

Western Kentucky University
Department of Biology

BIOL 207 General Microbiology
Summer 2021 Syllabus and Course Information

Instructor: Dr. Simran Banga

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Office Hours:

Friday: 2 -3:30 pm via Zoom

By appointment, available in my office and through Zoom

NOTE: The best way to contact the instructor is at 745-4748, the voice mail system will automatically record your message as well as the time and date of the telephone call.

Course Description:

CATALOG COURSE DESCRIPTION: An introduction to microorganisms and their importance to humans (for non-biology majors). Approximately one third of the course is devoted to each of the three major areas of microbiology: organismal, environmental, and medical.

This is an introductory course designed primarily to understand basic microbiology and its practical applications for non-biology majors. This course includes a survey of the systematics of both eukaryotic and prokaryotic microorganisms, microbial physiology, genetics, symbiosis including the host parasite relationship of human pathogenic microorganisms, and an introduction to immunology.

Course Objectives: Upon completion of the course you should be able to:

- ❖ Explain the fundamental concept of microbiology;
- ❖ Gain an understanding of different types of microbes and their interaction with environment and human lives;
- ❖ Explain how microbiological principles relate to issues of personal and/or public importance;
- ❖ Appreciate the impact of microbiology on medicine, industry, and society;
- ❖ Understand the importance of microbiology as both a basic and applied science;

- ❖ Apply scientific principles to interpret and make predictions in the areas of human health and environment;
- ❖ Understand microbial infections, their spread & transmission, diagnosis, prevention and control

Textbook:

E-text: Microbiology Fundamentals: A clinical approach by Cowan (with Bunn and Herzog). ISBN: 978-0-07-340235-2

This course is part of the WKU Store's Day One Access program, a program designed to provide open access to required Textbook/class materials for all students registered for the class at a reasonable price. By enrolling in this course, you automatically purchase the digital materials associated with this course. These materials include access to Connect, LearnSmart, a downloadable e-copy of the textbook and the option to print a gray-scale copy of your textbook at a reduced cost. Required materials will be available through the Blackboard course site and the WKU Store will charge your Student Bill after the Add/Drop period. More information on this program or to opt-out option can be found at WKU Bookstore.

Exams and Grading:

There will be two midterm and one final exam in this course.

Exams are designed to test an understanding of the microbiological concepts discussed in the course.

- ✓ Exams: There will be **three** exams, each carrying 100 points. The topics and material for each exam are as listed in the schedule. The questions will be multiple choices, True/False type and short answers. These are timed exams and will be available on Blackboard *for a period of 48 hours*, and can be taken from your personal computer during the designated period of time. You will be responsible for the appropriate browser compatible to Blackboard and internet connection (check the requirement: <http://www.wku.edu/it/blackboard/>).
- ✓ *Makeup*: There will be no makeup exams during the summer semester as these will be available to you for two days on your personal computer. However, under unavoidable University-approved circumstances, if you need to take the exam on another day, contact me.
- ✓ **LearnSmart assignments** will be given over main topic. You are expected log in and complete the LearnSmart assignments by the due dates. These items are scored automatically and totaled into your Blackboard grade book. The LearnSmart assignments will constitute 25% of your final grade.
- ✓ The grading criteria for the course is as shown below.

• Exam I	100
• Exam II	100
• Exam III	100
• LearnSmart assignments	<u>100</u>
Total	400

Grading Scale:

A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: less than 60%

COURSE ANNOUNCEMENTS, SUPPLEMENTARY MATERIAL AND ASSIGNMENTS:

Students should check the Blackboard site regularly for announcements, supplementary material and assignments pertaining to this course.

ADD /DROP /WITHDRAWAL:

The instructor will not drop any student from the class who is included in the official class register. It is the **responsibility of the student** to take any action regarding course enrollment. Credit for this course will not be changed to Audit after the university designated deadline for enrollment changes has passed.

CHEATING/PLAGIARISM

This course adheres to the University policy on **cheating and plagiarism**. Cheating on exams, homework, online assignments and quizzes and/or providing fabricated information (e.g. forged doctor's excuse), will not be tolerated and could result in your dismissal from the course and/or the University.

CIVILITY AND DISABILITY STATEMENTS

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. The phone number is 270.745.5004 [270.745.3030 V/TTY] or email at sarc@wku.edu. Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center. Information on Civility and Student Conduct can be accessed at: http://wku.edu/judicialaffairs/?page_id=70

More detailed information about University policies and services related to students is available at <https://www.wku.edu/syllabusinfo/index.php>

Summer 2021
Lecture and Examination Schedule

Week	Topic
June 1	Ch. 1 Intro to Microbes and their Building Blocks Ch. 3 Bacteria and Archaea Ch. 4 Eukaryotic cells and Microorganisms
June 7	Ch. 5 Viral Structure and Life Cycles Ch. 6 Microbial Nutrition and Growth Ch. 7 Microbial Metabolism
June 13	Exam I (Chapters 1, 3, 4 5, and 6)
June 14	Ch. 8 Microbial Genetics and Genetic Engineering Ch. 9 Physical and Chemical Control of Microbes Ch. 10 Antimicrobial Control
June 21	Ch. 11 Interactions between Microbes and Humans Ch. 12 Host Defenses I Ch. 15 Diagnosing Infections Ch. 16 Infections of the Skin and Eyes Ch. 18 Infections affecting Cardiovascular and Lymphatic system
June 23	Exam II (Chapters 7, 8, 9, 10, 11and 12)
June 28	Ch. 19 Infectious diseases affecting the Respiratory systems Ch. 20 Infectious diseases affecting the Gastrointestinal Tract Ch. 21 Infectious diseases affecting the Genitourinary system
July 02	Exam III (Chapters 15, 16, 18, 19, 20 and 21)