

BIOL 2420

Microbiology for Non-Science Majors - Laboratory



Course Information

Course Description

Laboratory includes basic microbiological methodology that corresponds to the material in the lecture portion of the class.

Prerequisite and Co-requisite Courses

Recommended Prerequisites: Biology 2324/2124 or Health Science Professions 2302/2102

Prerequisite Skills

Accessing Internet websites, including Blackboard, and proficiency with Microsoft Word, Excel and PowerPoint.

Student Learning Outcomes

Upon completion of this course, students will be able to:

- Demonstrate knowledge in discerning signs and symptoms of medically relevant infectious diseases in order to apply knowledge in clinical settings
- Understand infectious disease processes including pathogenesis, diagnosis, signs and symptoms, transmission, and treatment
- Demonstrate understanding of the methods of infectious transmission and the means by which these are controlled, including those related to nosocomial infections
- Demonstrate knowledge of the nature of antimicrobial resistance and to incorporate this knowledge within the context of providing appropriate healthcare
- Demonstrate knowledge in administering quality care in the context of safe handling of infectious materials/patients in order to minimize risk of transmission

Course Delivery

This is a face-to-face course with online components that students are expected to access in [Blackboard](#).¹

Required Texts and Materials

Microbiology Laboratory Theory & Application. Brief 3rd Edition. Leboffe and Pierce. Morton Publishing Customized for Angelo State University, 2021

Communication

Contact your specific laboratory instructor in their preferred method.

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Percent of Total Grade
Lab Reports	100
Lab Midterm	100
Lab Final	100
Total	300

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

Your grade in lab will be factored in with your grade from lecture.

Assignment and Activity Descriptions

Lab Reports will be assigned for each lab they are worth 10 points each. Lab reports are due the next week in lab, unless your instructor gives a different due date. The lab midterm and final will be administered in lab class time.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)²
- [Angelo State University Catalog](#)³

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#).⁴

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁵ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would

keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)⁶ for more information.

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)⁷ for more information.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Miller, J.D.
Special Assistant to the President and Title IX Coordinator
Mayer Administration Building, Room 210
325-486-6357
michelle.boone@angelo.edu

You may also [file a report online](#)⁸ 24/7.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information, visit the [Title IX website](#).⁹

Required Use of Masks/Facial Coverings by Students

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory [Facial Covering Policy](#)¹⁰ to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant

reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

Course Schedule

Date	Lab Activities
Jan 17 - 21	No Labs
Jan 24 - 28	Aseptic Technique and Inoculation Methods
Jan 31 – Feb 4	Microscopy and Staining
Feb 7 – 11	Gram Staining
Feb 14 - 18	Selective Media
Feb 21 - 25	Selective Media
Feb 28 – Mar 4	Lab Midterm
Mar 7 - 11	No Labs
Mar 21 – 25	Standard Plate Count
Mar 28 – Apr 1	Differential Tests
April 4 – 8	Differential Tests
Apr 11 - 15	Antimicrobial Susceptibility
Apr 18 – 22	Epidemic Simulation
Apr 25 - 29	Lab Final
May 2 – 7	No Labs

¹ <https://blackboard.angelo.edu/>

² <https://www.angelo.edu/current-students/student-handbook/>

³ <https://www.angelo.edu/academics/catalog/>

⁴ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

⁵ <https://www.angelo.edu/current-students/disability-services/>

⁶ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁷ [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)
[of](#)

⁸ <http://www.angelo.edu/incident-form>

⁹ <https://www.angelo.edu/title-ix>

¹⁰ <http://www.texastech.edu/downloads/ttus-policy-face-coverings.pdf>