



Keiser University
General Education

<u>Course Prefix & Number:</u>	MCB2000C
<u>Course Title:</u>	Microbiology
<u>Course Format:</u>	Online
<u>Credit Hours:</u>	4.0
<u>Course Schedule:</u>	Online, 24/7
<u>Prerequisites:</u>	None
<u>Co-requisites:</u>	None
<u>Faculty:</u>	Faculty Name, Email Address, Emergency Telephone As posted in the Online Classroom
<u>Office Hours:</u>	Keiser Live! Hours as posted in the Online Classroom
<u>Course Description:</u>	Presents pathogens and the diseases they cause. Topics include morphology, behavior, characteristics, and activities of common microorganisms and techniques of identification, culturing, staining, counting, and isolating microorganisms
<u>Program Goal(s):</u>	Understand the major concepts and applications of microbiology and their relationship to the physical and social sciences.

Course Objectives:

Upon Completion of the course, the student will be able to:

1. List several ways microbes affect our lives
2. Understand microbial structure and how microbes are observed and measured
3. Understand microbial function, including their growth, control, and genetics
4. Understand microbial classification
5. State the structural and functional relationships of prokaryotic and eukaryotic microbes
6. Understand the structure and function of viruses, viroids, and prions
7. Understand principles of epidemiology and pathogenesis
8. Understand the principles and role of immunology, including non-specific and specific host defense mechanisms
9. Understand the classes of anti-microbial drugs and their potential side-effects
10. Describe the effects of microorganisms on the different body systems

Grading and Evaluation Methods:

Item	Percent Total Grade	Due Date
Weekly Exams	60%	By 11:59 PM ET Sunday ending the assignment week
Post-test	5%	By 11:59 PM ET Sunday ending Week 4
Weekly Laboratory Assessments	20%	11:59 PM ET Sunday ending the assignment week
Weekly Discussions	15%	Main post: by 11:59 PM ET Friday each week. Comment 1: by 11:59 PM ET Saturday each Comment 2: by 11:59 PM ET Sunday each week
Total possible score	100%	

Grading Scale

Letter Grade	Numeric Grade
A	90.00-100.00%
B	80.00-89.99%
C	70.00-79.99%
D	65.00-69.99%
F	Up to 64.99%

Required Textbook:

Marjorie Kelly Cowan and Heidi Smith. (2018). *Microbiology: A Systems Approach*. New York, NY: McGraw-Hill.

Hard Copy Textbook ISBN-13: 978-1-259-70661-5

Electronic Textbook, ALWAYS in stock! ISBN-13: 978-1-259-94796-4 P

To access the electronic text, students must subscribe at www.brytewave.com

Topical Outline/Course Assignments/Calendar:

WEEK 1

Learning Objective(s): • 1, 2, 3, 4, 5, 6

Assigned Reading: • Text Chapters:

Background Material:

02, 08, 09

Week 1 Lesson:

01, 24, 25 (sections 1, 3 & 4),

04, 05, 06

Virtual Lab 1:

03 (section 2)

Suggested Learning Activity: • Microscopy
• Identify cell morphology and staining characteristics
• Discuss beneficial microbes

Evaluation: • Pre-test (does not count toward final grade), discussion,
laboratory quiz, examination

WEEK 2

Learning Objective(s): • 3, 8, 9

Assigned Reading: • Text Chapters:

Week 2 Lesson:

07, 11, 25 (sections 2 & 3) 12,

14, 15, 16

Virtual Lab 2:

03 (section 1)

Suggested Learning Activity: • Microbial isolation, culturing, and counting techniques
• Discuss microbes in the news

Evaluation: • Discussion, laboratory quiz, examination

WEEK 3

Learning Objective(s): • 3, 7, 10

Assigned Reading: • Text Chapters: Week 3 Lesson:
13, 18, 19, 20
Virtual Lab 3:
07 (section 2)

Suggested Learning Activity: • Microbial growth curves
• Discuss pathogens causing emerging infectious diseases

Evaluation: • Discussion, laboratory quiz, examination

WEEK 4

Learning Objective: • 3, 10

Assigned Reading: • Text Chapters: Week 4 Lesson:
21, 22, 23, 17, 10
Virtual Lab 4:
17 (excerpts), 10 (excerpts)

Suggested Learning Activity: • Microbial identifications
• Discuss human pathogens

Evaluation: • Discussion, laboratory quiz, examination, post-test

Course Assignment Format is to provide evidence of mastery of the course objectives which are linked to specific program goals and outcomes.

Course Guidelines and Policies*

Academic Integrity

Students are expected to maintain the highest standards of academic conduct, professional honesty, and personal integrity. Plagiarism, cheating and other misconduct are serious violations and will not be tolerated, and may result in academic penalties, including failing an assignment, failing the course, suspension or dismissal. Students must use the Safe Assign plagiarism tool to check their discussions for effective writing. Further details are outlined in the instructor's course expectation power-point presentation.

Participation

Participation is a basic requirement for an effective learning community. Online students must log in to the classroom by Wednesday of week one and must log in three separate days each week of the course to participate in discussions. Attendance is monitored and may affect program status as well as financial aid.

Missed Tests/Quizzes

Makeup exams will be allowed only with pre-approval of the instructor or with an acceptable, documented reason. Acceptable reasons for makeup exams include severe illness, family emergency or other unavoidable events. Exam format for makeup exams may be different than the original exam but the content for the exam will not change. Further details are outlined in the instructor's course expectation power-point presentation.

Late Assignments

Assignments are due by 11:59 PM ET on the day of the assignment week noted. Late assignments without penalty will be accepted only in cases of emergency. Students should discuss turning in late work directly with the instructor and in advance of the due date whenever possible. Late assignments will not be accepted if the assignment has already been graded and returned to the class. Further details are outlined in the instructor's course expectation power-point presentation.

Civility/Professionalism

This class is a community of learners, which means we will depend upon each other for support and information. In order to learn, we must be open to the views of people different than ourselves. Please honor the uniqueness of your classmates and appreciate the opportunity we have to learn from one another. Please respect each other's' opinions and refrain from personal attacks or demeaning comments of any kind. It is of the utmost importance to communicate with courtesy and professionalism. Professional courtesy includes respecting other's opinions, being courteous and respectful, and working together in the spirit of cooperation. Information on netiquette is located in the Start Here! area of the classroom.

University and Program Policies

Students are expected to abide by the policies set forth in the University Catalog and the Student Program Handbook/Manual. The University Catalog is available electronically at <http://www.keiseruniversity.edu/catalog/>. The Program Student Handbook/Manual is available electronically at the direction of your instructor.

Disability Accommodations:

In compliance with the Americans with Disabilities Act (ADA), students who require reasonable accommodations due to a disability to properly execute coursework must complete the application process and receive approval from the review committee. The first step is to consult with the Campus President or Dean of Academic Affairs.