

*In-Person*

* HOMEWORK – “MISSING MICROBES”. ***Due 1/22****. Last day to turn in late 1/29.*

*On-line*

* LAB QUIZ - Lab #2: Gram Staining & Isolation Streak Plate Technique. ***Available 1/22 until 9am****. NO LATE SUBMISSIONS ACCEPTED.*
* UPLOAD LAB REPORT #1 - Microscopy. ***Due 1/22, before 11:30pm.*** *Last late date 1/29 before 11:30pm.*
* *CONNECT - Learnsmart Textbook Review UNIT 1 (Chapters 1, 3, 4, 5, 13, 17).* ***Due 2/5, before 11:30pm****, the day of the midterm. NO LATE SUBMISSIONS ACCEPTED.*

**WEEK #3 (1/27 & 1/29)**

**REMINDERS & ANNOUNCEMENTS:**

* LAB QUIZ: Remember to take the Lab #2 Quiz on Moodle BEFORE we meet for lab this week!
* I will be introducing a study aid this week: ***Bacteria Classification Spreadsheet:*** You will complete this study aid throughout the semester. You can find the Word .doc of this assignment both on the [Virtual Microbiology Main Page](http://www.scienceprofonline.org/virtual-micro-main.html) and the [Meet the Microbes: Prokaryotes Lecture Main Page](http://www.scienceprofonline.org/vmc/prokaryotes-bacteria-types-main.html). **This assignment is due 2/26 MAKE NOTE OF THIS DUE DATE! NO LATE SUBMISSIONS ACCEPTED**.

**COURSE MATERIALS**

* LECTURE: [Prokaryotes - Meet the Microbes Main Page](http://www.scienceprofonline.org/vmc/prokaryotes-bacteria-types-main.html)
* LECTURE: [Eukaryotes - Meet the Microbes Main Page](http://www.scienceprofonline.org/vmc/eukaryotic-microbe-types-main.html)
* LAB #3: [Differential Staining & Specialized Media](http://www.scienceprofonline.org/vmc/vmc-lab/vmc-laboratory-differential-stains-specialized-media.html)
* TEXTBOOK READING: Chapter 5 & 17.

**HOMEWORK**

*In-Person*

* HOMEWORK Radiolab "RODNEY VS DEATH" - ***Due 1/29, in class.*** *Last late date 2/5.*

*On-line*

* LAB QUIZ - Lab #3: Differential Staining & Specialized Media – ***Available until 1/29, 9am****, NO LATE SUBMISSIONS ACCEPTED.*
* UPLOAD LAB REPORT #2 - Gram Staining & Isolation Streak Plate*.* ***Due 1/29, before 11:30pm.*** *Last late date before 2/5 before 11:30pm.*
* CONNECT - Learnsmart Textbook Review UNIT 1 (Chapters 1, 3, 4, 5, 13 & 17). ***Due 2/5, before 11:30pm****, the day of the midterm. NO LATE SUBMISSIONS ACCEPTED.*

**WEEK #4 (2/3 & 2/5) MIDTERM!**

**REMINDERS & ANNOUNCEMENTS:**

* **MIDTERM EXAM takes place during lecture time on Wednesday 2/3!!!**

**COURSE MATERIALS**

* LECTURE: [Microbial Metabolism & Growth Main Page](http://www.scienceprofonline.org/vmc/microbial-metabolism-growth-main.html)
* TEXTBOOK READING: Catch up if behind and review UNIT 1 chapters.
* LAB #4: [Bacterial Growth Media & Cultures](http://www.scienceprofonline.org/vmc/vmc-lab/vmc-laboratory-bacterial-growth-media-cultures.html) (collect samples).

**HOMEWORK**

 *On-line*

* LAB QUIZ - Lab #4: Bacterial Growth Media & Cultures – ***Available until 2/5, 9:00am.*** *NO LATE SUBMISSIONS ACCEPTED.*
* CONNECT - Learnsmart Textbook Review UNIT 1 (Chapters 1, 3, 4, 13 & 17). ***Due 2/5, before 11:30pm****, the day of the midterm. NO LATE SUBMISSIONS ACCEPTED.*
* UPLOAD LAB REPORT #3 Differential Staining & Specialized Media - ***Due 2/5, before 11:30pm****. Last late date 2/12 before 11:30pm.*

**WEEK #5 (2/10 & 2/12)**

**REMINDERS & ANNOUNCEMENTS:**

* I will be introducing a study aid this week:

***Differential Stain & Media Study Aid:*** This is NOT an assignment, but is a tool that you can use to help you learn the differential stains and media that we cover in this class. You can find the Word .doc of this study aid both on the [Virtual Microbiology Main Page](http://www.scienceprofonline.org/virtual-micro-main.html) and the [Differential Staining & Specialized Media Lab Main Page](http://www.scienceprofonline.com/vmc/vmc-lab/vmc-laboratory-differential-stains-specialized-media.html).

**COURSE MATERIALS:**

* LECTURE: [Microbial Genetics Lecture Main Page](http://www.scienceprofonline.org/vmc/microbial-genetics-main.html)
* LECTURE: [Virus Structure Main Page](http://www.scienceprofonline.org/vmc/virus-structure-main.html)
* LECTURE: [Virus Life Cycle Main Page](http://www.scienceprofonline.org/vmc/virus-life-cycle-main.html)
* LAB #4: [Bacterial Growth Media & Cultures](http://www.scienceprofonline.org/vmc/vmc-lab/vmc-laboratory-bacterial-growth-media-cultures.html) (examine results).
* LAB #5: [Microbial Control](http://www.scienceprofonline.org/vmc/vmc-lab/vmc-laboratory-microbial-control.html) (design home experiments and obtain supplies)
* TEXTBOOK READING: Chapters 7, 8 & 9.

**HOMEWORK**

*In-Person*

* HOMEWORK - Radiolab "SHRINK" Podcast - ***Due 2/12, in class.*** *Last date to turn in late 2/19 in class.*

*On-line*

* LAB QUIZ - Lab #5: Microbial Control – ***Available until 2/12, 9:00am.*** *NO LATE SUBMISSIONS ACCEPTED.*
* CONNECT - Learnsmart Textbook Review UNIT 2 (Chapters 6, 7, 8, 9, 11, 12, 14 & 15). ***Due 2/26, before 11:30pm****, the day of finals*. *NO LATE SUBMISSIONS ACCEPTED.*
* There is no Lab Report due this week.

**WEEK #6 (2/17 & 2/19)**

**REMINDERS & ANNOUNCEMENTS**

* Next week is our last week of class, and some things are due, particularly if you are turning in any an eligible late assignments. Please pay careful attention to due dates, as there are no exceptions.

**COURSE MATERIALS**

* LECTURE: [Viruses - Meet the Microbes Main Page](http://www.scienceprofonline.org/vmc/virus-types-main.html)
* LECTURE: [Immunology - Innate / Acquired Main Page](http://www.scienceprofonline.org/vmc/immunology-innate-acquired-main.html)
* LAB #5: [Microbial Control](http://www.scienceprofonline.org/vmc/vmc-lab/vmc-laboratory-microbial-control.html) (home experiment version, discuss experiments)
* During lab this week, you will complete and turn in a summary of your, and others, Home Microbial Control Experiment.
* Chapters 6, 11 & 12.

**HOMEWORK**

*In-Person*

* HOMEWORK - Radiolab "PATIENT ZERO" Podcast - ***Due 2/19, in class.*** *Last date to turn in late 2/26, in class.*

*On-line*

* UPLOAD LAB REPORT #4 - Bacterial Growth Media & Cultures - ***Due 2/19, before 11:30pm****. Last date to turn in late, 2/26, before 11:30pm.*
* CONNECT - Learnsmart Textbook Review UNIT 2 (Chapters 6, 7, 8, 9, 11, 12, 14 & 15). ***Due 2/26, before 11:30pm****, the day of finals*. *NO LATE SUBMISSIONS ACCEPTED.*

**WEEK #7 (2/24 & 2/26)**

**REMINDERS & ANNOUNCEMENTS**

* **LECTURE FINAL EXAM** takes place during lecture time on Monday 2/26. The final is cumulative, over all material that we have covered in lecture.
* **LAB PRACTICAL EXAM** takes place 2/26, in lab, during your scheduled lab time.
* In lecture, 2/24, we will be filling out IDEA course evaluation forms finishing Immunology and reviewing for the lab and lecture final.
* ***The last date/time to turn in extra credit is 2/26, in class***. Remember the rules associated with extra credit. They are explained in the syllabus.
* This week is our last full week of class, and some things are due, particularly if you are turning in any an eligible late assignments. Please pay careful attention to due dates, as there are no exceptions.

**COURSE MATERIALS**

* TEXTBOOK READING: Chapters 14 & 15.

**HOMEWORK**

*In-Person*

* HOMEWORK - RadioLab "PARASITES" Podcast - ***Due 2/26, in class.*** *NO LATE SUBMISIONS ACCEPTED.*
* UPLOAD HOMEWORK - Bacteria Classification Spreadsheet - ***Due 2/26, in class.*** *NO LATE SUBMISIONS ACCEPTED.*

*On-line*

* UPLOAD LAB REPORT #5 – Microbial Control - ***Due 2/26, before 11:30pm.*** *NO LATE SUBMISIONS ACCEPTED.*
* CONNECT - Learnsmart Textbook Review UNIT 2 (Chapters 6, 7, 8, 9, 11, 12, 14 & 15). ***Due 2/26, before 11:30pm****, the day of finals*. *NO LATE SUBMISSIONS ACCEPTED.*
* There is no Lab Quiz this week.

NOTE: This Course Schedule, the Moodle Materials and the Syllabus are subject to change. Any changes will be announced through the class discussion and announcement forum on Moodle.