



**BASIC COURSE INFORMATION**

<b>Course Prefix, Number, and Title:</b>	BIOL 202-6 (02686)	Introductory Microbiology
<b>Credits:</b>	Unit Hours/Credits:	4 units/credits
	Classroom study hours (CS):	3 hours
	Laboratory/Clinical hours (L/C):	2 hours
<b>Meeting Days and Times:</b>	Monday Lecture	7:00 PM to 9:30 PM MAFB Education Center
	Wednesday Lab	7:00 PM to 8:50 PM Moore Hall Room 318
<b>Semester/Year:</b>	Fall Semester 2019	
<b>Course Dates in Campus Connection:</b>	16-week (fall semester) August 26, 2019 to December 20, 2019.	
<b>Mode of Delivery:</b>	face-to-face	
<b>Location:</b>	Lecture: MAFB Education Center Room 210.	Minot Air Force Base.
	Lab: Cyril Moore Hall Room 318.	Minot State University.

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**INSTRUCTOR INFORMATION**

<b>Name(s) of Faculty Member(s):</b>	Aaron L. Ament, M.Sc., M.D. (Instructor for Lecture and Lab)	
<b>Office Location &amp; Office Hours:</b>	Swain Hall Room 308. Minot State University. Office Hours: Mon., Wed. and Fri. from 11AM to 1PM, or by Appointment.	
<b>Contact Information:</b>	Phone: (701) 240-3373	
	Email: aaron.ament@ndus.edu	
	Website: www.amentanatomy.com	

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**ADDITIONAL COURSE INFORMATION**

<b>Course Catalog Description:</b>	A survey of microbial cell biology, microbial genetics, the impact of microorganisms on the environment, and microbial interactions with humans; emphasizing human infectious disease.
<b>Placement Policies:</b>	None.
<b>Prerequisite/Co-requisite Courses:</b>	None.
<b>General Education Category (or Categories):</b>	BIOL 202 does meet the MSU's General Education Requirements in the FC2, CCS1 and CCS 6, and IP categories. (CCS = Critical Capacities and Skills, PSR = Personal and Social Responsibility, IP = Interconnecting Perspectives, FC = Foundational Content). It is typically taken by those with majors requiring the course or as an elective for those with an interest in the subject matter.
<b>Required Course Materials:</b>	Lecture Materials: <i>Microbiology</i> , by OpenStax (the book is a FREE PDF at <a href="https://openstax.org">https://openstax.org</a> You can also buy an inexpensive print copy in the bookstore or online).
	Lab Materials: No lab manual to buy. I provide a lab handout for each

lab when you arrive or have material written on the whiteboard. Your lecture book and the class website has all the photos and reference materials you will presented in the lab setting.

**Student Learning Outcomes:** N/A for BIOL 202

**Course Objectives:** Both the lecture and laboratory components of Introductory Microbiology at Minot State University (BIOL 202) are designed to adhere to the core themes and concepts recommended for an Introductory Microbiology course by the American Society for Microbiology: Evolution, Cell Structure and Function, Metabolic Pathways, Information Flow and Genetics, Microbial Systems and Impact of Microorganisms. At the conclusion of the course the student will have mastered the following skills: Proper use of the microscope, Gram staining, streak isolation, the ability to carry out a dilution series and the ability to interpret various biochemical tests in order to identify bacterial species.

**ASSIGNMENTS AND GRADING INFORMATION**

<b>Grading Policy and Scale:</b>	6 Lecture Quizzes (1 dropped, 50 points each)	250 points
	Final Exam (can not be dropped)	100 points
	11 lab reports (drop 1, 10 points each)	100 points
	2 lab practicals (25 points each, can not be dropped)	50 points
	<b>TOTAL POINTS:</b>	<b>500 points</b>

Letter Grade Breakdown:

— 90% to 100%	A	<i>"Excellent"</i>	450 — 500 points
— 80% to 84.9%	B	<i>"Good"</i>	400 — 449 points
— 70% to 74.9%	C	<i>"Average"</i>	350 — 399 points
— 60% to 64.9%	D	<i>"Poor / Passing"</i>	300 — 349 points
— 0% to 54.9%	F	<i>"Fail"</i>	0 — 299 points

There is no rounding of grades, and no curve applied to the class.  
 There are no extra-credit projects, and no retaking of quizzes or exams.  
 Tutoring services are usually available each semester, but not guaranteed.  
 If you are having academic trouble, ask me for help (earlier in the semester is better).

**Assignments and Descriptions:** Lecture material is tested by multiple choice exams as noted above. There are no papers to write. Each lab has a handout to be completed and turned in before the lab is over. Lab practical exams test on your knowledge of the lab topics as noted above and in the tentative calendar.

## Tentative Course Outline:

<u>Week</u>	<u>Day</u>	<u>Date</u>	<u>Lecture &amp; Lab Schedule</u>	<u>Topic</u>
1	Monday, <b>Wednesday,</b>	August 26 <b>August 28</b>	Chapter 1 <b>No Lab</b>	An Invisible World: Part 1
2	<b>Monday,</b> Wednesday,	<b>September 2</b> September 4	<b>No Lecture</b> Lab 1	<b>Labor Day</b> Lab Safety and the Ubiquity of Microbes
3	Monday, Wednesday,	September 9 September 11	Chapter 1 Lab 2	An Invisible World: Part 2 Effectiveness of Handwashing
4	Monday,  Wednesday,	September 16  September 18	<b>Quiz 1</b> Chapter 2 Lab 3	<b>Covers Chapter 1</b> Microscope & Staining Epidemiology of Disease Spread
5	Monday, Wednesday,	September 23 September 25	Chapter 3 Lab 4	The Cell Streak Isolation and Sterile Technique
6	Monday,  Wednesday,	September 30  October 2	<b>Quiz 2</b> Chapter 4 Lab 5	<b>Covers Chapters 2 &amp; 3</b> Prokaryotes: Part 1 Normal Flora
7	Monday, Wednesday,	October 7 October 9	Chapter 4 Lab 6	Prokaryotes: Part 2 Microscope Skills and Simple Staining
8	Monday,  Wednesday,	October 14  October 16	<b>Quiz 3</b> Chapter 5 <b>LAB Midterm EXAM</b>	<b>Covers Chapter 4</b> Eukaryotes: Part 1 <b>Covers Labs 1 through 6</b>
9	Monday, Wednesday,	October 21 October 23	Chapter 5 Lab 7	Eukaryotes: Part 2 Gram Stain
10	Monday,  Wednesday,	October 28  October 30	<b>Quiz 4</b> Chapter 6 Lab 8	<b>Covers Chapter 5</b> Viruses: Part 1 Bacterial Growth
11	Monday, Wednesday,	November 4 November 6	Chapter 6 Lab 9	Viruses: Part 2 Control of Microbial Growth
12	<b>Monday,</b> Wednesday,	<b>November 11</b> November 13	<b>No Lecture</b> Lab 10	<b>Veterans Day</b> Kirby-Bauer Assay
13	Monday,  Wednesday,	November 18  November 20	<b>Quiz 5</b> Chapter 13 Lab 11: part 1	<b>Covers Chapter 6</b> Control of Microbe Growth ID of an Unknown Bacteria
14	Monday, <b>Wednesday,</b>	November 25 <b>November 27</b>	Chapter 14 <b>No LAB</b>	Antimicrobial Drugs <b>Thanksgiving Break (November 27 to December 1)</b>
15	Monday,  Wednesday,	December 2  December 4	<b>Quiz 6</b> Chapter 16 Lab 11: part 2	<b>Covers Chapters 13 and 14 material.</b> Epidemiology ID of and Unknown Bacteria, Final Lab Review.
16	Monday, <b>Wednesday,</b>	December 9 <b>December 11</b>	"Final Topic" <b>Final LAB EXAM</b>	Common Human Fungal & Parasitic Infections <b>Comprehensive</b>
17	<b>Monday,</b>	<b>December 16</b>	<b>LECTURE FINAL EXAM</b>	<b>Comprehensive</b>

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### Tentative Dues Dates of Major Assignments:

See the Tentative course outline above for the dates and topics of each quiz, exam and lab practical.

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## POLICIES

- Late and Missed Work Policy:** If you have a schedule conflict (MSU sanctioned sports event, planned surgery, pregnancy, doctor's appointments, etc.... ), tell me (*if possible*) BEFORE the exam or ASAP by email so we can plan another testing time. If you are sick, go see a doctor first and talk to me later about make up work. Be prepared that makeup exams will likely not be the same format as listed below (i.e. fill in the blank, essay, or other kind of test of my choice). Ideally, all makeup lecture and lab exams will be done within a week of the one on the schedule.
- Attendance Policy:** I follow the Minot State University Attendance Policy that can be found at <http://www.minotstateu.edu/records/pages/policy-class-attendance.shtml>  
You are expected to attend all lectures and lab. As a courtesy, please email me if you are going to miss lecture or lab. Quizzes are at the beginning of the lecture period.
- University Sanctioned Events Policy:** Minot State University has a commitment to students who represent the University in official capacities. University-sanctioned activities include events that are required or encouraged by a class, program, club, or athletic team. When a student has a scheduled absence due to a university-sanctioned activity, it is the student's responsibility to communicate with the faculty member prior to his or her absence. If you absence occurs during a lab or when a lecture exam is being given, I will work with you to find a time to makeup the quiz or exam you missed. I try to get all missed work completed within 7 days. If the student fails to communicate with me (by email, phone, in-person, etc...) within a week of the missed work, a zero will be scored.
- Academic Honesty Policy with Penalty for Violating the Policy:** I follow the Minot State University Academic Honesty Policy that can be found at: <http://catalog.minotstateu.edu/graduate/policies-regulations/grad-academic-honesty/>  
If you are caught cheating on any quiz or exam, a zero will be recorded.
- Disability Statement:** In coordination with the Access Services, reasonable accommodations will be provided for qualified students with disabilities (LD, Orthopedic, Hearing, Visual, Speech, Psychological, ADD/ADHD, Health Related, TBI, PTSD and Other). Please meet with the instructor during the first week of class to make arrangements. Accommodations and alternative format print materials (large print, audio, disk or Braille) are available through the Access Services, [in person](mailto:in_person), by phone 701-858-3371 or by e-mail at [evelyn.klimpel@minotstateu.edu](mailto:evelyn.klimpel@minotstateu.edu).
- Non-discrimination Statement:** Minot State University subscribes to the principles and laws of the state of North Dakota and the federal government pertaining to civil rights and equal opportunity, including Title IX of the 1972 Education Amendments. Minot State University policy prohibits discrimination on the basis of race, gender, religion, age, color, creed, national or ethnic origin, marital status, sexual orientation, gender identity, or disability in the recruitment and admission of students and the employment of faculty, staff, and students, and in the operation of all college programs, activities, and services. Evidence of practices which are inconsistent with this policy should be reported using the Student Complaint and Anti-Discrimination Form located here: <https://form.jotform.com/72996849416981>. For the complete non-discrimination statement, visit [here](#).

**Title IX Statement:**

MSU faculty members are “mandatory reporters,” which means that once we are apprised of violence or harassment based on sex and gender, we are required to report the incident to the Title IX office on campus, regardless of whether the student wants this information reported or not. It may very well be that you would like the information reported, but you do not know whom to approach about this information, in which case our mandatory reporting requirements will be desirable to you. However, if you just wanted to talk about an incident but do not want it reported, neither you nor I have any choice in this matter, and once divulged, I must report it. This Office for Civil Rights.

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to accountability and support. If you or someone you know has been harassed on the basis of sex and gender or assaulted, you can find the appropriate resources on/off Minot State University’s campus.

Contact Information:

Lisa Dooley| Title IX coordinator  
Minot State University |Memorial 412  
500 University Ave W | Minot, ND 58707  
Ph: 701.858.3447 | [lisa.dooley@NDUS.edu](mailto:lisa.dooley@NDUS.edu)  
[Title IX Resources](#)  
[Reporting Forms](#)

**IMPORTANT DATES**

**Assessment Day:**

Monday, September 23rd from 8 AM to 3 PM is Assessment Day for MSU faculty. Since lecture begins at 7 PM, this does not affect us and there will be lecture. See the tentative schedule above for details. Holidays are noted in the tentative schedule.

**Final Exam Date and Time:**

See tentative calendar above for the full details of what is on each exam:

**Wednesday, December 11 7 PM LAB FINAL EXAM Comprehensive**  
**Monday, December 16 7 PM LECTURE FINAL EXAM Comprehensive**