

Western Kentucky University
Department of Biology

BIOL 207 General Microbiology
Summer 2020 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, on Skype 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;
- ❖ Demonstrate the understanding of the methods of scientific inquiry.

Activities by Which You Will Learn the Course Objectives:

- ❖ Studying lecture notes, reading assigned material from the textbook, and reviewing all posted lecture materials.
- ❖ Contributing to class discussion on discussion board.
- ❖ Working through LearnSmart assignments.
- ❖ Participating in Online assignments.

Textbook:

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

READ BEFORE PURCHASING TEXTBOOK:

The Biology Department at WKU has worked to develop a new model for textbook adoption. In order to save you some money, maximize your effective use of your textbook, increase learning and evaluate the best ways of teaching you difficult topics, we have entered into a partnership with McGraw-Hill publishers. By enrolling in this course, you agree to purchase the digital materials associated with this course. These materials include access to Connect, LearnSmart or LabSmart where appropriate, a downloadable e-copy of the textbook which is yours to keep, and the option to print a gray-scale copy of your textbook at greatly reduced cost. If you want a printed copy, that is about \$25, but you must order that through the WKU Store during the first week of class. In order to make these savings available to you, WKU must institutionalize the purchasing process. As a result, about two weeks into the semester, you will be billed the cost of the materials for the course. The nice thing about this is that you will have access to all the course materials from day one, without doing a thing! If you choose to drop the course during the regular add-drop period, you won't be charged for the book. You should note that for this course, you **WILL** be charged for the digital materials. Do **NOT** buy a copy of the book from online or local vendors. **ONLY** the digital format will be used in this course.

Exams and Grading:

There will be two midterm exams and one final comprehensive examination.

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

- ✓ Midterms: Midterms are close-book, timed-tests. There will be **two** Midterms, each carrying 100 points and *including materials covered before*. 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/>).

- ✓ **Final:** Final is a comprehensive exam conducted by WKU/DELO testing centers on the scheduled date. It includes all the materials covered in the class (approximately, an assortment of 60% questions from previous chapters and 40% from chapters afterwards). It will carry a weight of 150 points. Questions will be multiple choices, True/False, short answers, similar to midterms.

You will need to register, in advance, with the DELO Testing Office for your final exam. You will receive a notification from WKU/DELO office in this regard. Alternatively, you may visit <http://www.wku.edu/reachu/testing%20center/topnet.htm> to register via TopNet, when you want to take final exam from the campus testing center. For instructions on how to set up your exam with a remote site (out of town, anywhere in US), please visit the link <http://www.wku.edu/reachu/testing%20center/ExamInfoDistantSite.htm> and follow the instructions.

For questions or concerns, as well as detailed guidelines and procedures about testing in a proctored environment, visit the [TDELO Testing Center](#) website, call at 270-745-5122 or 270-745-2106, or email at <mailto:delo.testing@wku.edu>. Make sure to reserve your place early for the final exam.

- ✓ **Makeup:** There will be no makeup exams for midterm exams as these will be available to you for two days on your personal computer. Make up for final can be considered only under University-approved circumstances.
- ✓ **Online-assignments and quizzes** will be given each week. You are expected log in and complete the LearnSmart assignments and Chapter Quizzes by the established deadlines. No credit will be awarded for work submitted after the deadline. These items are scored automatically and totaled into your Blackboard grade book. The LearnSmart assignments and Chapter quizzes will constitute 30% of your final grade.
- ✓ The weighted percentages for all graded items are shown below.

• Exam I	20%
• Exam II	20%
• Final	30%
• LearnSmart assignments	10%
• Quizzes	20%

Grading Scale:

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

All examination results will be available to the student as soon as possible.

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 2020
Lecture and Examination Schedule

Week	Topic
May 18	Ch. 1 Intro to Microbes and their Building Blocks Ch. 3 Bacteria and Archaea Ch. 4 Eukaryotic cells and Microorganisms
May 25	Ch. 5 Viral Structure and Life Cycles Ch. 6 Microbial Nutrition and Growth Ch. 7 Microbial Metabolism
May 29	Midterm Exam I (Chapters 1, 3, 4, 5 and 6)
June 1	Ch. 8 Microbial Genetics and Genetic Engineering Ch. 9 Physical and Chemical Control of Microbes Ch. 10 Antimicrobial Control
June 8	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 9	Midterm Exam II (Chapters 7, 8, 9 and 10)
June 15	Ch. 19 Infectious diseases affecting the Respiratory systems Ch. 20 Infectious diseases affecting the Gastrointestinal Tract Ch. 21 Infectious diseases affecting the Genitourinary system
June 19	Final Examination