



MLAB 1231 Parasitology / Mycology HYBRID

Course Syllabus: Spring 2025

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

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	1000-noon, 1300-1700	1300-1700	By appt	By appt	By appt	By appt

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: 2 credit hours.

Parasitology is the study of clinically significant parasites; a comprehensive discussion of individual parasites, and relevant diagnostic methods designed to detect and identify the organisms present. Mycology is the study of fungi, how they cause disease in humans and how they may be cultivated and identified. This course will also cover the detection and identification of viruses in humans.

Prerequisite(s): Acceptance into the MLT Program

Student Learning Outcomes:

The primary goal of this course is to provide students with an understanding of what organisms are significant to humans, their life cycles, morphology, clinical disease, pathogenesis, diagnosis, treatment, epidemiology and prevention.

- Describe individual parasites and their life cycles
- Describe the morphologies of individual parasites
- Explain what is the most likely specimen source to recover specific parasites
- Describe collection methods, quality control-Pre-analytical, Analytical, Post-Analytical
- Describe the best diagnostic procedure(s) to recover specific parasites
- Explain the clinical significance of various parasites Perform diagnostic procedures to identify parasites
- Explain the growth requirements for specific fungi
- Describe the microscopic and macroscopic features of various fungal species
- Perform laboratory methods to identify various fungal isolates
- Describe the viral infectious cycle
- List viruses associated with specific clinical specimens
- List some of the most efficient laboratory tests or methods for detecting viruses

Lectures & Discussions:

Introduction to Parasitology

Specimen Collection and Processing, Pre-Analytical, Analytical, Post-Analytical

The Amoebas
The Flagellates
The Hemoflagellates
Select Sporozoa: Plasmodium and Babesia
Miscellaneous Protozoa
The Nematodes
The Filariae
The Cestodes
The Trematodes
Artifacts and Confusers
The Arthropods
Introduction to Mycology
Morphology of Fungi - microscopic and macroscopic
Fungal media and stains
Mycotic infections
Yeasts
Molds
Overview of virology
Viruses in Human Disease
Antiviral Therapy, Susceptibility, Testing, and Prevention

Evaluation/Grading Policy: Lecture 65%; Lab 35%

A ≥90%
B 80-89%
C 70-79%
D 60-69%
F <60%

Your Lecture Grade will be composed of homework and exams

Homework average 30%

Exam (4) average 50%

Final 20%

Your Lab Grade will be composed of lab worksheets, Parasit. Notebook, Lab Mid-term & Lab Final

Lab worksheet average 30%

Parasit. Notebook 10%

Lab Mid-term 30%

Lab Final 30%

A minimum grade of "C" is required for BOTH the lecture and laboratory components of all Medical Laboratory Technology courses. Failure to meet the minimum passing score in each area will result in a "D" for the course and possible dismissal from the program.

Tests/Exams:

4 exams + Final Exam (Cumulative)

Unannounced quizzes may be given periodically. If so, they will be factored into Lab Grade.

Required Instructional Materials: Tille, P.M., Bailey & Scott's Diagnostic Microbiology, 15th Edition, Mosby, 2022

Publisher: Elsevier / Mosby

ISBN Number: 978-0-323-68105-6

Optional Instructional Materials:

Evolve Student Resources accompanying Tille: <http://evolve.elsevier.com/Tille/>

Parasite Image Library, CDC: www.dpd.cdc.gov/dpdx

Mycology website: www.doctorfungus.org

Indiana Pathology Parasitology and Mycology Atlases (available on PCs in MS103 and UHS student computer labs)

Additional material on internet

Minimum Technology Requirements:

Laptop

Most Windows or Mac laptop computers work well for online classes.

Chromebooks use the Chrome operating system which is not a supported operating system for Blackboard. Some areas of Blackboard require Java on your computer, and Chromebooks do not support the use of Java. If you use a Chromebook, please be sure you also have access to a Mac computer or Windows computer so you can fully participate in your Blackboard class. Some things will not work on a Chromebook.

Please do not ONLY rely on a tablet, including an iPad, or a smartphone to use Blackboard. Not all features will work on tablets and smartphones. You may need access to a full computer to be able to do everything in your Blackboard class.

You will need to scan documents and upload them to Blackboard. You can use a scanner attached to a computer, a smartphone app, or your cell phone's camera.

Internet Access

While Bb can be accessed with dial-up online service, best results will be obtained when using a broadband Internet service.

Java

Make sure your computer is running the current version of java. It is a free download at www.java.com.

Internet Browser

Supported browsers for use with Blackboard include Firefox, Google Chrome, Internet Explorer, and Safari. If you experience any problems in Blackboard we recommend you login to the portal and Blackboard from another browser before seeking assistance from NTCC Technical support.

Required Computer Literacy Skills:

Intermediate Internet Skills

You should be familiar with how the Internet works including following links and searching for information.

Intermediate Word Processing Skills

You should be familiar with how to enter data (text) on a word processing document, format text, and save documents.

Course Structure and Overview:

This is a Hybrid class which means class meets once a week and all other instruction is done online via the learning management system BLACKBOARD. In class meetings will be reserved for lecture, case studies, labs and group projects. Students are expected to complete all the readings of the required ebook chapters, watch the instructional videos and complete the online chapter activities. You will see that the

course is divided into 16 weeks in the Blackboard portion. Each week you will be expected to complete certain online homework assignments for the chapters found in that week's folder. This course requires daily computer and internet access. Pay close attention to deadlines for all assignments. Assignments will not be accepted late! Technical difficulties are no excuse for late assignments. A due date assignment schedule is posted in the START HERE folder in Blackboard the entire semester! Please check it weekly so that you know what is due and do not miss anything.

Homework: Various on-line activities. Assignments averaged together for 30% of lecture grade; no assignments will be accepted late!

Exams: Multiple choice questions from homework; taken in class on laptop; 4 exams averaged together for 50% of Lecture grade. Final exam is cumulative and 20% of lecture grade. Grades reflected immediately in Blackboard

Lab Worksheets: completed in-class. Labs averaged together for 30% of Lab grade.

Parasit. Notebook: Notebook will be submitted as 10% of Lab grade.

Lab Mid-term (Practical): 30% of Lab grade

Lab Final (Practical): 30% of Lab grade

Communications:

EMAIL: E-mail preferred. E-mails will be responded to within 24 hours during the work week (Monday – Thursday 8am-6pm and Friday 8-noon). Please check your NTCC email EVERYDAY. Email is the official form of communication used here at NTCC.

TEXT MESSAGE NOTIFICATION: TEAMS will be used to get information out to students quickly. This will enable you to receive important class announcements and reminders from me via text message so that you will not miss out on any assignment changes or important updates. Please continue to check your NTCC email daily. If you do not own a cell phone, you can receive these same reminders through your email.

ANNOUNCEMENTS: These can be found in Blackboard under the course link on your Bb homepage. Please make sure you are reading any announcements thoroughly when they are posted there

Institutional/Course Policy:

Classroom Expectations:

1. Attend all labs, be on time, and remain in class for the entire period.
For every three days missed, 10 points will possibly be deducted from the final grade. Three episodes of tardiness or early departure will be equated with one class absence. If you must leave early, please inform instructor before scheduled class.
2. Complete assigned readings before lab.
3. Be prepared to take notes and participate in lab.
4. Exams are to be taken on the scheduled date and time. Prior approval of the instructor is required for anyone missing an exam date. Makeup exams must be taken within 2 days of returning to campus. Every day after that will have 10 points deducted from the exam grade. Missing an exam without notifying the instructor will result in a grade of "0" for the exam. Anyone more than 15 minutes late for an exam without prior approval will take the exam at the end of class in instructor's office and have 10 points deducted from the exam grade.
5. You must EARN your grade; I do not GIVE grades, so study, study, study!
Average study time is 2-3 hours per hour of lecture/class time a week.
6. Any missed laboratory session for any reason will require an essay of no less than 250 words (2 hand-written pages) covering the topic or activity performed during that session. This essay will be

submitted before the next scheduled class period. The activity or procedure must also be made up, if possible, and any assignments as part of the missed lab session will also be turned in as soon as the lab activity has been completed. It is the student's responsibility to contact the instructor for such assignments. Do not miss labs, as there is a lot of content to cover in this course.

7. When illness or emergencies arise which necessitate a student's absence from any scheduled class or other scheduled activity, the instructor should be notified as soon as possible.

8. Be respectful of your classmates and instructors.

9. Turn off cell phones/notification devices or set to vibrate.

Attendance and Absences: You are expected to attend ALL scheduled labs and take the exams as scheduled. You will be held responsible for all information covered in lab. *If you will be absent, inform the instructor by phone or email at least 15 minutes BEFORE class begins. Absences will be counted as unexcused if the instructor is not informed in a timely manner. For every three days missed, 10 points will possibly be deducted from the final grade.*

Three episodes of tardiness or early departure will be equated with one class absence. If you must leave early, please inform instructor before scheduled class.

More than five unexcused absences will result in the student being dropped from the course. Students with perfect attendance will have five (5) points added to their final exam.

Makeup Policy: No late work will be accepted. Assignments available on Blackboard will be due on Sunday's at 11:59pm according to course schedule. After that date and time, a grade of zero will be entered for any work not completed. The student is responsible for requesting a makeup when they are unable to attend a regularly scheduled examination. Makeup exams will be scheduled only in the event of an EXCUSED absence. Makeup exams must be taken within 2 days of returning to campus. Every day after that will have 10 points deducted from the exam grade. Missing an exam without notifying the instructor will result in a grade of "0" for the exam. Anyone more than 15 minutes late for an exam without prior approval will take the exam at the end of class in instructor's office and have 10 points deducted from the exam grade.

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.

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 accommodations 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 accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. 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.

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