



BIOLOGY 401 GENERAL MICROBIAL SPRING 2009

Mon, Wed, Fri, 1:10 – 2:00 p.m., SCI 210

Instructor: Dr. José R. de la Torre
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Office Hours: Wednesdays 2 - 4 p.m.

Course Description

The world around us is teeming with microbial life. Microbes associated with our bodies outnumber our own cells 10:1! Given their numbers, microorganisms play vitally important roles not only in our own health, but also in the health of the planet. This three-unit course will introduce you to the microbial world. We will examine the structure, growth and biology of microorganisms, with an emphasis on microbial physiology and molecular biology. We will draw from both medical and environmental microbiology to get a better understanding of how microbes grow, how they respond and in turn influence their environments. We will use both the textbook and primary research papers as source material in our explorations in order to become familiar with the subject matter. Topics to be covered will include growth dynamics and cell division, bacterial genetics and pathogenesis.

Prerequisites:

One semester of Organic Chemistry (CHEM 333) and two semesters of Introductory Biology (BIOL 230 and BIOL 240) are required with a grade of C- or better. An understanding of the chemistry and basic biology learned in these courses is necessary to succeed in studying microbiology. You should enroll in BIOL 401 only AFTER you have taken these courses. If you have not taken these courses at SFSU, you must provide documentation of successful completion of similar courses. **If you do not meet these prerequisites, you will be dropped from the roll.** Students registered for the course but not attending the first weeks of lectures may be dropped from the roll.

Textbook:

The reading assignments are from *Microbiology: An Evolving Science*, by Slonczewski and Foster, and are listed in the syllabus. The book is available in electronic format (ebook) at <http://www.wwnorton.com/students/titles/biology/mbio/order.php>. The entire ebook is available for \$60 and individual chapters can be purchased for \$2 each. The publisher also has a free companion website that includes review questions, chapter summaries, and some graphics at <http://www.wwnorton.com/studyspace>.

Additional readings will be assigned in class and made available in lecture and/or through iLearn. Required readings for each lecture are listed in the lecture schedule and on iLearn, but changes and additions may be announced in class; you should read the material before coming to class.

Grading:

Four exams will be given during the semester: three in-class exams ("midterms") and one final exam. **The final exam is cumulative** and will cover selected material from the entire course. Test questions will be derived from lecture, handouts, or the required reading. You are responsible for understanding all topics covered in lecture. Four problem sets will also be given during the semester. They will provide an indication of the types of questions to be asked on the exam and help assess how much is being learned and understood. In addition, students will have to participate in group presentations at the end of the semester on select microorganisms. Other factors that contribute to your final grade include class participation (assessed via clickers), quizzes, and miscellaneous assignments.

Exams (4 total)	4 x 100 pts = 400 pts	60%
Problem sets (4 total)	4 x 25 pts = 100 pts	20%
Class presentation	50 pts = 50 pts	10%
Quizzes	25 pts = 25 pts	5%
Class participation, Misc.	25 pts = 25 pts	5%
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Total	600 pts	100%

Missed problem sets and exams may NOT be made up, except if missed for a serious or compelling reason. You must provide documentation of your absence and the makeup test will be in essay format. Students will receive a zero for missed assignments or exams.

Clickers:

Students are responsible for ensuring that their clickers are working properly. There will be random checks to ensure that students are using their own clickers. Responses using clickers will count towards class participation. Typically, a correct response will be worth 2 points, an incorrect one 1 point, and no response 0 point.

Attendance:

Students enrolled in BIOL 401 should attend all class sessions. If you miss a class, you are responsible for obtaining the information covered in lecture from a classmate.

Class Website & E-mail Policy

Course material, including lecture notes and assignments, will be made available online through SFSU's iLearn system (<http://iLearn.sfsu.edu/>) as they become available. Lecture notes will be posted within 48 hours AFTER each lecture. These materials are intended to supplement your own notes, not replace them. If you encounter any problems, please contact the instructor as soon as possible.

You are welcome to e-mail questions to the instructor. Whenever e-mailing questions, please include "BIOL 442" in the subject line and identify yourself by signing the message with your full name. If appropriate, responses will be posted on iLearn or discussed in class—without identifying the student. *Be advised that, in general, e-mails will receive responses within a day or two.*

Cell phones & pagers

Please silence cell phones and pagers before arriving in class.

Statement on plagiarism and cheating

Students are expected to maintain a high level of academic integrity in all work pursued at SFSU. Cheating on an examination will result in an automatic zero points for that exam. Plagiarism, defined as either direct copying or loose paraphrasing of text from any published work (including online) without appropriate referencing, or use of another person's work or ideas without appropriate attribution, will result in zero points for that assignment. Any incidence of cheating or plagiarism will be reported to the Chair of the Biology Department, the Dean of the College of Science and Engineering, and the Office of Student Affairs.

American with Disabilities (ADA) Accommodation

The University is committed to providing reasonable academic accommodation to students with disabilities. Students with disabilities who need accommodations are encouraged to contact the instructor. The Disability Programs and Resource Center (DPRC) is available to facilitate the accommodations process. The DPRC is located in the Student Service Building and can be reached by telephone (voice/TTY 415-338-2472) or by e-mail (dprc@sfsu.edu).

Important Deadlines for Add/Drop/Withdrawal:Friday, February 20, 2009

Deadline to add or drop courses with instructor-issued permit number.

Friday, March 20, 2009

Deadline to request CR/NC grading option.

February 21 – April 24, 2009

Withdrawal from a course(s) is permissible only for serious and compelling reasons, documentation is not needed during this time period. The student will receive a "W" grade.

April 25 – May 15, 2009

Withdrawals are normally not permitted during this period except in cases of verified accident or serious illness where the cause of withdrawal is due to circumstances clearly beyond the student's control and where the assignment of an incomplete is not practical. Ordinarily, withdrawals in this category involves a total withdrawal from the University

Changes to the Syllabus or Lecture Schedule

The syllabus and lecture schedule are subject to change. Changes will be announced in class and/or iLearn.