



## Undergraduate Course Syllabus

### BIO 212: Microbiology

Center: Online

Credits: 3

### Course Prerequisites

BIO 205, BIO 211

### Course Description

Microbiology focuses on the impact of pathogenic organisms and their role in immunology and disease. Course content will focus on the etiology of microbial infections, the interaction between microbe and host, and preventive measures. Students will participate in simulations that will provide clarity into the symptomatology, etiology, pathogenesis, epidemiology, prevention, and best practices in the treatments of infectious diseases.

### AACN Essentials

This course meets the following AACN Essentials of Baccalaureate Education for Professional Nursing Practice:

- **Essential I: Liberal Education for Baccalaureate Generalist Nursing Practice:** A solid base in liberal education provides the cornerstone for the practice and education of nurses.
- **Essential III: Scholarship for Evidence-Based Practice:** Professional nursing practice is grounded in the translation of current evidence into one's practice.
- **Essential VII: Clinical Prevention and Population Health:** Health promotion and disease prevention at the individual and population level are necessary to improve population health and are important components of baccalaureate generalist nursing practice.

### Course Outcomes

- Describe characteristics and pathogenesis of microorganisms for identifying disease presentation
- Explain how the basic principles of antimicrobial therapy promote patient-care outcomes
- Evaluate the effectiveness of current protective and preventative measures for the purpose of reducing infection and disease transmission
- Recommend evidence-based preventative strategies to address infectious diseases within an at-risk population
- Analyze how immune response can be manipulated for disease prevention

### Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through the [SNHU Online Bookstore](#) rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the IT Service Desk, your advisor, and the instructor can provide you with support if you have problems.

Access code for MasteringMicrobiology lab, which includes the following e-book:

Bauman, R. (2017). *Microbiology with diseases by body system*. (5th ed.). New York, NY: Pearson Education. ISBN: 978-1-323-83235-6

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). ISBN: 978-1-4338-3216-1

### **Optional Materials**

*Microbiology with disease by body system* (looseleaf)

Bauman, R. (2018). *Microbiology with diseases by body system*. (5th ed.). New York, NY: Pearson Education. ISBN: 978-0-13-461844-9

### **Diversity, Equity, and Inclusion**

As indicated in our core values, SNHU is committed to “embrace diversity where we encourage and respect diverse identities, ideas, and perspectives by honoring difference, amplifying belonging, engaging civilly, and breaking down barriers to bring our mission to life.”

This may or will be reflected in SNHU’s curriculum as we embrace and practice diversity, equity, and inclusion (DEI) to provide the most transformative experience for our students, faculty, and staff. Because topics pertaining to DEI can be sensitive, please remember that embodying and practicing diversity, equity, and inclusion is one of our core values that you will encounter throughout the academic experience. In higher education, we are expected to think and engage critically. Use a growth mindset to embrace the diverse readings, course assignments, and experiences of your peers and faculty.

For more information about DEI at SNHU, please visit our website at the [Office of Diversity and Inclusion](#).

### **Instructor Availability and Response Time**

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor’s answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours. Instructors will post grades and feedback (as applicable) within seven days of an assignment’s due date, or within seven days of a late submission.

## Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	3	10	30
MasteringMicrobiology Homework	8	20	160
MasteringMicrobiology Quizzes	4	100	400
Journal	1	30	30
Final Project			
Milestone One	1	30	30
Milestone Two	1	75	75
Final Project Submission	1	275	275
			<b>Total Course Points: 1,000</b>

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

## University Grading System: Undergraduate

Grade	Numerical Equivalent	Points
A	93–100	4
A-	90–92	3.67
B+	87–89	3.33
B	83–86	3
B-	80–82	2.67
C+	77–79	2.33
C	73–76	2
C-	70–72	1.67
D+	67–69	1.33
D	60–66	1
F	0–59	0
I	Incomplete	
IF	Incomplete/Failure *	
IP	In Progress (past end of term)	
W	Withdrawn	

\* Please refer to the [policy page](#) for information on the incomplete grade process.

## Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

## Weekly Assignment Schedule

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module.

Module	Topics and Assignments
1	Introduction to Prokaryotes and Chemistry <i>Microbiology With Diseases by Body System</i> , Chapters 1, 2, and 3 1-1 Final Project Review 1-2 Discussion: Getting Started 1-3 MasteringMicrobiology Homework: Module One 1-4 Final Project Milestone One Reminder
2	General Prokaryotes, Nutrition, and Growth <i>Microbiology With Diseases by Body System</i> , Chapters 5 and 6 2-1 MasteringMicrobiology Homework: Module Two 2-2 MasteringMicrobiology Quiz: Modules One and Two 2-3 Final Project Milestone One: Viral and Bacterial Community Impact Summary
3	Operon Regulation <i>Microbiology With Diseases by Body System</i> , Chapters 7 and 8 3-1 MasteringMicrobiology Homework: Module Three 3-2 Discussion: Operons
4	Viruses and Oncogenesis <i>Microbiology With Diseases by Body System</i> , Chapters 7 (Reread) and 13 4-1 MasteringMicrobiology Homework: Module Four 4-2 MasteringMicrobiology Quiz: Modules Three and Four 4-3 Final Project Milestone Two Reminder
5	Antibiotics and Microbicides <i>Microbiology With Diseases by Body System</i> , Chapters 9 and 10 5-1 MasteringMicrobiology Homework: Module Five 5-2 Discussion: Diagnosing, Preventing, and Treating Disease 5-3 Final Project Milestone Two: Disease Pathology, Management, and Pharmacological Impact Summary
6	Immunity and Vaccination <i>Microbiology With Diseases by Body System</i> , Chapters 15, 16, and 17 6-1 MasteringMicrobiology Homework: Module Six 6-2 MasteringMicrobiology Quiz: Modules Five and Six 6-3 Final Project Reminder
7	Specific Microbial Diseases <i>Microbiology With Diseases by Body System</i> , Chapters 19, 22, and 24 7-1 MasteringMicrobiology Homework: Module Seven 7-2 Final Project Submission: Analysis of Infectious Disease Processes

Module	Topics and Assignments
8	Environmental and Foodborne Illnesses <i>Microbiology With Diseases by Body System</i> , Chapter 25 8-1 MasteringMicrobiology Homework: Module Eight 8-2 MasteringMicrobiology Quiz: Modules Seven and Eight 8-3 Journal: Final Reflection

### Attendance Policy

Online students are required to submit a graded assignment/discussion during the first week of class. If a student does not submit a graded assignment/discussion during the first week of class, the student is **automatically dropped** from the course for non-participation. Review the [full attendance policy](#).

### Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the [full late assignment policy](#).

### SNHU Student Handbook

Review the [student handbook](#).

### ADA/504 Compliance Statement

Southern New Hampshire University (SNHU) is dedicated to providing equal access to individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and with Title III of the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.

SNHU prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. The university has adopted this policy to provide for prompt and equitable resolution of complaints regarding any action prohibited by Section 504, the ADA, or the ADAAA.

For questions about **support services, documentation guidelines, general disability issues, or pregnancy accommodations**, please visit the [Online Accessibility Center](#) (OAC).

As a student, you must complete an interactive intake process, with supporting documentation, in order to be granted accommodations. Once reasonable accommodations are approved by the OAC, you will receive an accommodations letter. You are then responsible for sharing the letter with your instructor. Accommodations are not retroactive.

If you feel you've been subject to discrimination on the basis of disability, by any party, you may file a complaint or grievance. For more information on the ADA/504 Grievance Policy, go to the [Disability and Accessibility Services](#) website.

### Academic Integrity Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic

work. Activities such as plagiarism and cheating are not condoned by the university. Review the [full academic integrity policy](#).

**Copyright Policy**

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the [full copyright policy](#).

**SNHU Withdrawal Policy**

Review the [full withdrawal policy](#).

**Southern New Hampshire University Policies**

More information about SNHU policies can be found on the [policy page](#).