

MICR 2010-01 (Class #: 95126)
Microbiology for Health-Related Sciences- Fall 2018

Instructor:

- **Dr. Mohamed Maged, Youssef;** Office: Bios 262
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Class Days/Time: MWF 8:00-8:50 AM in SH 358B
Office Hours: M/W/F 9:45 AM -11:00 AM

Course description:

- Basic function and structure of microorganisms; host-parasite relationships, infectious diseases, immunology and serology, epidemiology, antimicrobial agents, and chemotherapy.

Prerequisites:

- BIOL 1200 or BIOL 2010 and BIOL 2020 with a grade of C or higher, CHEM 1100 or CHEM 1010 with a grade of C.

Student learning outcome: Upon completion of this course students will

- Be able to describe and differentiate microbial agents most relevant for human health and disease with special emphasis on bacteria and viruses
- Be able to name key parameters promoting microbial proliferation and apply this knowledge to control microbial growth
- Understand microbial interaction with humans and the immune response
- Be familiarized with common microbial diseases including transmission, pathogenesis, symptoms, diagnostics, prevention and therapy
- Be able to identify mechanisms to treat and prevent infectious diseases

Required textbook:

- **Microbiology: The Human Experience**
John W. Foster, Zarrintaj Aliabadi, and Joan L. Slonczewski
W. W. Norton & Company, Inc.
ISBN: 978-0-393-90609-7). Available at University Bookstore.

PowerPoints and course related materials:

- Accessible via Canvas
- You must have an NIS account and calstatela.edu email address in order to be added to Canvas.

Attendance:

- Regular attendance is required and will be tracked through active learning exercises and attendance (sign-in) sheet.

Study suggestions:

- Always read the text and the PowerPoints and do the Inquizitive-online activity before attending lecture.
- summarize what you have learned after lecture.
- Take very good notes during lecture- anything that was explained or commented on verbally may be tested on.
- Utilize all student support materials provided by the publisher.
- do the Smartwork5-online homework before the due date.
- Form study groups and be able to explain the material you have learned to your peers.
- Create tables that organize the lecture material from different viewpoints.
- Learn to recognize when you need help and get help in a timely manner (visit office hour, email instructor, tutor center).
- Study, study, study, study, study.....

Performance evaluation: 700 points total

Reflective essays (one at the beginning of class, one at the end, 10 points each)	20 pts
Interview assignment	30 pts
Pre-lectures quizzing activity (INQUIZITIVE)	100 pts
post-lectures quizzing activity (SMARTWORK5-homework)	120 pts
Attendance and In-class activity	30 pts
2 Midterm exams	200 pts
Final exam (comprehensive)	200 pts

You will write two **reflective essays**, one at the very beginning of the class, and one at the end of the class. Instructions for these essays will be posted on Canvas. These essays aim to help you connect with the class and shall establish early on the significance of the class content. Lectures will routinely include various active learning exercises for which you will work in groups. Points are given for participation. Online smart activities and assignments such as **Inquizitive** and **Smartwork5-homework** are used instead of the traditional pre and post-lectures-quizzes. Make sure to submit all the assignments before their due date. Towards the end of the semester, you will conduct an **interview** with a professional from your desired career path, to help you better understand the significance of this course for your future career. The interview will be related to a topic discussed in class. Specific instructions will be posted. **Midterms** and **Final exam** consist of multiple choice and other questions. Questions are based on lecture content (material captured in the PowerPoint slides, additional verbal instruction, class discussions, and active learning exercises) and additional questions will be drawn from chapter end self-study and in-class assessments. Bring scantrons (Form No: 882-E) to the midterms and final exam. You must bring your picture ID (Golden Eagle or driver’s license) to the midterms and final.

Grades: Based on the % points achieved out of the *total achievable points (450 Points) the students can earn:*

A : ≥ 92 % (644 pts)	<i>B+ : ≥ 84 % (588 pts)</i>	<i>C+ : ≥ 72 % (504 pts)</i>	<i>D+ : ≥ 60 % (420 pts)</i>
<i>A- : ≥ 88 % (616 pts)</i>	<i>B : ≥ 80 % (560 pts)</i>	C : ≥ 68 % (476 pts)	<i>D : ≥ 56 % (392 pts)</i>
	<i>B- : ≥ 76 % (532 pts)</i>	<i>C- : ≥ 64 % (448 pts)</i>	<i>D- : ≥ 50 % (350 pts)</i>
			<i>F : below 50 %</i>

Keep track of your points:

Assignment	Points	Your points
Reflective paper 1	10	
Reflective paper 2	10	
INQUIZITIVE	100	
SMARTWORK5	120	
Interview	30	
Attendance & activity	30	
Midterms	200	
Final exam	200	
Total	700	

General policies:

No make-up examinations. Missed events will be set as “0 points” unless satisfactorily justified with supporting documentation for example 1. Doctor’s note or 2. Graduate or Medical School Interview confirmation. Students are responsible to obtain the missed information. The Drop/Incomplete and Academic/Honesty policies explained in the University General Catalogue will be strictly followed. Students are expected to read and abide by the University’s Academic Honesty Policy, which can be found at <http://www.calstatela.edu/academicsenate/handbook/ch5a>. Students who violate this policy will be subject to disciplinary action, and may receive a failing grade in the course for a single violation. You are responsible for the prerequisites for this course and are encouraged to discuss any questions regarding the policies and prerequisites with the instructor. Students with disabilities: Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation. Please contact the instructor ASAP to arrange appropriate accommodations!

Students are strongly encouraged to work with the instructors throughout the course.

You can email anytime and expect responses within 24 hours.

INQUIZITIVE: Inquizitive is a new formative adaptive quizzing program that helps students to prepare for lectures and reinforces core concepts in the text through interactive quiz questions.

SMARTWORKS LECTURE HOMEWORK: Smartwork5 is an interactive assessment tool that improves student problem-solving skills. Students receive rich answer feedback and hints that help them understand key concepts in each chapter.

To begin the online lecture activity, click the Inquizitive/Smartwork5 Chapter 1 assignment link and you will be asked to register for the Inquizitive/ Smartworks online activities. You need to purchase an access code. You get the access code when you purchase the textbook/eBook. Once you register and sign in, you should be able to work on the online activity.

Please follow the steps in this video: <https://www.youtube.com/watch?v=EgNkg9Yl6cg> to see how to register for Inquizitive with canvas and <https://www.youtube.com/watch?v=XpOUT4vjbr8> to see how to register for smartwork5 with canvas If you have questions about how to use Smartwork5, such as which browser to use, where to see your grade, or how to answer questions, you can view help notes

with screenshots here: <http://wwnorton.knowledgeowl.com/help/smartwork5-students>.

Please note that it can take up to 24 hours for the grade that you earn in an assignment to fully report to your course gradebook.

If you have any questions about your grades or technical issues contact Norton support at support.wwnorton.com and include the name of the assignment and your instructor’s name.

Class schedule:

Week	Topic
1 8/20, 22, 24	-Introduction and course requirements - Chapter 1: Microbes Shape Our History - Chapter 2: Basic Concepts of Infectious Disease - Chapter 3: Observing Microbes
2 8/27, 29, 31	- Chapter 4: Living Chemistry: From Atoms to Cells - Chapter 5: Cell Biology of Bacteria and Eukaryotes
3 9/5, 7	- Monday,9/3: Labor Day; University Closed - Chapter 6: Bacterial Growth, Nutrition, and Differentiation
4 9/10,12,14	- Chapter 7 Bacterial Metabolism - Chapter 8 Bacterial Genetics and Biotechnology
5 9/17,19,21	- Chapter 9 Bacterial Genomes and Evolution - Chapter 10 Bacterial Diversity
6 9/24,26,28	Midterm 1 (50 points)- Bring a scantron and your picture ID - Chapter 11 Eukaryotic Microbes and Invertebrate Infectious Agents
7 10/1,3,5	- Chapter 12 Viruses - Chapter 13 Sterilization, Disinfection, and Antibiotic Therapy
8 10/8,10,12	- Chapter 14 Normal Human Microbiota: A Delicate Balance of Power - Chapter 15 The Immune System: Inflammation and Innate Immunity
9 10/15,17,19	- Chapter 16 The Immune System: Adaptive Immunity
10 10/22,24,26	- Chapter 17 Immune Disorders, Tools, and Vaccines - Midterm 2 (50 points)- Bring a scantron and your picture ID
11 10/29,31, 11/2	- Chapter 18 Microbial Pathogenesis - Chapter 19 Infections of the Skin and Eye
12 11/5,7,9	- Chapter 20 Infections of the Respiratory Tract - Chapter 21 Systemic Infections
13 11/12,14,16	- Monday,11/12: Veterans Day; University Closed - Chapter 22 Infections of the Digestive System
14 NO CLASSES	-Mon-Wed (11/19-21): Fall Recess, No Classes, Campus Open -Thurs-Sat (11/22-24): Thanksgiving Holiday, Campus Closed
15 11/26,28,30	- Chapter 23 Infections of the Urinary and Reproductive Tracts - Chapter 24 Infections of the Central Nervous System
16 12/3,5,7	- Chapter 26 Epidemiology: Tracking Infectious Diseases
12/10/2018 7-9:00 AM	Final Examination (200 points)- Bring a scantron and your picture ID

*Note: The schedule may be changed during the course and some lectures might be narrated and posted for self-study

DROP POLICY: The drop policy established by the university will be strictly followed. After the no record drop deadline (**/2017**), students may drop a course only for “serious and compelling reasons”. Failing a course is not an acceptable reason for withdrawal. Acceptable documentation is required verifying the reason for the withdrawal. See the Schedule of Classes for information. **day, /2017:** last day to add for winter quarter. **day, /2017:** Last day to withdraw for a grade of “W”.

INCOMPLETE GRADE POLICY: Incomplete grades can only be assigned when the majority of the coursework has been completed (essentially all work except the final exam), and the student is passing the course (grade of C or better). The submission of an Incomplete Grade Form is required.

COMPUTER/INTERNET REQUIREMENTS Students are expected to participate actively in the course using CSULA learning management system, [CANVAS](#). You will need to have an up-to-date browser, operating system and some additional software on your computer to take this class. Check the [ITS helpdesk](#) link for student resources. Some of the documents in this course will be available to you in PDF form. If you do not have Adobe Acrobat Reader software on your computer, you can download it by going to [Adobe.com](#). This class will be in CETL Tech classroom equipped with up-to-date workstation and projection systems for multiple electronic devices, including connectors to laptops, and other portable devices. Students are encouraged to bring laptops or personal electronic devices for class lecture and activities.

Please refer to this syllabus for all course procedural questions. This syllabus is subject to change. If a change is made, the professor will immediately notify the class and post a revised syllabus.

Course Communication

OFFICE HOURS To ensure that you will be seen promptly during office hours, arrange an appointment with me by email in advance. Drop-ins are fine, but if I am already meeting with another student you may have to wait. If you put in the effort required, you should learn a lot from this course. If you are having trouble, or are not learning what you hoped to learn, talk to me. I benefit from your feedback.

INTERACTION WITH INSTRUCTOR The Instructor will make every effort to communicate frequently with students through announcements and postings within the Canvas site. Post any questions or comments you have about the course content and/or requirements in the *Muddiest Point* forum. Peer response to those questions are highly recommended and counted toward class participation. Questions of a more personal nature can be sent to the Instructor via email. As a student, you should expect to receive feedbacks and responses to postings within 48 hours. The Instructor will post an announcement alerting the students if he or she will be unavailable for more than a day.

EMAIL All emails pertaining to the course must come from your *CSULA email account*. E-mail correspondence with the professor must be professional. Now is the time to start practicing for the job market, graduate school applications, business correspondence, etc. When you send a sloppy, unpunctuated e-mail (e.g., from your iPhone), you are conveying a message of non-professionalism, laziness, and indifference; this will hurt you dearly in the professional world. Having the discipline to write professional correspondence will benefit you!

NETIQUETTE When posting on the discussion boards and chat rooms it is important to understand how to interact with one another online, *netiquette*. You can read more about the rules of netiquette at <http://www.albion.com/netiquette/index.html>

Helpful Student Resources

TECHNICAL RESOURCES Information on CSULA technical support resources for students: (<http://www.calstatela.edu/cetl/technical-support-resources>)

STUDENT SUPPORT SERVICES Information on CSULA student support resources for students: (<http://www.calstatela.edu/cetl/student-support-resources>)

ACADEMIC SUPPORT SERVICES Information on CSULA academic support resources for students:
(<http://www.calstatela.edu/cetl/academic-support-resources>)

Course & University Policies

STUDENT HANDBOOK

Information on student rights and responsibilities, academic honesty, standards of conduct, etc., can be found in Schedule of Classes for the current quarter (<http://www.calstatela.edu/classschedule/>) under Policies and Procedures.

DROPPING AND ADDING

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Students should be aware of the current deadlines and penalties for adding and dropping classes: <https://get.calstatela.edu/Registrar.htm>.

AMERICANS WITH DISABILITIES ACT (ADA)

Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation. For more information visit the website at <http://web.calstatela.edu/univ/osd/atlc.php>.

ACADEMIC HONESTY/ PLAGIARISM

Students are expected to read and abide by the University's Academic Honesty Policy, which can be found at <http://www.calstatela.edu/academic/senate/handbook/ch5a.htm> as well as in the current Schedule of Classes. Students who violate this policy will be subject to disciplinary action, and may receive a failing grade in the course for a single violation. All cell phones and other electronic devices are to be turned off during the exams.

Many incidents of plagiarism result from students' lack of understanding about what constitutes plagiarism. However, you are expected to familiarize yourself with Cal State L.A.'s policy on plagiarism. All work you submit must be your own scholarly and creative efforts. Cal State L.A. plagiarism as follows: "At Cal State L. A., plagiarism is defined as the act of using ideas, words, or work of another person or persons as if they were one's own, without giving proper credit to the original sources."

For Q2S planning and advisement contact: UNDECLARED MAJORS University Academic Advisement Center (UAAC) Library Palmer Wing (PW) Room 1040A (323) 343-3150 <http://www.calstatela.edu/academicadvisementcenter>
Declared MAJORS: Their College Advisement Center
Natural and Social Sciences (NSS) Advisement Center King Hall (KH) D-1051 (323) 343-5284
<http://web.calstatela.edu/academic/nssd/AdvisementCenter/StudentServices.php>

Good Luck