



Course Information

Course Number: MICRO 202L
Course Title: Introductory Microbiology Lab
Credit Hours: 1

Instructor Information

Instructor: Mrs. Allison Thomes
Phone: 701-356-2050
Email: athomes@west-fargo.k12.nd.us
Course Location: Class 218J, Lab 215J, Office 214J
Office Hours: Period 2A (10:25 – 11:55) & 1B (8:25 – 9:55)

Course Description

MICRO 202L is an overview of the structure and use of microscopes, staining procedures, aseptic technique, and common microbiological laboratory procedures useful in the identification of bacteria. Corequisite: MICR 202.

Textbook and Required Materials

MICROBIOLOGY, AN INTRODUCTION 12th Ed. Tortora, Funke, and Case. Pearson Education. ISBN 13: 978-0-321-92915-0.

Learning Goals/Outcomes

Upon completion of this course, the student will be able to:

1. Demonstrate effective written and oral communication.
2. Utilize skills of aseptic technique, sterilization, propagation of pure cultures, diagnostic tests to identify microbes, and use of oil immersion microscopes.
3. Utilize proper lab safety and practices conducive to physical wellness and health
4. Use reasoning and analytical skills to explain exercises and apply acquired knowledge to solve problems

Course Goals:

1. To teach student basic microbiology laboratory techniques, including light microscopy, aseptic technique, microbiological media, growth and metabolism of microbes, and the use of standard lab equipment.
2. To make students aware of the ubiquity and importance of microorganisms.
3. To promote the value of collaboration and time management.

Grading and Evaluation

- All exams and lab reports must be turned in or an incomplete will be received for the course.
 - Students must schedule make-up exams and labs with me in ADVANCE if an absence is known ahead of time. Credit will NOT be given for work and assessments missed due to unexcused absences.
- Late assignments will be accepted ONE day late for half credit. Late assignments submitted more than one day late will not be eligible for credit.
- Grades will be based on the following scale and weighted categories:

90-100% = A

80-89% = B

70-79% = C

60-69% = D

59%-0% = F

Daily work/Quizzes = 30%

Exams/Labs/Projects = 70%

Tie to Assessment Outcomes

Microbiology 202/202L support Liberal Arts assessment outcomes

ADA Statement

Any student who feels they may need an accommodation based on the impact of a disability should contact their instructor privately to discuss specific needs. Please contact the Accessibility Coordinator at NDSCS.Accessibility@ndscs.edu or by phone at 701-671-2623 as soon as possible in the semester to discuss possible accommodations.

Equal Opportunity Statement

North Dakota State College of Science is an equal opportunity employer and equal opportunity educator. NDSCS is fully committed to equal opportunity in employment decisions and educational programs and activities. All practices are in compliance with all applicable federal and state laws, for all individuals without regard to age, color, gender identity/expression, genetic information, marital status, national or ethnic origin, physical and mental ability status, public assistance status, race, religion, sex, sexual orientation, familial or parental status, status as a U.S. veteran/service member, or participation in lawful activity off the employer's premises during nonworking hours which is not in direct conflict with the essential business-related interests of the employer.

For more information, refer to the NDSCS College Catalog under *Non-Discrimination Statement* and *Equal Opportunity Policy*.

Academic Integrity

Acts of academic dishonesty, including but not limited to cheating, plagiarism, falsifying research data or results or assisting others to do the same will be cause for sanction up to and including reduction in grade, failure of course or removal from class. Repeat offenses may result in additional sanctions.

For more information, refer to the NDSCS College Catalog under *Academic and College Policies and Procedures*.

In addition, working together collaboratively is encouraged, but each student is expected to participate and not just copy someone else's work. Copying from any source (classmates, textbooks, webpages, etc.) and passing it off as your own work is plagiarism and will not be tolerated.

Early Entry Course Withdrawal

Students who wish to drop a college course must contact the NDSCS Early Entry Program Coordinator at 701-671-2406. Notifying the high school of a drop/withdrawal **does not** withdraw the student from the NDSCS college class. If the student has not officially withdrawn from the college course, an “F” will be recorded on their permanent college transcript. View the current Refund Schedule at: [Refund Schedules for Early Entry \(Dual Credit\)](#).

Course/Instructor Expectations

- **Collaboration:**
 - **Be** Scientists (Ask questions, think critically, analyze, communicate, and listen)
 - **Be** a collaborative teammate and lab partner.
- **Compassion**
 - **Be** Respectful! Respect others in the classroom through your words and actions; dress appropriately
 - **NO CELL PHONES OR WIRELESS HEADPHONES/EARBUDS ALLOWED IN CLASS.** These must be put away once the bell rings and cannot be taken out until bell rings (full District Policy is on School Website).
 - Hats must be removed/turned backwards/hoods put down during class/labs
 - No clothing that causes a learning distraction for others is allowed
 - Hats must be removed during labs
 - Close-toed shoes **must** be worn during labs
 - No food allowed in class or lab
 - **Be** Honest! Use Academic integrity; use proper citations for ideas/words that are not your own
Refer to the student handbook for a thorough description and consequences of cheating.
- **Responsibility**
 - **Be** Present and Time! This means in your seat and ready to learn when the bell rings.
- **Be** Prepared! **Bring iPad/stylus charged every day; Complete homework assignments** and come prepared to be an **active, contributing member of the class.**

Tentative Class Outline:

- Ubiquity of Microorganisms Intro Lab
- Types of Microbes Microscope Lab
- Antibiotic Disk Lab
- Aseptic Technique Lab
- Simple Stain and Gram Stain Lab
- Fermentation/Types of Media Lab
- Transformation Lab
- Controlling Microbes Lab – Individually planned and Formal Lab report due
- Microbial Unknown Lab – Individually conducted and Formal Lab report due
- Antigen/Antibody/Blood typing Lab – artificial blood used

Developed/Revised: 8-14-24