



BIOL 2320 – Pathology/Microbiology for Funeral Sciences Online

Course Syllabus: Fall 2026

“Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed.”

Instructor: Dr. Shannon Cox-Kelley

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Weekday	Office Hours
Monday	1:00 PM – 3:00PM
Tuesday	None
Wednesday	None
Thursday	None
Friday	None

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description:

3 credit hours.

Lecture: Three hours of lecture each week.

Basic principles of pathophysiology and microbiology for funeral science. The course focuses on inflammatory disorders, degenerative disorders and trauma to the body. Additionally, disease-causing microorganisms, their classification, anatomy, requirements for growth, methods of control, and human diseases caused by significant microorganisms are covered.

Prerequisite(s): None

Student Learning Outcomes:

1. Describe distinctive characteristics and diverse growth requirements of prokaryotic organisms compared to eukaryotic organisms.
2. Provide examples of the impact of microorganisms on agriculture, environment, ecosystem, energy, and human health including biofilms.
3. Describe conditions associated with disturbances in circulation and diseases of the blood and circulatory system.
4. Explain the unique characteristics of bacterial metabolism and bacterial genetics.
5. Compare characteristics and replication of acellular infectious agents with characteristics and reproduction of cellular infectious agents.
6. Describe evidence for the evolution of cells, organelles, and major metabolic pathways from early prokaryotes and how phylogenetic trees reflect evolutionary relationships.

7. Describe functions of host defenses and the immune system in combating infectious diseases and explain how immunizations protect against specific diseases.
8. Explain transmission and virulence mechanisms of cellular and acellular infectious agents.
9. Demonstrate knowledge of diseases and related terminology.
10. Identify pathological conditions and etiological factors that require special procedures in the removal, handling, preparation and disposition of human remains.
11. Correlate the relationship between disease processes and the preparation of human remains for disposition.
12. Distinguish between mechanisms of physical and chemical agents to control microbial populations

Evaluation/Grading Policy:

The breakdown of the course requirements is as follows:

%	Requirement
50%	Lecture Exams
15%	Course Activities
15%	Course Quizzes
20%	Discussions

- There are four **lecture exams** that make up 50% of the overall grade. The first three exams will be worth 10% each and the final exam will be worth 20%. These lecture exams will cover material from the textbook, course exercises, quizzes and case studies.
- **Course Activities** include labeling, matching, interactive assignments, videos exercises, and case studies. Course activities make up 15% of the overall grade.
- **Course quizzes** are short assessments that evaluate your knowledge gained from the readings and activities. Quizzes are also completed in blackboard. Quizzes make up 15% of the overall grade.
- There are **8 discussions** throughout the course that are worth 20% of the overall grade. Discussions require an initial post and two replies for full credit. Discussions require participation and will only be accepted the day that they are due.

Semester grades will be earned as follows

Percentage	Letter Grade
90% and above	A
80 %–89%	B

70 %–79%	C
60%–69 %	D
59.9% and below	F

Please be aware that **NO EXTRA CREDIT WILL BE GIVEN** at the end of the semester. The average shown in Bb will determine the final course grade, and no additional work is possible.

Required Instructional Materials:

Required Textbook(s):

Pathology and Microbiology for Mortuary Science, 2nd Edition By David Mullins and Bob Brennan

Publisher: Funeral Service Education Resource Center

ISBN Number: 978-0-9979261-7-0

Optional Instructional Materials:

None

Minimum Technology Requirements:

- Laptop or computer with webcam
- Access to high speed daily internet
- Microsoft Office 365 (available as a free download for all NTCC students)

Required Computer Literacy Skills:

- Ability to use a web browser to access NTCC Blackboard System for course information, lectures and assignments
- Ability to access NTCC student email system and communicate professionally and competently with instructor
- Ability to create and complete Word documents, save on your computer and upload into Bb assignment links

Course Structure and Overview:

Students should log onto **Blackboard (Bb)** ASAP and **carefully** read **all announcements**. **Bb** and **student email** should be checked **DAILY** for **new announcements or messages**.

Questions are welcomed during office hours (or by appointment), or if more convenient, they can be directed to me either by phone or e-mail. **Please do not hesitate to ask questions! There is no such thing as a stupid question. It is only stupid NOT to ASK them. It is VERY difficult to improve your course average after you fail the first exam, so PLEASE contact the instructor for help or studying tips EARLY in the semester, before it is too late to make a difference.**

Exam/Quiz Make-Up Policy: If a student is unable to take an exam/quiz as scheduled, a make-up will be arranged **ONLY** if the reason is legitimate, and the instructor is notified **IN ADVANCE of the time the exam/quiz is scheduled** (or becomes unavailable), either through the telephone or e-mail. **Students who fail to make appropriate arrangements will receive a grade of "0" for the exam missed. There will be no exceptions.**

Communications:

Campus email is the preferred method of communication. Emails will be responded to within 24 hours, including on weekends. Should there be deviations from this, the instructor will send an announcement out on blackboard

of delayed response times. Grading will occur within 24 hours of the posted due date.

Institutional/Course Policy:

- Northeast Texas Community College is a “community of scholars.” Please remember that you and all of the students in this class are pursuing very important goals in your lives. As scholars, I expect every student to be courteous to other students and the instructor in all online experiences.
- All colleges and universities must remain diligent in their pursuit of assuring the academic integrity of their courses to maintain their accreditation status with Southern Association of Colleges and Schools and the Texas Higher Education Coordinating Board.
- Schedule and plan to complete all assignments and submit them when they are due. Be sure to print off the calendar to help you keep up with assignment due dates.
- Be sure to do all of your own work. Collusion and plagiarism are acts of academic dishonesty. Work that is copied and pasted directly from any website is not acceptable in any form on any assignment. See the Student Handbook, p. 90 for definitions of collusion, plagiarism, and cheating. Infractions can result in severe grading penalties or failure.

The last day to drop the course with a grade of W is **Tuesday, November 17, 2026**. If circumstances require you to withdraw from this course, you must do so by that date. It is the student’s responsibility to initiate the withdrawal with the registrar’s office. Failure to officially withdraw will result in your receiving a grade of F.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements:

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC’s website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:

Employees and students shall be permitted to explore artificial intelligence (AI) and implement its use in and out of the classroom in accordance with policy and administrative regulations. The use of AI shall only be as a support tool to enhance student outcomes or as necessary to engage in research and shall never take the place of faculty, staff, and student decision-making. Any use of AI must comply with law, policy, and administrative regulations relating to student and employee privacy and data security. A student shall only use AI tools with faculty permission and shall be expected to produce original work and properly credit sources, including AI tools used in creating the work.

Example:

APA (7th edition)

OpenAI. (2026). ChatGPT (March 25 version) [Large language model]. <https://chat.openai.com/>
MLA (9th edition)
OpenAI. ChatGPT. 25 Mar. 2026, <https://chat.openai.com/>.

Employees or students who use AI tools to deceptively harm, bully, or harass others shall be disciplined in accordance with policy. [See DH, DIA series, FFD series, FFE, FLB, and the FM series] AI Use by Employees and Students. Northeast Texas Community College 225500 TECHNOLOGY RESOURCES CRB ARTIFICIAL INTELLIGENCE (LOCAL) DATE ISSUED: 12/8/2025 1 of 1 UPDATE 50 CRB(LOCAL)-AJC Adopted: 12/16/2025

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodation for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodation as required to afford equal educational opportunity. It is the student's responsibility to request accommodation. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tentative Course Schedule:

Week	Topic	Dates	To Do
1	Introduction to Microbiology	8/24 – 8/30	• Get Started Folder • Syllabus Acknowledgement Quiz • Cell Theory EdPuzzle • Match the Historical Figure • Match the Microbe • I Got Worms Case Study • Week 1 Quiz • Introduction Discussion All Assignments Due 8/30/26
2	Characteristics of Cells	8/31 – 9/6	• Germ Theory EdPuzzle • Prokaryote and Eukaryote EdPuzzle • It is Just a Cold Case Study • Cellular Structure Discussion • Week 2 Quiz All Assignments Due 9/6/26
3	Introduction to Bacterial Diversity	9/7 – 9/13	• Bacteria EdPuzzle • Identify the Bacterium Genus • Monsters Inside Me - Prokaryotes • Bacteria Discussion • Week 3 Quiz All Assignments Due 9/13/26
4	Fungal Biology and Diversity	9/14 – 9/20	• Monsters Inside me - Eukaryotes • A Trip to Costa Rica Case Study • Noah's Ark Discussion • Week 4 Quiz All Assignments Due 9/20/26
5	Viral and Prion Structure and Function	9/21 – 9/27	• Viruses EdPuzzle • The Plaque Discussion • Virus and Bacteria Comparison • Week 5 Quiz All Assignments Due 9/27/26
6	Microbial Growth and Metabolism	9/28 – 10/4	• Exam 1

- Autotroph and Heterotroph EdPuzzle
- Growth Curves EdPuzzle
- Microbe Growth Exploration
- Microorganism Discussion
- Week 6 Quiz

All Assignments Due 10/4/26

7 Understanding Microbial Control Methods 10/5 – 10/11

- Controlling Microbe Growth Assignment
- Week 7 Quiz

All Assignments Due 10/11/26

8 Nature of Infectious Disease 10/12 – 10/18

- Exam 2
- Interactive Autopsy
- Autopsy EdPuzzle
- Death Processes EdPuzzle
- Microbe Virulence Case Study
- Week 8 Quiz

All Assignments Due 10/18/26

9 Understanding Skin Structure and Function 10/19 – 10/25

- Cellular Changes EdPuzzle
- Cell Structure Concept Map
- Inflammation EdPuzzle
- Cancer Discussion
- Integumentary Learning Activity
- Week 9 Quiz

All Assignments Due 10/25/26

10 Understanding Circulatory Diseases 10/26 – 11/1

- Pulmonary Diseases EdPuzzle
- Respiratory Learning Activity
- A Sick Child Case Study
- Lymphatic Learning Activity
- Week 10 Quiz

All Assignments Due 11/1/26

11 Infectious Diseases Impacting Blood Health 11/2 – 11/8

- Blood Disorders EdPuzzle
- Blood Learning Activity
- Heart Learning Activity
- Week 11 Quiz

All Assignments Due 11/8/26

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| 12 | Understanding the Nervous System and Its Vulnerabilities | 11/9 – 11/15 | <ul style="list-style-type: none">• Nervous System Learning Activity• Week 12 Quiz |
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All Assignments Due 11/15/26

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| 13 | Infectious Diseases of the Bones and Joints | 11/16 – 11/22 | <ul style="list-style-type: none">• Exam 3• Arthritis EdPuzzle• Endocrine System Learning Activity• Week 13 Quiz |
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All Assignments Due 11/22/26

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| 14 | Urinary and Digestive System Infections | 11/23 – 11/29 | <ul style="list-style-type: none">• Urinary System Learning Activity• Digestive System Learning Activity• Week 14 Quiz |
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All Assignments Due 11/29/26

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| 15 | Common Reproductive Disorders | 11/30 – 12/6 | <ul style="list-style-type: none">• STI EdPuzzle• Female Reproduction Learning Activity• Birth Defects EdPuzzle• Chimera Discussion• Male Reproduction Learning Activity• Week 15 Quiz |
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All Assignments Due 12/6/26

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| 16 | Final Exam | 12/7 – 12/10 | <ul style="list-style-type: none">• Final Exam |
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Final Exam Due 12/10/26