

North Dakota State College of Science

Syllabus – Microbiology Lecture

Fall - 2024



# **Course Information**

Course Number:MICRO 202Course Title:Introductory MicrobiologyCredit Hours:3

#### 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 202 is a university transferable introductory microbiology course that examines the characteristics and importance of microorganisms with emphasis on their identification, control and relationships to health and disease. Corequisite: MICR 202L.

# **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:

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1. Gain an appreciation of the diversity of microbes; in the context of this course, "microbes" include diverse organisms, e.g., viruses, bacteria, fungi, protists, and small worms

- 2. Describe the structure and function of microbes, as well as the growth, metabolism, and genetics of microbes
- 3. Understanding diagnostic tests and procedures used to identify microbes
- 4. Understanding the relationship between microbes, disease, and the disease process.
- 5. The role of microbes in microbial ecology.
- 6. Understand the roles of microbes in community health and how microbes are controlled.

### **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% = D59%-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 <u>NDSCS.Accessibility@ndscs.edu</u> 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: <u>Refund Schedules for Early Entry (Dual Credit)</u>.

# **Course Expectations**

- Collaboration:
  - **B**e Scientists (Ask questions, think critically, analyze, communicate, and listen)
  - **B**e a collaborative teammate and lab partner.
- Compassion
  - **B**e 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 <u>must</u> be worn during labs
    - No food allowed in class or lab
  - **B**e 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
  - **B**e Present and Time! This means in your seat and ready to learn when the bell rings.
  - **B**e Prepared! **Bring iPad/stylus charged every day;** <u>Complete homework assignments</u> and come prepared to be an <u>active, contributing member of the class.</u>

# **Tentative Course Outline:**

- Ch. 1 The Microbial World and You; Review Ch. 2 & 3 (on own)
- Ch. 4 Anatomy of Prokaryotic & Eukaryotic Cells; Ch.20 Antimicrobial Drugs
- Ch. 5 Microbial Metabolism
  - Exam 1: Ch. 1, 4, 20, 5

Ch. 6 Microbial Growth

Ch. 7 Control of Microbial Growth

Ch. 8 Microbial Genetics

# ➢ Exam 2: Ch. 6, 7, 8

Ch.11 Prokaryotes

Ch. 12 Eukaryotes (fungi, protists, helminths)

Ch. 13 Viruses

# Poster Project Assessment (in place of Exam 3): Ch. 11, 12, 13

- Ch.14 Principles of Disease & Epidemiology
- Ch.16 Nonspecific Defense Mech. of the Host

Ch.17 Specific Host Defenses: The Immune Response

# Exam 4: Ch. 14, 16, 17

Lab Practicum Final

**Developed/Revised:** 8-14-24