BIOL 2421-Intro to Microbiology-Fall 2025 Syllabus
Texas A&M University-San Antonio-Dept. of Natural Sciences-Biology Program
Instructor: T. Marie Tipps
Office: SciTech 311K Phone: 210-784-2230
Email: tmtipps@tamusa.edu
Student Help Time (aka, office hours): M-R 1:00 p.m.-2:00 p.m.
Other times for appointments (Zoom or in person) are available. Please email request when needed.
Note: Regular office hours may be rescheduled due to other meetings.

Class Meeting Times and Location(s)

Lecture: Tuesday/Thursday 9:30-10:45; STEM 242

Course Description

This course addresses the biology of an array of microorganisms including archaea, bacteria, viruses and eukaryotic microbes such as fungi. Topics will include organism morphology, structure, growth and reproduction, and use of antimicrobial compounds. Discussion of the medical, industrial, and environmental impact of microbes will be included. With laboratory section. TSI Restriction(s): Reading, Math, and Writing

Prerequisites: A grade of C or better in BIOL 1306/1106, BIOL 1307 /1107, also CHEM 1311/1111. Completion of at least one semester of general chemistry is expected prior to taking Microbiology. If you find yourself needing more academic support, please make an online appointment with the science tutors at Tutoring Services.

Expectations and study tips (AKA, work hard!)

Significant study time outside of class is expected. Being a full-time student is essentially a full-time job, and if you have other commitments you need to manage your time accordingly. The rule of thumb for any course is to spend 2-3 hours per week outside of class for every hour in class. See this website: https://courses.lumenlearning.com/waymaker-collegesuccess/chapter/text-class-time-to-study-time-ratio/ Thus, for lecture alone you should spend **9 hours per week studying** outside of class hours (roughly 1 hr. 15 min. per day per lecture course you are taking!) Lab would be an added 2-3 h/week of work outside the attendance in the lab on your lab day.

ACTIVE RECALL and SPACED REPETITION. Studying could be reviewing your notes and PowerPoints, or re-reading the textbook, or even looking up relevant outside materials online to reinforce class concepts. However, **recalling** the information (i.e. QUIZZING YOURSELF) is the best way to learn the material. Try answering questions within the chapters or at the end of chapters without looking up the answers first! See if you can remember the information. Look at a figure and see if you can explain it without looking up the answer first, or redraw it from memory. There are lots of sites to help explain these study techniques, but here is one: https://www.brainscape.com/academy/active-recall-definition-studying/

I highly recommend that you take handwritten notes during lectures, as this method also has been shown to increase learning. One option is to print the PowerPoints prior to class and make notes on the slides themselves, as they will not contain all of the information you need. If you have a tablet, taking notes on the slides themselves is also a good option. Another suggestion is to take independent notes (paper or digitally) during lecture and correlate them with the slides later. Another great study method I recommend is for the student to look at each slide and come up with your own "test" question. It makes you look at the material from a different perspective. ***Don't just flip through the slides and skim over them!*** That doesn't work! Here is a relevant website on note taking: https://www.cultofpedagogy.com/note-taking/

Learning objectives

The student will learn:

1) Diversity of microbes and differences between categories of microbes, such as bacteria, archaea, fungi, and viruses, as well as other members of the microbial world.
2) Basic structures and components of microbial organisms and infectious particles.
3) Importance of microscopy and other laboratory techniques in the study of microbes.
4) The various types of metabolic pathways that bacteria use.
5) How microbes interact with host organisms and that these interactions can be beneficial and not necessarily pathogenic.
6) How microbes grow and methods for controlling that growth, such as disinfection, antimicrobials, and vaccination.
7) Basics of disease transmission and examples of medically-related disease processes.
8) Importance of microbes in ecology and food microbiology.

The laboratory portion of the course will provide hands-on experience with experimental scientific principles and microbial techniques, as well as illustrate and enhance concepts covered in the lecture course.

Textbook for Lecture-REQUIRED and provided as an e-book

1) ***Cowan, Microbiology* (7th ed.)**. You are provided access to the e-book version of this text and the online learning system (Connect) prepaid with your fees (Inclusive Access.) Once you enter the online Connect system, you may purchase a loose-leaf version of the book from the publisher (McGraw-Hill) for about $30, or you may rent a hard-copy. Many students like the loose-leaf book because they can then carry only the current chapters with them, and also place their handwritten notes within the correct chapter.
    - The online e-book has some really good videos, guides for study groups, etc.!

2) Note: Online access to Microbiology Connect is also **required** as your homework (HW) will be assigned through this system. You will need to register for Connect **within the first three days of class** by accessing an assignment on Blackboard.

3) Assignments through the SmartBook (SB) will be available for most chapters. These will not count for a grade but will be available and useful for studying throughout the entire semester.

   If I feel that students are arriving to class unprepared, I may institute quizzes in class. Online quizzes may also be assigned.

Other online homework (denoted HW) typically can be done after the due date, with a 10% deduction per day late. This will allow you time flexibility to learn the material and earn some of the available points without getting too far behind.

Other Required Materials

- **Blackboard** access: Students are expected to access Blackboard **daily**.
    - The Blackboard app is provided to you FREE by the university.
        - I still recommend that you access BB frequently on a computer as well, since the interface is different and may show you things you missed on the app.
    - Important announcements may be posted on Blackboard and are considered equivalent to items announced in class.
    - Grades will be posted on Blackboard.
        - Please note that I do not calculate grades on Blackboard. They are posted there for your information, and it is the student's responsibility to keep up with how he/she is doing in the course. I download grades and do calculations in Excel.

- Jaguar email account: **Students are expected to access their Jaguar email accounts** routinely as that account will be the other main method for me to communicate with you.

Communication

As stated above, all students are expected to access Blackboard for updates on the course and to find the course materials. I am available during student help time/office hours (please use them) if you need clarification on material in this course or just want to chat. I will post a notice if I am pulled away into a meeting during a scheduled office hour. You may also drop by during office hours, but if someone has an appointment, they will have priority and you may have to wait. I am available to make appointments at other times as well so please request if needed!

Email (tmtipps@tamusa.edu) is an excellent way to get in touch with me, and I will respond as soon as possible, usually same day, and no later than 2 business days, except in unusual cases. HOWEVER, do not expect an immediate response, especially if you are emailing me at 2 in the morning or on the weekend! And please note, any private information MUST come through your JAGUAR email account, not a personal email. When you email, you must **provide your full name** and which **course section** you are in. (I have a lot of students to keep track of!)

If you are having a significant crisis in your life, please come talk to me sooner rather than later. If I can help you early in the semester, it is much better than trying to salvage things at the end of the semester.

Grading

This course combines a lecture and laboratory section. These two sections will have different weight in your final grade for the course. The lecture section will be worth 50% of your course grade. The laboratory section will be worth 50% of your grade.

The total grade will be calculated by:

(% of the available lecture points earned X 0.50)
\+ (% of the available lab points earned X 0.50)
= total % grade for the course.

Sample calculation for student whose lecture grade is 85 and whose lab grade is 95:
Final grade= (85 * 0.50) + (95 * 0.50) = 90.0 (this student earned an A)
Final grades of 89.5, 79.5 etc. may be rounded up, but grades of 89.4, 79.4 etc. will not be rounded up.
Participation will be considered when looking at borderline grades and whether to round up.

Course Structure for LECTURE

Total points=800 points (unless extra quizzes instituted, see above); the lecture "only" part of your grade will be a percentage of the available points earned, e.g. 680 pts earned/800 available = 85% earned in lecture

4 Regular Exams (100 points each)

- Exams will vary in format and may have a combination of multiple-choice, fill-in-the-blank, matching, labeling, or short answer. These 4 exams will either be online or take-home exams.
- I will do my best to get exams graded in a timely manner within a week. However, extenuating circumstances may require longer periods for grading.
- If you feel that your exam was graded incorrectly, I would be happy to discuss it with you within a week of the exam being returned to you. I am human, and I do make mistakes. After that time, the grade will stand.

1 Final Exam (100 points)

- This CUMULATIVE exam is OPTIONAL and will be used to replace your lowest regular exam grade if you decide to take it and it is higher than your lowest test grade (HOPEFULLY that's the case!)

Online Homework (HW) (20 points each/10 total- 200 points)

- There are 13 assignments total for the semester. Only 10 will count towards your grade. If you complete all 13, the three extra assignments will be bonus points in this category.
- If you have a problem with the online Connect system, you MUST contact McGraw Hill Publishing directly for assistance (1-800-331-5094) and obtain a case number BEFORE you contact me.
    - Also, take a screenshot of the error message you are receiving. I will require this for any possibility of an extension. Extensions are not guaranteed.
- USE THE ONLINE STUDY SYSTEM to your advantage. **You get 2 chances at the HW**— leave yourself enough time to reread material and to earn back missed points.
    - However, be aware that I do write my own test questions that are at a higher level of critical thinking and ask that you apply material learned. So the HW is just one place to practice, but not all encompassing.
- HW assignments can be done late for a 10% deduction per day. Better to earn some points for an assignment, rather than nothing!

Study Group Work: (50 points per unit/4 total – 200 points)

- You will be assigned to groups at the beginning of the semester. This will be a two-part assignment that will span each unit. More information on this will come in the first week of class.
- Part I: Micro Minutes (20 points) – each person in your group will create a 5 minute video based on an assigned topic for each unit
- Part II: Microbe Missions (20 points) – each person in your group will take on a different mission for each unit. Over the course of the semester, each person will have each job once.
- Part III: Discussion (10 points) – each person will peer review 2 other videos and leave questions for clarification, understanding, or application

Make-up Policy for Exams

Exam Day Attendance: Mandatory

- You may make up the exam only if:
    - You contact me **in writing (email)** within 24 hours after the scheduled exam (unless there are extenuating circumstances such as hospitalization), and preferably prior to the exam.
        - Note: A voicemail on my office phone (210-784-2212) does generate an email to me, and can be used in cases where you do not have email access.
    - Your absence is one approved by TAMU-SA policies (illness, death in the family, other immediate-family emergencies; a vacation is not an excused absence). Absences must have documentation to be excused (required for fairness with all students) and acceptance of the excuse is at my discretion. It is not guaranteed.
    - You should make up the exam within a week of the original exam date, preferably sooner, unless you are extremely ill or under duress.

IMPORTANT UNIVERSITY POLICIES AND RESOURCES

Academic Accommodations for Individuals with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us https://www.tamusa.edu/DisabilitySupport-Services/index.html or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services as soon as possible.

Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the Tools section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, call 210-784-1331 or visit Madla 120. All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information on SCC services visit http://tamusa.edu/studentcounseling

Crisis support is available 24/7 by calling the SCC at 210-784-1331.

Additionally, the TELUS Student Support App provides a variety of mental health resources to including support for in the moment distress, an anonymous peer-to-peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.

Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option to receive a text message, email with instructions and updates. To register or update your information visit: https://tamusa.bbcportal.com

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: https://www.tamusa.edu/about-us/emergency-management/

Download the SafeZone App (https://safezoneapp.com/) for emergencies or call (210) 784-1911. NonEmergency (210) 784-1900.

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Faculty will provide the Office of Financial Aid with an electronic notification if a student has not attended by the published Census Date (the first week of class). Any student receiving federal financial aid who does not attend prior to the published Census Date (the first week of class) will have their aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester may also need to return a portion of their federal aid.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on "Writing, Language, and Digital Composing Center" to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at https://www.tamusa.edu/academics.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a CARE referral (https://www.tamusa.edu/university-policies/StudentRights-and-Responsibilities/file-a-report.html) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots' Casa building, room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided with an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual on our campus and within our state, nation, and world. All decisions and actions involving students and employees are to be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the University's Civil Rights Officer at 210-784-2061 or titleix@tamusa.edu.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking based on sex, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related sex-based misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide such reasonable modifications to pregnant students as would be provided to a student with temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K). Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

Young Jaguars: can support parenting students with daycare who meet this criteria: Must be enrolled in classes at TAMUSA in the current semester. Must be Pell eligible or a single parent. They serve children ages 3 to 12-years-old. Children must be enrolled in Pre-K-3 through 6th grade. youngjaguars@tamusa.edu (210) 784-2636

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university students' rules shall be assured a fundamentally fair process.

Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation, or disability. Conduct that infringes on the rights of another individual will not be tolerated. Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct

policies and procedures please review the Student Code of Conduct (https://www.tamusa.edu/university-policies/student-rights-andresponsibilities/documents/Student-Handbook-2022-23.pdf) or visit the resources available in the OSRR website (https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/academicintegrity.html)

Use of Generative AI Permitted With Explicit Permission

There are situations and contexts within this course where you may be asked to use artificial intelligence (AI) tools to explore how they can be used. Outside of those circumstances, you should not use AI tools to generate content (text, video, audio, images) that will end up in any student work (assignments, activities, discussion responses, etc.) that is part of your evaluation in this course. Any student work submitted using AI tools should clearly indicate with attribution what work is the student's work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, students should reach out to their instructor for clarification before submitting work for grading. Use of AI-generated content without the instructor's permission and/or proper attribution in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

Important Dates:

August 25	First day of class
September 1	Labor Day – No classes
September 10	Census Day
October 6-17	Midterm grading period
November 14	Last day to drop with "W"
November 25	Last day to withdraw from the university
November 26	Study Day – No classes
November 27-28	Thanksgiving Holiday – No classes
December 4	Last day of scheduled weekday classes
December 5	Study Day – No classes
December 6-12	Final Exams
December 16	Commencement

The complete academic calendar is available online: https://www.tamusa.edu/academics/academic-calendar/index.html

August						
Tentative Schedule – Subject to Change						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
24	25	26 Go over syllabus/expectations/ Ch. 1 Intro to Micro	27	28 Ch. 1 – Intro to Micro	29	30
September						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
31 **Ch. 1 HW Due**	1 **LABOR DAY – NO CLASSES**	2 Chapter 2 – Chem Review	3	4 Chapter 2 – Chem Review	5	6
7 **Ch. 2 HW Due**	8	9 Chapter 3 – Microscopy	10 Census Date	11 Chapter 3 – Microscopy	12	13
14 **Ch. 3 HW Due**	15	16 Exam Review Chapter 4 – Bacterial Cell Structure	17	18 **EXAM I** – Chapters 1-3	19	20
21	22	23 Chapter 4 – Bacterial Cell Structure	24	25 Chapter 5 – Eukaryotic Cells & Microbes	26	27
October						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28 **Ch. 4 & Ch. 5 HW Due**	29	30 Chapter 5 – Eukaryotic Cells & Microbes/ Chapter 6 – Microbial Genetics	1	2 Chapter 6 – Microbial Genetics /Chapter 7 – Viruses & Prions	3	4
5 **Ch. 6 & 7 HW Due**	6	7 Chapter 7 – Viruses & Prions/Exam II Review	8	9 **EXAM II -**Chapters 4, 5, 6, 7	10	11

12	13	14 Chapter 9 – Microbial Nutrition & Growth	15	16 Chapter 9 – Microbial Nutrition & Growth	17	18
19 **Ch. 9 HW Due**	20	21 Chapter 10 – Microbial Metabolism	22	23 Chapter 10 – Microbial Metabolism	24	25
November						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26 **Ch. 10 HW Due**	27	28 Chapter 11 – Physical & Chemical Control of Microbes	29	30 Chapter 11 – Physical & Chemical Control of Microbes	31	1
2 **Ch. 11 HW Due**	3	4 Exam III Review/Ch. 12 – Antimicrobial Treatment	5	6 **Exam III – Chapters 9, 10, 11**	7	8
9	10	11 Chapter 12 – Antimicrobial Treatment	12	13 Chapter 12 – Antimicrobial Treatment/Chapter 13 – Microbe-Human Interactions	14	15
16 **Ch. 12 HW Due**	17	18 Chapter 13 – Microbe-Human Interactions	19	20 Chapter 15 – Host Defenses	21	22
23 **Ch. 13 HW Due**	24	25 Chapter 15 – Host Defenses/ Chapter 16 – Adaptive Immunity & Vaccination	26 **NO CLASSES – STUDY DAY**	27 **NO CLASSES – THANKSGIVING BREAK**	28	29

DECEMBER						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30 **Ch. 15 HW Due**	1	2 Chapter 16 – Adaptive Immunity & Vaccination	3	4 **Exam IV – Chapters 12, 13, 14, 16** *Last Day of Regular Classes*	5 **NO CLASSES – STUDY DAY**	6
7	8	9 **FINAL EXAM – 12:00-1:50 p.m.**	10	11	12	13

August						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
24	25 Go over syllabus/expectations	26	27 Ch. 1 – Scientific Method	28	29	30
September						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
31 **Ch. 1 HW Due**	1 **LABOR DAY – NO CLASSES**	2	3 Chapter 2 - Atoms Molecules & Water	4	5	6
7 **Ch. 2 HW Due**	8 Chapter 2 - Atoms Molecules & Water/Chapter 3 – Organic Molecules	9	10 Census Date Chapter 3 – Organic Molecules	11	12	13
14 **Ch. 3 HW Due**	15 Exam Review Chapter 4 – General Features of Cells	16 **SB Chs. 1-3 Due**	17 **EXAM I** – Chapters 1-3	18	19	20
21	22 Chapter 4 – General Features of Cells	23	24 Chapter 26 – Non-living Particles	25	26	27
October						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28 **Ch. 4 & 26 HW Due**	29 Chapter 5 – Membrane Structure, Synthesis & Support	30	1 Chapter 5 – Membrane Structure, Synthesis & Support	2	3	4
5 **Ch. 5 HW Due**	6 Exam II Review	7 **SB Chs. 4, 5, 26 Due**	8 **EXAM II -**Chapters 4, 5, 26	9	10	11

	Chapter 6 – Energy & Metabolism					
12	13 Chapter 6 – Energy & Metabolism	14	15 Chapter 7 – How Cells Harvest Energy	16	17	18
19 **Ch. 6 HW Due**	20 Chapter 7 – How Cells Harvest Energy Chapter 8 – Photosynthesis	21	22 Chapter 8 - Photosynthesis	23	24	25
November						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26 **Ch. 7 & Ch. 8 HW Due**	27 Exam III Review Chapter 10 – How Cells Divide	28 **SB – Chs. 6-8 Due**	29 **Exam III – Chapters 6-8**	30	31	1
2	3 Chapter 10 – How Cells Divide	4	5 Chapter 11 Sexual Reproduction & Meiosis	6	7	8
9 **Ch. 10 & Ch. 11 HW Due**	10 Chapter 12 – Patterns of Inheritance	11	12 Chapter 12 – Patterns of Inheritance	13	14	15
16 **Ch. 12 HW Due**	17 Exam IV Review/Work Day	18 **SB – Chs. 10-13 Due**	19 **EXAM IV– Chpts 10-13**	20	21	22
23	24 Chapter 14 – DNA: The Genetic Material	25	26 **NO CLASSES – STUDY DAY**	27 **NO CLASSES – THANKSGIVING BREAK**	28	29

DECEMBER						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30 **Ch. 14 HW Due**	1 Chapter 15 – Genes and How They Work	2	3 Chapter 15 – Genes and How They Work	4 *Last Day of Regular Classes*	5 **NO CLASSES – STUDY DAY**	6
7 **Ch. 15 HW Due** **SB – Chs. 14-15 Due**	8 **FINAL EXAM – 2:00-3:50 p.m.**	9	10	11	12	13

INTRO MICROBIOLOGY CLASS SCHEDULE-Fall 2

Tentative schedule-**Subject to change**. Changes will be announced on Blackboard.

Weeks	Dates	Lecture Topics/Readings
1 & 2	6/3-6/16	Course expectations/info Unit 1: Main Themes of Microbiology (Ch. 1) Chemistry of Biology (Chemistry review, Ch. 2) Tools of the Laboratory (Culturing and microscopy, Ch. 3) **Exam 1 (Ch. 1-3)**
3 & 4	6/16-6/30	Unit 2: Bacteria and Archaea (Ch. 4) Eukaryotic Cells and Microorganisms (Ch. 5.1 to 5.5, skip 5.6) Microbial Genetics (Ch. 6) Viruses and Prions (Ch. 7) **Exam 2 (Ch. 4, 5, 6, 7)**
5 & 6	6/30-7/14	Unit 3: Microbial Nutrition and Growth (Ch. 9) Microbial Metabolism (Ch. 10) Physical and Chemical Control of Microbes (Ch. 11) **Exam 3 (Ch. 9, 10, 11)**

7 & 8	7/14-7/28	Unit 4: Antimicrobial Treatment (Ch. 12) Microbe-Human Interactions (Ch.13) Host Defenses I (Ch.15) Adaptive Immunity and Vaccination (Ch. 16, section 16.7) **Final Exam (12, 13, 15, 16)**