MBIO 3010 Bacteriology

TR 12:30P – 1:45P, Naraghi 322, Spring 2020

Instructor	Choong-Min Kang, Ph.D.
Office/Telephone	N274 / (209) 667-3484
Office hours	W/F 1:00 PM-2:00PM, or by appointment
E-mail	ckang1@csustan.edu - Best method to contact instructor - Please include your name and the course number in the subject line.
Webpage	https://blackboard.csustan.edu/ (lecture notes, announcement, *etc*)

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

    c. Bacterial cellular metabolism and physiology

    d. Microbial diseases

2. Understand the role of microbes in everyday life including medicine (health and welfare and in infectious diseases), environment and industry.

Course Requirements

Prerequisites: Introductory college-level biology and chemistry series (BIOL 1050/1150 and CHEM 1100/1110, or equivalent).

Recommended Textbooks

1. "Microbiology, An Introduction" by Tortora, Funke and Case, 12th edition.
2. "Microbiology" Openstax free textbook.(https://openstax.org/details/books/microbiology)

ADD/DROP Policies

February 21 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. No cell phone will be allowed out at any time.

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. Please silence your phone during the exam. 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. 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. There will be **5 regular exams**.

5. Make-up exam WON'T be allowed. Instead,

a. The lowest exam score **among the first 4 exams** will be dropped (5^{th} exam cannot be dropped),

b. If you skip an exam, that exam WON'T be counted as your lowest,

c. If you have to skip an exam (for medical- or school activity-related reasons), official letter or document must be provided to instructor with an appropriate excuse. Then, the skipped exam will be dropped.

d. If you have to skip more than twice during the semester, you will be asked to drop the course or offered an "I (Incomplete)" grade.

6. Total points for course = 530 pts

4 regular exams (120 pts/exam, 40 questions)	480 pts
Labster (Virtual Lab: more on this in class)	50 pts

Total	530 pts

- 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__.

7. **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.

8. **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		Subjects
Jan	28	Introduction, The Microbial World and You
	30	The Microbial World and You
Feb	4	The Microbial World and You/Prokaryotic Cells
	6	Prokaryotic Cells
	11	Prokaryotic Cells
	13	1st Exam, Prokaryotic Cells/Microbial Metabolism
	18	Microbial Metabolism
	20	Microbial Metabolism
	25	Microbial Growth
	27	Microbial Growth
Mar	3	Microbial Growth/Control of Microbial Growth
	5	2nd Exam, Control of Microbial Growth
	10	Control of Microbial Growth/Microbial Genetics
	12	Microbial Genetics
	17	Microbial Genetics
	19	Microbial Genetics
	24	Spring break
	26	Spring break
	31	Cesar Chavez Day (Campus Closed)
Apr	2	Prokaryotes
	7	3rd Exam, Prokaryotes
	9	Prokaryotes/Viruses, Viroids and Prions
	14	Viruses, Viroids and Prions
	16	Viruses, Viroids and Prions
	21	Viruses, Viroids and Prions
	23	Diseases and Epidemiology
	28	4th Exam, Diseases and Epidemiology
	30	Diseases and Epidemiology
May	5	Mechanisms of Pathogenicity
	7	Mechanisms of Pathogenicity
	12	Mechanisms of Pathogenicity
	14	5th Exam (11:15 AM - 1:15 PM)