General Microbiology- Biol 207 online Syllabus-- Fall 2024

Instructor: Dr. Nilesh Sharma

Office: KTH# 3037

Office Hours: Th 2:00 PM-4:00 PM

Phone: 270-745-6593

E-mail: nilesh.sharma@wku.edu

General Education Course Content and Learning Outcomes: Biol-207 fulfills the D.1. (Science/Mathematics) general education requirement. In addition, this course is a requirement for some degree programs such as nursing, pre-pharmacy, pre-veterinary medicine, and others. Please check your degree program and with your advisor to make certain that this course fulfills your degree requirements. This course will help you attain the following general education goal and its corresponding outcomes:

"Use the scientific perspective to gain basic understanding of the natural and physical world and the relevance of science issues of personal and public importance"

More specifically, successful completion of this course provides you skills to

- Demonstrate the understanding of the methods of scientific inquiry
- Explain fundamental principles or concept of microbiology
- Gain an understanding of bacteria, viruses and other microbes and their interaction with human lives
- Apply scientific principles to interpret and make predictions in the areas of human health and environment
- Explain how scientific principles relate to issues of personal and/or public importance

Required:

- > E-text: Microbiology Fundamentals: A clinical approach by Cowan (with Bunn and Herzog).
- > READ BEFORE PURCHASING TEXTBOOK

The Biology Department at WKU has worked over the past year to develop a new model for textbook adoption. 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 full access to Connect, LearnSmart practice module and 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. 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 with 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 will not 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.

NB: You will need to register with McGRAW HILL to gain access to the digital package CONNECT – as shown on the last pages: 5-6

TENTATIVE TOPICS (Dates as announced in the class)

Week	Chapter title	Chapter Reading/Posted PPT	Assignments
Week 1	Intro to MicrobesBuilding Blocks	Chapter 1; PPT presentation 1	SmartBook Assign 1
Week 2	Prokaryotic Structure	Chapter 3	
Week 3	Viral StructureLife Cycles	PPT presentation 2 Chapter 5; PPT presentation 3	SmartBook Assign 2 SmartBook Assign 3
Week 4	Microbial NutritionGrowth	Chapter 6; PPT presentation 4	SmartBook Assign 4
Week 5	Microbial Metabolism	Chapter 7; PPT presentation 5	SmartBook Assign 5
Week 6	Microbial GeneticsGenetic Engineering	Chapter 8; PPT presentation 6	SmartBook Assign 6
Week 7	Continued: Microbial Genetics Genetic Engineering	Chapter 8; PPT presentation 6	SmartBook Assign 7
Week 8	Physical and Chemical Control of Microbes	Chapter 9; PPT presentation 7	SmartBook Assign 8
Week 9	InteractionMicrobes and Humans	Chapter 11; PPT presentation 8	SmartBook Assign 9
Week 10	Host Defenses	Chapter 12 PPT presentation 9	SmartBook Assign 10
Week 11	Infectious DiseasesRespiratory System	Chapter 19; PPT presentation 10	SmartBook Assign 11
Week 12	Gastrointestinal Diseases	Chapter 20; PPT presentation 11	SmartBook Assign 12
Week 13	Sexually Transmitted Diseases	Chapter 21 PPT presentation 12	SmartBook Assign 13

Week 14	Infectious Diseases- Miscellaneous topics	Selected conditions from Chapters 16-18	SmartBook Assign 14
Week 15	Infectious Diseases- Miscellaneous topics	Selected conditions from Chapters 16-18	

EXAM SCHEDULES & GRADING POLICY

EXAM-1 (5 ^{th.} Week)100	
EXAM-2 (10 th . Week)100)
EXAM-3 (16 th . Week) 100)
SmartBook Pre Lecture Assignments100	0

Grading scale: A= 90%; B=80%; C=70%; D=60% Total 400 Points

(DISTRIBUTION OF GRADE POINTS IS TENTATIVE AND CAN CHANGE; FOLLOW ANNOUNCEMENTS)

WHAT ARE YOU TESTED FOR?? This course will be delivered in the manner students will be able to achieve the cognitive competencies at the level of Remembering, Understanding and Applying the learned concept in a thorough manner- the three basic categories of Bloom's Taxonomy. Multiple-choice exams will be primarily designed to test your learning at those levels. However, this class aims for higher learning goals as well; for example, students are expected to demonstrate some mastery of the topic at the level of analysis and evaluation.

EXAM POLICY

You must check the Blackboard announcement regularly for all tests or exams.

1. Three Exams: All exams will be conducted by the WKU Testing center. Each exam will cover the topics/chapters completed in a specific module of contents (see Course Content). The exams will include multiple-choice questions. You will need to register, in advance, with the DELO Testing Office for all the exams. Note, I do not schedule any testing center exam, the WKU Testing Center will send you a notification showing the details of all exams. Immediately following that notice, you can schedule all exams in one attempt. I encourage you to complete your registration needs within the first few weeks of the semester. There will be no exception to the testing center exams.

To take exam from the campus-testing center, visit www.wku.edu/testing to register through TopNet. For instructions on how to set up your exam with a remote site (out of town or state), please go to www.wku.edu/testing 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.

Makeup	Exams	are only	given	in EXTREME	circumstances fo	r documented	university	excused
absences	when p	ermissio	n is give	en by me in ad	vance! You will no	ot be allowed to	o make up a	an exam
without o	locumer	ntation. I	Example	es of circumstan	ces where make up	exams may be a	allowed inclu	ude:
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Attending a university	ersity sporting ever	nt where you are	e a player

 $\hfill \Box$ Attending a university academic event such as a conference/debate etc. where you are a presenter or performer

WHAT IS PRE-LECTURE SmartBook ASSIGNMENT?? SmartBook is the most widely used adaptive learning resource that is designed to maximize productivity and efficiency in learning. This suite spans the entire learning process – from course prep to concept mastery – and it creates high impact study sessions that focus students on the concepts that they need to learn. It is part of the McGraw Hill digital package that Biology Department has introduced for introductory courses.

SmartBook Pre Lecture Assignments will be available to students <u>under Blackboard Tests/Quizzes browser</u> and students are expected to complete an assignment before or when a related chapter is being discussed in the class so that students may be familiar with the terms, definitions and important concepts in advance of reading slides or chapters (*accessing assignments from other browser will not give you any credits*). As soon as you open this assignment, you will see a pop up coming with a variety of questions. Keep responding to the questions, it will show your right or wrong attempts. It will teach you like a classroom teacher asking questions and then giving you the correct answers at the end. I believe this system is very useful for learning. You can practice until you develop mastery over the materials and score full points (points earned automatically enter the gradebook). There will be multiple SmartBook assignments (14 listed above which may vary). You must complete these practice assignments within the non-extendable deadline (appearing below the assignment under Tests/Quizzes browser).

How to study and prepare for tests

- 1. Reading PPT slides: PPT presentations made on each covered chapter begin with Learning Goals for that specific chapter and then describe a subject with possible illustrations. These slides set a nice background for you to focus on learning, avoiding unnecessary details of the book chapter. If you read these presentations in conjunction with the description in a book chapter (for details), you will have better learning and comprehension.
- 2. Each PPT presentation contains several model questions that you should practice.
- 3. Completion of prior SmartBook practices will be immensely helpful for the study and preparation of exams.
- 4. Each chapter of your digital book ends with several multiple choice and critical thinking questions that you should practice for confidence building before the exam.
- 5. Attend Q & A Zoom Sessions (when notified/scheduled) to discuss issues of your concern

Blackboard familiarity: Students are required to be familiar with blackboard functions as course materials and the tests/assignments will be administered through Blackboard. Visit http://www.wku.edu/it/blackboard/ for help.

Expectations & Academic integrity

You are expected to read book chapters and PPT slides every day. I would recommend you do SmartBook assignments before chapter reading. It will be then easier for you to understand Chapter/PPT materials. Chapters are voluminous, therefore, PPT slides will guide you on what to focus. Materials covered on PPT slides will be mainly included in tests. You are expected to pay attention to the lecture and to take notes on the topics covered in class. Dishonesty/use of any unfair means in exams or any misconduct in the class will inevitably result in a failing grade.

Withdrawals: There are deadlines for the withdrawal. To withdraw from the course, adhere to the *Tuition and Fee Refund Policy of WKU*. You may not drop or withdraw from the class after the designated time. It is YOUR responsibility to drop the class. Do NOT assume that I will do this for you.

Disabilities

"Students with disabilities who require accommodation (academic adjustments and/or auxiliary aid or services) for this course must contact the Office for Student Disability Services, Room 445, Potter Hall. The OFSDS telephone number is (270) 745-5004 V/TDD/ Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services"

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) as provided in the following link. I suggest you check the link: https://www.wku.edu/syllabusinfo/ for various accommodations that this class may offer.

How to Register for McGraw Hill Connect:

1. CLICK TOOLS on BLACKBOARD COURSE SITE MENU FOR McGraw Hills Higher Education link. THIS LINK TAKES YOU TO "GO TO MY CONNECT SECTION-

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- 2. Click on REGISTER NOW
 - o Student registration tutorials are available if you need help.
- 3. Enter your email address
- 4. Your E. Mail is your access code
- 5. Next, you will need to fill out the registration form.
 - Click on "Go to Connect Now" to complete your registration and continue to your instructor's course.
- 6. You are now at your instructor's course.
 - o This is where you can access your assignments and study resources.
- 7. To Return to Connect
 - o Go to the web address provided to you by your instructor. Again, you'll want to bookmark it to save time.
 - o Once on the Connect homepage, enter your email address and password.

Please visit the <u>Student Registration Tutorial</u> for additional registration information. If you need help or have any questions about Connect, you can visit our Customer Experience support center: <u>Visit our 24-hour online support site</u>.

o Call us at 800-331-5094

- Sunday: 6pm to 11pm (Central Time)
- Monday Thursday: 8am to 11pm (Central Time)
- Friday: 8am to 6pm (Central Time)
- o Online Tutorials: http://www.connectstudentsuccess.com

COURSE NAVIGATION: WHERE TO GET WHAT

- 1) READ SYLLABUS TWICE FOR COURSE TOPICS AND EXAM POLICY
- 2) READ COURSE SCHEDULES FOR COURSE TIMELINE
- 3) FIND PPT PRESENTATIONS UNDER Blackboard COURSE CONTENT
- 4) CLICK TESTS & QUIZZES FOR ASSIGNMENTS & EXAMS
- 5) CHECK DUE DATES OR ANNOUNCEMENTS FOR ASSIGNMENTS OR EXAMS
- 6) JOIN THE BLACKBOARD DISCUSSION FORUM TO DISCUSS CONTENT OR POLICY