

# MBIO 3010 Bacteriology

TR 12:30P – 1:45P, Dorthy & Bill Bizzini 117, Spring 2017

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<b>Instructor</b>	Choong-Min Kang, Ph.D.
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<b>Office hours</b>	M 11:00A-12:00P, W 11:00A-12:00P, or by appointment
<b>E-mail</b>	<a href="mailto:ckang1@csustan.edu">ckang1@csustan.edu</a> <ul style="list-style-type: none"><li>- Best method to contact instructor</li><li>- Please include your name and the course number in the subject line.</li></ul>
<b>Webpage</b>	<a href="https://blackboard.csustan.edu/">https://blackboard.csustan.edu/</a> (lecture notes, announcement, etc)

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## Course Description

A study of microorganisms, particularly bacteria, including an introduction to bacterial structure/function, genetics, metabolism, physiology, and evolution, and their role in the world.

## Course objectives

1. Gain factual knowledge of the basic principles and theories of microbiology, particularly
  - a. Bacterial structures and their function
  - b. Bacterial genetics and evolution
  - c. Bacterial cellular metabolism and physiology
  - d. Microbial diseases and host immunity
2. Understand the role of microbes in everyday life including medicine (health and welfare and in infectious diseases), environment and industry.

## Course Requirements

*Prerequisites:* One year of introductory college-level biology and chemistry series (ZOOL 1050 and BOTY 1050, or BIOL 1150 and CHEM 1110 or equivalent).

## Required Text

"Microbiology, An Introduction" by Tortora, Funke and Case, 12<sup>th</sup> edition with Mastering.

## ADD/DROP Policies

February 22 is the last day to drop the course. The add/drop policies for this class are the same as the university add/drop policies.

## Course Etiquette

1. Arrive prepared and on time for class.
2. Turn off and put away all cell phones and pagers. No cell phone will be allowed out at any time. If they are taken out, they will be confiscated.
3. Please do not carry on conversations with your neighbors once class has started. Such behavior is highly disrespectful and very distracting to me and to the other students around you.

## Grading Policies

1. **Academic Dishonesty and Misconduct:** There is zero tolerance for cheating. Cheating in any capacity in this class will result in penalties ranging from a minimum of a zero on the assignment or exam to a maximum of expulsion from California State University, Stanislaus as indicated by the official University Policy regarding dishonesty and misconduct. Exams, reports, and/or other assignments are indicators of individual performance. Copying off of another student's exam, plagiarized reports, or other assignments constitutes cheating. If your phone rings during the exam, ten (10) points will be deducted from your exam score. Taking out a cell phone during an exam is considered cheating, your exam will be confiscated, and you will receive zero points for that exam.

2. **Regular attendance is vital to your success in this course:** You are expected to attend class regularly, come to class on time, and complete assigned readings. Attendance requires not only your physical presence, but your attention and participation as well. Students who are physically present, but inattentive (including, but not limited to, sleeping, excessive conversation, texting, emailing, web-surfing, being disruptive, arriving late, leaving early, etc.) may be asked to leave. Missing more than 4 classes may result in being dropped from the course. You are responsible for any information or assignments you missed in your absence.

### 3. Exams:

a. Exams are written with the course objectives in mind. Because the information in this course cannot be divided into separate, discreet units, exams will, to some extent, be cumulative.

b. Questions that may appear on exams include multiple choice, matching, short answer, discussion, problem-solving and case study interpretation. You do **NOT need Scantron** for the exams. You will mark on the exam paper directly. Note that:

i. Take care to erase well those answers you do not want marked.

ii. Illegible answers in written portion will not be graded.

iii. Correct spelling and grammar are necessary for effective communication. Therefore, spelling and/or grammatical errors will result in loss of points on exams.

c. Unless otherwise stated, exams will begin at the beginning of the scheduled class time. If you are tardy, you will not be given extra time to finish the exam.

d. You will not be allowed to leave the room until you have finished and turned in your exam.

e. After graded exams have been returned, you have **one week** to review exams or dispute errors; no grades will be changes after that time.

4. **Make-up exams can be given ONLY of the Final under extenuating circumstances and only with documentation:** Make-up exams will be different and will consist only of short answers and essay questions. Failure to appear at exam time without 24 hours prior notice to instructor with an appropriate excuse, or an appropriately documented emergency, will result in zero points for that exam. No Make-up for regular exams!

5. Total points for course = 600 pts

- There are 5 regular exams (120 pts/exam, 40 questions)

- Additional assignments may also be given throughout the semester. The instructor reserves the right to give unannounced quizzes if it becomes apparent that students are not keeping up with the material, there are an unacceptable number of absences and/or if students show up late for class.

**\*No late assignments will be accepted.**

6. **Grading will be based on a percent scale:**

93-100 = A, 90-92 = A-, 87-89 = B+, 83-86 = B, 80-82 = B-, 77-79 = C+, 73-76 = C, 70-72 = C-, 67-69 = D+, 60-66 = D, < 60 = F

**NOTE:**

- a. Take care of your grade. Remember you earn your grade; it is not given to you.
- b. The instructor reserves the right to reduce your grade due to excessive absences and/or tardiness.
- c. Grades/scores will not be sent to students via email or be given over the telephone.
- d. Instructor will not calculate student's scores or grade.

**7. Course Page:**

Information for the course (Lecture notes, syllabus, related materials including exam results, etc.) can be found on the course's Blackboard (<https://blackboard.csustan.edu/>). Lecture materials are copyrighted and are only for the personal use of students enrolled in the course. Do not give the username/password to anyone else. If you do so no more material will be provided.

\*Note: Laptops, cameras, or cell phones are allowed in class for the learning purpose only.

Class schedule

Date		Related Reading	Subjects
Jan	26	1	Introduction, The Microbial World and You
	31	1,2	The Microbial World and You, Chemical Principles
Feb	2	2	Chemical Principles
	7	4	Prokaryotic and Eukaryotic Cells
	9	4	Prokaryotic and Eukaryotic Cells
	14	4, 5	Prokaryotic and Eukaryotic Cells, Microbial Metabolism, <b>1st Exam</b>
	16	5	Microbial Metabolism
	21	5	Microbial Metabolism
	23	6	Microbial Growth
	28	6	Microbial Growth
Mar	2	7	Control of Microbial Growth, <b>2nd Exam</b>
	7	7	Control of Microbial Growth
	9	8	Microbial Genetics
	14	8	Microbial Genetics
	16	8	Microbial Genetics
	21		Spring break
	23		Spring break
	28	8,9	Microbial Genetics/Biotechnology and recombinant DNA
	30	9	Biotechnology and recombinant DNA
Apr	4	9	Biotechnology and recombinant DNA, <b>3rd Exam</b>
	6	9,10	Biotechnology and recombinant DNA/Classification of Microorganisms
	11	10	Classification of Microorganisms
	13	11	Prokaryotes
	18	11	Prokaryotes
	20	12	Prokaryotes
	25	13	Viruses, Viroids and Prions, <b>4th Exam</b>
	27	13	Viruses, Viroids and Prions
May	2	14	Diseases and Epidemiology
	4	14	Diseases and Epidemiology
	9	15	Mechanisms of Pathogenicity
	11	15	Mechanisms of Pathogenicity
	16	20	Antimicrobial Drugs
	23		<b>(11:15 am - 1:15 pm) 5th Exam</b>