

Course Syllabus

Harriet Wilson

Bio. Sci. 4, Fall 2016

Course Code 80328

Lecture: Sewell Hall, Room S-114

Lab Section: Sewell Hall Room S-114

Hours: 162 (54 lecture, 108 laboratory)

Tuesday & Thursday 5:30 – 10:05pm

Tuesday & Thursday 5:30 – 6:50pm

Tuesday & Thursday 7:00 – 10:05pm

Contact information:

Home phone – (916) 652-0637

Preferred Email for Microbiology Students – microbes@mac.com

Prerequisite: Completion of high school chemistry, CHEM A, or higher-level chemistry course with a grade of "C" or better.

Advisory: Eligibility for ENGL 11 strongly recommended.

Grading:

Your grade will be based on your percentage relative to the total point accumulation, and is **earned by you, not given to you by your instructor**. Letter grades will be assigned as follows:

93-100% = A, 80-92% = B, 70-79% = C, 60-69% = D and below 60% = F

Points can be earned by completing the following:

| | |
|--|---------------------|
| Lecture midterm exams (2, 100 points each) | 200 points |
| Lecture Final exam (1, 200 points) | 200 points |
| Laboratory exams (2, 150 points each) | 300 points |
| Lecture quizzes (10 or more, 20 points each) | 200 points |
| Laboratory quizzes (10 or more, 10 points each) | 100 points |
| Homework assignments (5 or more, 20 points each) | 100+ points |
| Morphological unknown (1) | 30 points |
| Physiological unknowns (2, 50 points each) | 100 points |
| Semester project (1) | 70 points |
| Estimated total | ~1300 points |

Quiz and Exam Format:

The format for lecture quizzes and exams can readily be observed in the microbiology study guide (revised fall 2013), and will include definitions, fill-in-the-blank, short answers and occasionally diagrammatic type questions. There will be **NO** multiple-choice/true-false questions and **NO** Scantrons used for lecture materials. All quizzes and exams (with the possible exception of laboratory quizzes) will begin promptly at the beginning of class. Laboratory quizzes will cover material emphasized and recorded during previous laboratory sessions, e.g., observations made, results determined, calculations required, etc. Laboratory quiz format will vary, but will not require Scantron forms.

Makeups:

Makeup quizzes covering lecture materials will be essay type and will **NOT** include extra credit.

Makeup exams not taken before regularly scheduled exams are returned will also be essay type and will not include extra credit. If you miss an exam, it is your responsibility to make it up as quickly as possible. Makeups for laboratory quizzes will **NOT** be available; however, the lowest scores obtained for one lecture quiz and one laboratory quiz will be dropped, and 30 points will be subtracted from the total points possible at the semester's end. The lecture final exam cannot be made up after the semester ends, i.e., it must be taken on or before the day of the last class meeting.

Extra Credit:

Extra credit options **WILL NOT** be provided on an individual basis. All extra credit options will be presented to the class as a whole. A maximum of 30 points extra credit is possible.

Required Text and Related Materials:

Text – Tortora, G.J., Funke, B.R. and Case, C.L., Microbiology an Introduction, 12th Ed.

Lab Manual – Wilson, H. and Warren, S., Microbiology Laboratory Syllabus, Exercises and Questions, August, 2016 (2014 or 2015 editions can be used as an alternative). Online version also available.

Microbiology Study Guide (on-line only), Microbiology Lecture Syllabus (on-line only)

Laboratory materials – Safety goggles or glasses, lab coat (optional), Colored pencils, glass marker (must be non-water soluble), three-ring binder

On-line Assistance:

Although Sierra College has allocated space for this class on Canvas, the Canvas account for the Tuesday-Thursday evening section will **NOT** be activated. On-line assistance is available through the Microbiology Web site (<http://biosci.sierracollege.edu/materials/4/index.html>), and through email contact with your instructor (microbes@mac.com). Announcements will be posted on the Microbiology Web site at various intervals throughout the semester, and frequent visits are highly recommended. Although most lectures are available in printed form as PDF files, students are expected to attend lecture sessions, and are responsible for obtaining the information presented there.

Additional Information:

Individuals enrolled in Bio. Sci. 4 are expected to be conscientious students serious about learning microbiology, **if you do not meet these criteria, you are in the wrong class**. In the interest of maintaining optimum learning opportunities, please abide by the following:

Attend all lecture and laboratory meetings, arrive promptly at the beginning of class, come prepared, i.e., read assigned materials/exercises before class, and **engage your brain!**

Turn off or silence all cell phones, PDAs and other potentially disruptive devices while in class.

Do not consume food, drinks, snacks, candy, etc. while in the microbiology **Laboratory**.

Be respectful of other students, get to know one another and work together. Microbiology is much more enjoyable if you make it social, and you will learn better by helping others learn.

Promptly report cheating or other unethical behavior to your instructor, and avoid displaying behavior likely to be interpreted as cheating – **Cheating precipitates hostility!**

Remember that meeting the deadlines for adding or dropping this class is your responsibility.

Recognize that flash cards, the Internet, the study guide and mnemonic devices are your "friends".

If you are uncertain about anything relative to this class, please ask your instructor.

The Official Student Learning Outcomes for BIOL 0004 (12/4/13) are as follows:

- CSLO 1. Distinguish the cellular organization of organisms within Domains Archaea, Bacteria, and Eukarya and describe the microscopic structures of viruses. (PSLO A, C, D)
- CSLO 2. Distinguish morphological, physiological, and environmental characteristics for, ecological impact of, and taxonomic classification for several representative microorganisms from each Domain of life. (PSLO A, B, C, D)
- CSLO 3. Describe metabolic and genetic pathways of microbial cells and the replication processes of viruses. (PSLO A, C, D)
- CSLO 4. Describe the human immune system and the importance of vaccination against microorganisms and viruses to human herd immunity. (PSLO A, D, E)
- CSLO 5. Perform modern genetic techniques used in the identification of microorganisms and recombinant DNA technology. (PSLO A, B, C, D)