

MEDICAL MICROBIOLOGY – FALL 2019
BIOL 209
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Office Hours: [Removed]

Welcome to BIOL 209! I am glad to be your guide as you learn about the microbiological world and its impact on human health.

Course Description and Learning Objectives

Medical Microbiology will provide an introduction to the general principles of microbiology and immunology in order to provide a thorough understanding of the host-microbe relationship in disease. By the end of the course you should be able to:

- Describe the structure and growth of microbial organisms
- Explain how microbial organisms acquire and use energy
- Describe microbial genetic mechanisms and how they contribute to microbial adaptation
- Explain how the immune system provides resistance to pathogens
- Apply knowledge of microbial organisms and pathogenesis to specific microbial diseases

Advice

Learning is an active process. It requires energy and commitment. If you have not done so already, it is important to discard a passive mode of learning where you expect only to adsorb information during a lecture and regurgitate it during exams. Instead, actively participate in class discussions and activities. Take notes during class and when reading the text. Reformulate these notes when you study. Studying in groups is highly recommended. Verbalize your understanding by reviewing the course material with other students. Importantly, if you are experiencing difficulty with the course, take action early! Consult your study group, talk to a preceptor, take advantage of my office hours, and use the free tutoring at the campus learning center (<https://www.vcu.edu/uc/clc/>).

Blackboard

<https://blackboard.vcu.edu>

We will be using the blackboard course site extensively. I will post course information (including this syllabus), important announcements, assignments and grades on the site. This site will also be the source for any on-line quizzes and exercises.

Textbook

Microbiology: The human experience. Foster, Aliabadi, and Slonczewski. (Norton, 1st ed.)

Classroom response system

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text messaging. You can visit the Top Hat Overview (<https://success.tophat.com/s/article/Student-Top-Hat-Overviewand-Getting-Started-Guide>) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. An invitation will be sent to you by email, but if don't receive this email, you can register by simply visiting our course website within Top Hat: [removed]

Note: our Course Join Code is [Removed]

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: <https://www.tophat.com/pricing>

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491.

Communication

The best way to communicate with me is to talk with me immediately after class, or during office hours. If the question cannot wait until the next class, you may email me, however **you MUST include “BIOL 209” in the subject line**. Do not send a message by email that you would not tell me in person, i.e. the subject should be appropriate and the form courteous and concise. In email responses, use the “reply with history” option.

Assessment

Your final course grade will depend on your overall performance as determined by the outcome of exams, quizzes, online exercises and responses to in-class questions. Letter grades will be assigned at the end of the course. No extra-credit assignments are available.

Online exercises 10%
Classwork 15%
Quizzes 15%
Exams 60%

Final Grade Scale

90-100% = A 80-89% = B 70-79% = C 60-69% = D Below 59% = F

Scores on individual exams and quizzes will be posted on Blackboard and you will have one week to check them and get back to me with any questions about them. Classwork scores will also be posted on Blackboard and updated periodically through the semester. Your provisional course grade may be calculated by using the posted scores and the assessment weighting indicated above.

Online exercises

We will be using the ‘Smartworks’ program as an on-line learning tool. Access to this program is free, but you will need to register with Norton, creating an account and using our “Student Set ID”

[Removed] before you start any on-line exercise. Due dates for completion of these exercises will be announced in class or on the course website. There will be ~10 of these exercises and the lowest will be dropped from the final grade calculation.

Quizzes

Quizzes will be announced beforehand and given either in class, or made available on-line through the Blackboard course web site with specified due dates/times after which they will be unavailable. *These are limited time quizzes that are to be completed individually, without notes, texts, or internet resources, following the VCU honor system.*

Exams

There will be 4 exams given during scheduled classes and a final exam during exam period at the end of the semester. No make-up exams will be given except under extraordinary circumstances (see below). Students are not required to take the final exam, but the score on this exam can be used to replace the lowest in-class exam score. You must bring a #2 pencil and a photo ID to each exam, and you must know your V#. If you fail to provide your V# and a photo ID you may receive a score of zero for that examination. All backpacks, bookbags, purses, etc. must be left at the front of the room during the exam. No cell phones or any other electronic devices can be used during the exam. They must be left in your bag at the front of the room. If an emergency occurs that prevents you from taking an exam, you must notify me within 24hrs with a legitimate reason (severe illness, death in family, accident) and provide documentation of that reason (medical practitioner’s note, obituary, police report). Under-documented emergency circumstance remediation will be considered. If no documentation is provided you will receive

a zero for the exam. Tentative dates for the in-class exams are posted in the schedule at the end of the syllabus. **The final exam is scheduled for [removed]. Please make sure that you know exactly when the tests are scheduled.**

Observation of religious holidays

[Removed] is the last day to provide written notification of intent to observe religious holidays.

Withdrawing from the course

The deadline to withdraw from the course is [Removed]

Before withdrawing from classes, students should consult their instructor as well as other appropriate university offices. Withdrawing from classes may negatively impact a student's financial aid award and his or her semester charges. To discuss financial aid and the student bill, visit the Student Services Center at 1015 Floyd Avenue (Harris Hall) and/or contact your financial aid counselor regarding the impact on your financial aid.

The required syllabus statements originally included here are maintained by the Office of the Provost and are regularly updated. To prevent the dissemination of information which may no longer be accurate or complete, the full text of the required syllabus statements have been removed from this document.

Students should visit <http://go.vcu.edu/syllabus> and review all syllabus statement information. The full university syllabus statement includes information on safety, registration, the VCU Honor Code, student conduct, withdrawal and more.

Course Schedule by Date (tentative)

Date	Topic
[Removed]	Introduction to Microbes and Infectious Disease
[Removed]	Biomacromolecules, Prokaryotic cell structure
[Removed]	Labor Day – no class
[Removed]	Prokaryotic & Eukaryotic cell structure
[Removed]	Exam 1
[Removed]	Microbial growth
[Removed]	Bioenergetics: Fermentation & Respiration
[Removed]	Microbial Genetics
[Removed]	Evolution & Genetic exchange
[Removed]	Exam 2
[Removed]	Eukaryotic microbes I
[Removed]	Reading Day – no class
[Removed]	Eukaryotic microbes II
[Removed]	Viruses, Control of Microbial Growth
[Removed]	Human Microbiome, Innate Immunity
[Removed]	Exam 3
[Removed]	Adaptive Immunity
[Removed]	Pathogenesis
[Removed]	Pathogens and Infectious disease I
[Removed]	Fall Break: no classes
[Removed]	Pathogens and Infectious disease II
[Removed]	Exam 4
[Removed]	Final Exam: [Removed]