

**Master Syllabus**

**COURSE: BIOL 2240 Microbiology Lab**

**CRN:**

**CREDIT HOURS (Lecture/Lab/Total): 0/1/1**

**CONTACT HOUR (Lecture/Lab/Total): 0/45/45**

**INSTRUCTOR INFORMATION**

**Name:**

**Email:**

**Phone:**

**Office:**

**Office Hours:**

**Class Location:**

**COURSE DESCRIPTION:** BIOL 2240 is designed to utilize a series of laboratory exercises to illustrate the material studied in Microbiology 2230 for students majoring in biology, biotechnology, nursing and certain allied health and technical fields. Students should enroll in the lecture section (BIOL 2230 - Microbiology) during the same semester. This course consists of three of hours of laboratory per week. A laboratory fee is required for this course.

**PREREQUISITES:** Co-requisite course BIOL 2230. All prerequisite courses must have a grade of C or better.

## LEARNING OUTCOMES:

1. Demonstrate knowledge of routine safety practices for a laboratory setting.
2. Demonstrate correct techniques for disposal of general laboratory and infectious wastes including use of biohazard bags, sharp boxes, and chemical neutralization procedures.
3. Describe the location of the Material Safety Data Sheets and discuss the applications of the information contained in them.
4. Give examples of procedures that require use of personal safety equipment such as gloves, eye protection and full-face protection.
5. Demonstrate revulsion at the sight of food, drink or open cosmetics in or near the laboratory especially in chemical storage refrigerators.
6. Use correct transport, cleaning and storage procedures for microscopes.
7. Outline the appropriate response to common laboratory emergencies including fire, cuts, and chemical spills.
8. Outline the typical procedure to reporting an accident/incident including forms to be completed, personnel to be informed and time frame for these reports.
9. Demonstrate correct hand-washing procedures and discuss the importance of frequent and thorough hand washing in laboratory and personal safety.
10. Practice the principles embodied by “wash, touch, wash” and “wet, red, dirty 🡪 glove”.
11. Follow prudent safety procedures important in the handling of potentially pathogenic materials.
12. Use a microscope including the oil immersion lens and identify organisms by shape and gram reaction.
13. Prepare a wet mount, prepare a heat-fixed smear, and do a gram stain without reading instructions.
14. Do simple stains following written instructions.
15. Maintain living cultures of bacteria using appropriate aseptic transfer techniques.
16. Do procedures used in microbiology when given written instructions and prepared reagents.
17. Calculate and prepare dilutions needed for the enumeration of bacteria in milk and water.
18. Demonstrate appropriate methods used in the identification of common but unknown bacteria.

**ASSESSMENT MEASURES:** (1) portfolios/essays, (2) journals, (3) homework/reader responses, (4) class participation/attendance, (5) quizzes and tests, (6) midterm/final. **The instructor should consult departmental policies to determine required assessment measures to list here.**

## TEXTBOOKS: The instructor will enter the most current textbook information.

**SUPPLIES AND EQUIPMENT:** The instructor will determine supplies needed.

**ATTENDANCE POLICY:** It is the student’s responsibility to maintain regular contact with instructors. Class attendance is the responsibility of the student. All students must be officially enrolled in any course that they attend. It is expected that students attend all classes and be on time. If an absence occurs, it is the responsibility of the student for making up examinations, obtaining lecture notes, and otherwise compensating for what may have been missed. Students who stop attending class and do not officially drop, withdraw, or resign from the college may receive a grade of “F” for all coursework missed. Absences affect performance in this course and do not reflect well on participation. No student may substitute the attendance of another student. **Online students must be actively participating in online courses to be considered making progress.** **Hybrid students must attend face-to-face meetings as well as complete online assignments.**

Students should frequently check Canvas (Learning Management System) for notifications and updates to the course. Students are expected to use the online resources provided by NTCC to:

1. Track course assignments and progress

2. Discuss topics and issues with fellow students

3. Turn in assignments, quizzes, and tests

4. Check for any updates, changes or alterations to the course

5. Access all course materials to include presentations, assignments, quizzes, and tests.

## GRADING REQUIREMENTS: The instructor will follow departmental policies and include grading criteria here by assessment measure in either points or percentages.

Example: Final Project 50%, Class activities/ assignments 30%, Class participation/ attendance 20%= Total 100%

**GRADING SCALE: A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: 0 -59 %**

**ACADEMIC INTEGRITY AND CONDUCT:** Students are expected to maintain the highest standards of academic integrity. Behavior that violates these standards is not acceptable. Plagiarism, cheating, and other forms of academic dishonesty are prohibited and are subject to disciplinary actions established in the Student Code of Conduct. The instructor reserves the right to assign a grade of “F” on any type of assignment or examination based on evidence that the student has violated the Student Code of Conduct.

**STUDENT BEHAVIOR/CLASSROOM DECORUM:** Students are encouraged to discuss, inquire, and express their thoughts and views during class. Classroom behavior that interferes with either the instructor’s ability to conduct the class or the ability of students to benefit from the instruction is not acceptable. Students are required to turn off all cell phones or similar electronic devices (or place them on silent mode) before coming into the classroom. The instructor reserves the right to assign no credit for work on that day if a student talks or texts on a cell phone or similar electronic device. The classroom is not a place for children, and students are not to bring their family members into the classroom.

**DISABILITY CODE:** If you are a qualified student with a disability seeking accommodations under the Americans with Disabilities Act, you are required to self-identify with the Student Affairs. No accommodations are granted without documentation authorized from Student Affairs.

**WITHDRAWAL POLICY:** The last day to withdraw from a course or resign from the college is **\_\_\_\_\_\_\_\_\_\_\_\_\_**. If you intend to withdraw from the course or resign from the college, you must initiate the action by logging into LoLA. The instructor will not withdraw you automatically.

**COMMUNICATION POLICY:** My.NorthshoreCollege.Edu is the official student email communication within Northshore Technical Community College. Therefore, the College has the right to send communications to students via their College email address and the right to expect that those communications will be received and read in a timely fashion. Every student is assigned a My.NorthshoreCollege.Edu. Students can redirect their College email address to an outside email provider. However, the College is not responsible for handling outside email providers, and redirecting their College email address does not absolve a student from their responsibilities associated with communication sent to their official College email address.

**COPYRIGHT POLICY:** Unless a student has obtained permission from the copyright holder, it is a violation of Copyright Law to print or photocopy chapters from a textbook that the student did not purchase. If the course requires the use of an electronic textbook, a student must look for a statement that allows for photocopying and/or printing of the eTextbook.

**NETIQUETTE POLICY:** This term is used to describe accepted, proper behavior on the Internet. Remember the following when communicating online (messages, discussion board, etc.):

* Never post profanity, racist, or sexist messages
* Be respectful of fellow students and instructors
* Never insult any person or their message content
* Never plagiarize or publish intellectual property
* Do not use text messaging abbreviations or slang
* Do not type in all CAPS (this is considered online yelling)