# BIOL 2421-Intro to Microbiology-Spring 2025 Syllabus Texas A&M University-San Antonio-Dept. of Natural Sciences-Biology Program Instructor: Dr. Brenda Rushing

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Student Help Time (aka, office hours): Mon/Wed from 10-11:30 a.m. and Tues. 11-noon It is helpful to me if you plan to attend office hours by scheduling through my Calendly app: <a href="https://calendly.com/brushing-appts">https://calendly.com/brushing-appts</a>

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: T/Th 9:30-10:45 a.m. STEM 141

**Attendance policy**: Attendance is expected, and hopefully you will enjoy and benefit from attending class. I will occasionally take roll via Vevox poll or in-class activity, so let me know if something unusual has come up for you. I know things in life can happen. If I notice a student is not attending regularly, I will check in with you to see what's up but know that eventually you may be dropped from the course. So please communicate with me!

Lab: Time varies (2 separate lab times available—must be concurrently registered in a lab), CAB 302.

# **Course Description: Microbes are cool!**

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.







Don't fear microbes!

# **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.

# How to be successful (AKA, roadmap to success!)

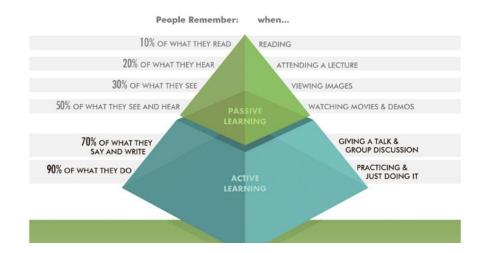
- Significant study time outside of class is necessary to be successful! But you can do this!
  - Being a full-time student is essentially a full-time job, and if you have other commitments you need to manage your time accordingly.
  - Create a study calendar that includes all of your commitments.
    - Eating and sleeping
    - Working out
    - Working a job, caring for family members etc.
    - Specific study times for each of your courses (an hour a day, a block of time on a weekend, whatever fits your schedule)
    - Fun time/down time
    - Realize that you may need to be flexible with certain weeks (exam week etc.)
- Be sure that study time is without phone, social media interruptions, etc.
  - These distractions make you lose focus.
  - Suggestion: Set a timer for a length of time you will work, and then take a 5-10 minute phone break. (Time the phone break too so you don't go down a social media rabbit hole!)
- 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: <a href="https://courses.lumenlearning.com/waymaker-collegesuccess/chapter/text-class-time-to-study-time-ratio/">https://courses.lumenlearning.com/waymaker-collegesuccess/chapter/text-class-time-to-study-time-ratio/</a>
  - Thus, for each lecture alone you should spend 6-9 hours per week studying outside of class hours (roughly 1 hr. per day at least, per lecture course you are taking!)
  - o Make sure this is in your calendar above!
- Labs require an added 2-3 hr/week of work outside the attendance in the lab on your lab day.
- Think about finding a study partner, or create a group, that meets once a week with a specific time and place. The earlier in the semester you do this, the better!

#### Study suggestion: 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 or your study partner) 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 try to redraw it from memory.

- There are lots of sites to help explain these study techniques, but here is one: <a href="https://www.brainscape.com/academy/active-recall-definition-studying/">https://www.brainscape.com/academy/active-recall-definition-studying/</a>
- 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!
- There is a new study feature called "Sharpen" within the Connect system that has flashcards, videos, quizzes, and other helpful tools. Here is the QR code to access the app.

#### Active Learning vs. Passive Learning





- I highly recommend that you take <u>handwritten notes</u> during class, 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.
  - o 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.
  - Here is a relevant website on note taking: <a href="https://www.cultofpedagogy.com/note-taking/">https://www.cultofpedagogy.com/note-taking/</a>

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

- 1) Nester's Microbiology (10<sup>th</sup> ed or Evergreen 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 \$47, 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.
- 2) Your SmartBook (SB) and 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) It is expected that the student will read the assigned chapter material *prior* to coming to class in order to participate in discussion and gain the most out of the lecture period. To ensure this type of study, pre-class assignments through the SmartBook (SB) will be required for most chapters.

These SB will technically close on the due date, but I give a <u>two-day</u> grace period (with no penalty) if you miss the deadline.

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

4) 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.
- University laboratory safety agreement must be signed during the first lab session.

#### Communication

The main thing here is to please, please communicate with me! I am here to help, and I can't help you out if I don't know what is going on. 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.

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. Please use the Calendly link above to schedule appointments if possible. You may also just 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 (<a href="mailto:brushing@tamusa.edu">brushing@tamusa.edu</a>) is an excellent way to get in touch with me, and I will respond as soon as possible, usually same day, and typically no later than 2 <a href="mailto:business">business</a> 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** you are in. (I have a lot of students to keep track of!) And please don't use the BB messaging system as I rarely check it.

# **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 75% of your course grade. The laboratory section will be worth 25% of your grade.

The total grade will be calculated by:

- (% of the available lecture points earned X 0.75)
- + (% of the available lab points earned X 0.25)
- = total % grade for the course.

Sample calculation for student whose lecture grade is 85 and whose lab grade is 95:

Final grade= (85 \* 0.75) + (95 \* 0.25) = 87.5 (this student earned a B)

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. Attendance will be considered when looking at borderline grades and whether to round up.

## **Course Structure for LECTURE**

Total points=~500 points (unless extra quizzes or in-class activities happen, see above); the lecture "only" part of your grade will be a percentage of the available points earned, e.g. 425 pts earned/450 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.
- 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.

**Online assignments SmartBook (SB)/Homework (HW)/online quizzes etc.** (worth an exam grade of 100 pts; various points each; total points adjusted to % of 100 pts. to be equivalent to an exam. Example: If we have 530 total online points available, and you earned 435 of those points, your online assignment grade average is 82%.)

- There will be various assignments during the semester worth different point values.
- Most assignments will be via the online portal, and you will be expected to access this portal
  frequently. If you have an issue with your computer or your internet, please be prepared to do
  your work at a library or a location with Wi-Fi. "My internet was down" is usually not an
  acceptable excuse but let me know and we'll discuss it.
- 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
   (yay!)—leave yourself enough time to reread material and correct the errors to earn back
   missed points. You can also rework assignments as part of studying before a test. (It's called
   RECHARGE on the Connect system.)
  - 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.

Most of all, DON'T SKIP the online assignments. Each individual one is worth a small
percentage of points, but they add up by the end of the semester and count as a TEST grade.
HW assignments can be done late for a 10% deduction per day. Better to earn some points
for an assignment, rather than nothing! SB assignments will have a 2-day grace period with
no deduction.

### **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). <u>Absences typically must have documentation to be excused</u> (required for fairness with all students) and acceptance of the excuse is at my discretion. It is not guaranteed, but I do try to be flexible if the system isn't being taken advantage of.
  - You should make up the exam within a week of the original exam date, preferably sooner, unless you are extremely ill or under duress.

# **Allowed in-class electronics**

- You may take notes on a laptop or tablet, but do not spend time on the Internet during class unless we are looking up a biology topic during a class discussion. It should go without saying that you should not be playing games, sending email, checking Facebook or other social media during class time. It is disruptive and disrespectful to the class to behave in this manner.
  - o If I see these behaviors, I will give one warning and ask you to close your electronic device.
  - o If I see it again. I may ask you to leave the classroom for the day.
- You may photograph notes/diagrams on the white board.
- If you would like to audio record lectures, <u>please ask me for permission</u>. Any recordings are for your personal study use only and are not to be posted online. No video recording is allowed.

# Classroom Behavior: The bottom line is respect.

- A well-timed question is always encouraged and is not considered a disruption.
- Other disruptions are to be kept to an absolute minimum—if you have a habit of getting up during class routinely, I may ask you to leave for the day. An occasional trip to the restroom is fine, but my preference is for you to take care of that business prior to class.
- We may discuss controversial topics occasionally. Please abide by common courtesy and listen
  with respect to the opinions of your peers during class. If a student becomes abusive or
  disrespectful, he/she/they will be asked to leave class.
- Ear buds and headphones may NEVER be worn during class/lab periods.
- Phones must be on vibrate or turned OFF for the entirety of the class/lab period.
- If you must take a call during class, DON'T answer the call in the classroom. Leave the room before answering the call. Keep these disruptions to an absolute minimum. If the phone rings a second time and you must take the call, please do not return to the classroom that day.
- Do not text during class; it is distracting to everyone and disrespectful of the academic environment.
- During quizzes and exams, ALL electronic devices (phones, music players, iPads, laptops, etc.)
  must be stored under the desk. Attempts to cheat on quizzes and exams will result in maximum
  penalty (see below). You will not be allowed to leave the classroom during an exam (rare exceptions
  possible), so please use the restroom prior to the exam. Phones may not be used as a calculator
  on an exam or quiz.

- Only students enrolled in the course are allowed in the classroom. No friends, family, etc. unless
  you clear it with me in advance under a special circumstance, such as a childcare issue. I am
  generally flexible with these situations, so please ask, but it may depend on the class topic that
  day.
- I generally don't mind food & drink in the classroom but keep the disruption to a minimum.

#### Preferred name and pronouns

 If you have a preferred nickname or gender pronouns, please indicate that to me in whatever method is most comfortable for you: after class, via email, during office hours etc.

#### **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 <a href="https://www.tamusa.edu/Disability-Support-Services/index.html">https://www.tamusa.edu/Disability-Support-Services/index.html</a> or email us at <a href="mailto:dss@tamusa.edu">dss@tamusa.edu</a>. 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 and their instructors as soon as possible.

<u>Academic Learning Center:</u> 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 <a href="mailto:tutoring@tamusa.edu">tutoring@tamusa.edu</a>, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

<u>Counseling/Mental Health Resources:</u> 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 <a href="mailto:tamusa.edu/studentcounseling">tamusa.edu/studentcounseling</a>

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').

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 (<a href="https://safezoneapp.com/">https://safezoneapp.com/</a>) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

<u>Financial Aid and Verification of Attendance</u>: 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. Any student receiving federal financial aid who does not attend by the census date will have their financial aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester, a Care report will be submitted, and you will possibly be dropped from the class. Your financial aid may have to be recalculated and a portion of your federal aid may have to be returned to the DoE.

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 <a href="https://www.tamusa.edu/academics/">https://www.tamusa.edu/academics/</a>.

<u>Meeting Basic Needs:</u> 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 (<a href="https://www.tamusa.edu/university-policies/Student-Rights-and-Responsibilities/file-a-report.html">https://www.tamusa.edu/university-policies/Student-Rights-and-Responsibilities/file-a-report.html</a>) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources.

<u>Military Affairs:</u> 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 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 within our state, nation, and world. All decisions and actions involving students and employees should 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, gender identity, gender expression, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

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, 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 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 accommodations to pregnant students as would be provided to a student with a 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.

<u>Students' Rights and Responsibilities:</u> 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 student 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, <u>Student Code of Conduct</u>, 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 (<a href="https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/documents/Student-Handbook-2022-23.pdf">https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/academic-integrity.html</a>).

Academic misconduct for which a student is subject to penalty includes (but is not limited to) cheating, plagiarism, fabrication, multiple submissions, misrepresentation of academic records, facilitating academic dishonesty, unfair advantage, violating known safety requirements, and ethical misconduct.

University policy prescribes serious consequences for acts of academic misconduct including, but not limited to, a grade of 'F' on the particular paper or assignment or a failing grade in the course. Also, a referral may be issued to the Office of Student Rights and Responsibilities where the sanctions can vary up to possible expulsion from the University. Considering the potential consequences of academic misconduct, it is obviously in students' best interests to avoid even the appearance of such behavior. If you are ever unclear whether a specific act might constitute academic misconduct, please contact your instructor for an assessment of the situation.

#### Use of Generative AI Permitted Under Some Circumstances or 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.

**NOTE:** Guidance for how to cite Al-generators, like ChatGPT, can be found here <a href="https://apastyle.apa.org/blog/how-to-cite-chatgpt">https://apastyle.apa.org/blog/how-to-cite-chatgpt</a>

#### **Important Dates:**

January 21 First day of class March 10-15 Spring Break

April 18 (Friday) Study Day – No classes

April 21 Last day to drop with an automatic "W"

April 28 Last day to drop a course or withdraw from the University

May 5 Last day of classes

May 6 Study Day – No classes

May 7-13 Final exams (Wed. to Tues.)

The complete academic calendar is available online: <a href="https://www.tamusa.edu/academics/academic-calendar/index.html">https://www.tamusa.edu/academics/academic-calendar/index.html</a>.

INTRO MICROBIOLOGY CLASS SCHEDULE-Spring 2025
Tentative schedule-Subject to change. Changes will be announced on Blackboard and in class.

Week	Dates	Lecture Topics/Readings
1	Jan. 21-23	Course expectations/info
		Humans and the Microbial World (Ch. 1)
2	Jan 28-30	Chemistry review (Ch. 2 Molecules of Life)
		Cell Structure/Microscopy (Ch. 3)
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3	Feb. 4-6	Ch. 3 continued
4	Feb. 11-13	Ch. 3 cont.
		Review for exam or begin Chapter 4
		Thursday 2/13 Exam 1 (Ch. 1-3)
5	Feb. 18-20	Dynamics of Microbial Growth (Ch. 4)
		- J. I. S. I. I. S.
6	Feb. 25-27	Microbial Metabolism (Ch. 6)
7	Mar. 4-6	Ch. 6 Part II
8		Spring Break (March 10-14)
		Opining Broak (march 10 14)
9	Mar. 18-20	Ch. 6 finish, review for exam
		Thursday 3/20 Exam 2 (Ch. 4,6)
10	Mar. 25-27	Identifying and Classifying Organisms (Ch. 10)
11	Apr. 1-3	Diversity of <i>Bacteria</i> and <i>Archaea</i> (Ch. 11) Part I
11	Apr. 1-3	Diversity of bacteria and Archaea (Cit. 11) Fait 1
12	Apr. 8-10	Ch. 11 finish
'-	'	Eukaryotic Members of the Microbial World (Ch. 12) (selected)
13	Apr. 15-17	Ch. 12 finish
		Thursday 4/17 Exam 3 (Ch. 10, 11, 12)
14	Apr. 22-24	Viruses, Viroids, and Prions (Ch. 13)
		Control of Microbial Growth (Ch. 5)
15	Apr. 29-May 1	Finish Ch. 5 if needed
		Antimicrobial Medications (Ch. 20) (selected)
		Application of Immune Responses (Ch. 17.1-17.2, vaccines)
	Tues. May 6	Study day (no classes) (possible optional review session for final)
		Final exam week Wed. 5/7- Tues. 5/13
		Exam 4 (Ch. 13, 5, 20, 17.1-2)
		Date: <b>TBD by University final exam calendar</b>
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