

Texas A&M University – San Antonio

Biol 2401 Fall 2024 Syllabus

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Office Hours: Wednesday afternoons after 2:00 P.M. by appointment only.

Important dates

August 26	Monday	First class day
September 2	Monday	Labor Day Holiday
September 11	Wednesday	Census Date
November 27	Wednesday	Study Day - No classes
November 28-November 30	Thursday-Saturday	Thanksgiving Holiday
December 5	Thursday	Last day of scheduled classes
December 6	Friday	Study Day - No classes
December 7-December 13	Saturday-Friday	Final examinations
December 17	Tuesday	Commencement
December 24-January 1	Saturday-Monday	Winter Break

Class Times

Lecture class 2401-004	09:30 - 10:45	Mon-Wed	Science & Technology 166
Laboratory 2401 04L	11:00 - 13:45	Wed	Science & Technology 337

Lecture class: all assignments and class materials are embedded within the Blackboard lecture course.

Lab class: all assignments and class materials are embedded within the McGraw-Hill Connect website.

Lecture Course Description as per the Academic Course Guide Manual of The Texas Higher Education Coordinating Board (THECB): Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous, and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

Attendance for lectures is equivalent to a lecture exam grade.

Additionally, this course assesses the following student/institutional learning outcomes as required by the Texas Higher Education Coordinating Board (THECB):

- Communication: Expressing ideas through effective written, oral, and visual communication.
- Teamwork: Considering different points of view and working effectively with others to support a shared purpose or goal.
- Critical Thinking: Exploring issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
- Empirical and Quantitative Skills: Applying scientific and mathematical concepts to analyze and solve problems.

Learning Outcomes.

Upon successful completion of this course, students will:

1. Use anatomical terminology to identify and describe locations of major organs of each system covered.
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
3. Describe the interdependency and interactions of the systems.
4. Explain contributions of organs and systems to the maintenance of homeostasis.
5. Identify causes and effects of homeostatic imbalances.
6. Describe modern technology and tools used to study anatomy and physiology.

LECTURE ASSIGNMENTS

Exams: Five exams worth 400 total points.

- ✓ Attendance = 40 pts.
- ✓ Exam 1 = 40 pts.
- ✓ Exam 2 = 60 pts.
- ✓ Exam 3 = 80 pts.
- ✓ Exam 4 = 80 pts.
- ✓ Exam 5 = 100 pts.

Quizzes: Ten quizzes worth 100 total points.

Final Exam = 100 pts.

Chapter Homework Assignments = 100 pts.

Total = 700 pts

***Students must use Respondus Lockdown Browser with webcam when taking online exams.

**There is no point deduction for late submission.

BIOL 2401 Lecture Topics and Schedule

Week 1 - Aug. 26th Quiz 1 - Human Body and Chemistry

Week 2 - Sept. 2nd Quiz 2 - Cells

Week 3 - Sept. 9th Lecture Exam 1

Week 4 - Sept. 16th Quiz 3 - Tissues and Integumentary system

Week 5 - Sept. 23rd Quiz 4 - Joints

Week 6 - Sept. 30th Lecture Exam 2

Week 7 - Oct. 7th Quiz 5 - Muscular system

Week 8 - Oct. 14th Quiz 6 – Nervous tissue

Week 9 - Oct. 21st Lecture Exam 3

Week 10 - Oct. 28th Quiz 7 - Central Nervous system

Week 11 - Nov. 4th Quiz 8 - Peripheral Nervous system

Week 12 - Nov. 11th Lecture Exam 4

Week 13 – Nov. 18th Quiz 9 – Autonomic Nervous System

Week 14 – Nov. 25th Quiz 10 – Special Senses

Thanksgiving Holiday – 11/28 – 11/30

Week 16 - Dec. 2nd Lecture Exam 5

LAB ASSIGNMENTS

Lab Assignments = 1500 points

- ✓ Pre-Labs = 300 pts. (30 pts. each)
- ✓ Online labs = 450 pts. (45 pts. each)
- ✓ In Person labs = 450 pts. (45 pts. each)
- ✓ Checks for understanding = 300 pts. (30 pts. each)

Lab Practical Exams = 1500 points

- ✓ 3 Virtual labs = 750 pts. (250 pts. each)
- ✓ 3 In Person labs = 750 pts. (250 pts. each)

BIOL 2401 Lab Assignments and Schedule

- **Week 1:** August 28th
 - Introduction
 - Lab 1: Human Body
 - Microscopy
 - Chemistry (elements, periodicity, subatomic particles, bonds, pH)
- **Week 2:** September 4th
 - Lab 2: Cells (organelles, cell division, macromolecules, and cell membrane)
- **Week 3:** September 11th
 - Lab 3: Tissues (epithelial, connective, muscular, and nervous)
 - Integumentary system

Week 4: Lab Practical 1 on Wednesday, September 18th

- **Week 5:** September 25th
 - Lab 4: Bones and Skeletal Tissue
 - Articulations (joints)
 - The Skeleton (axial)
- **Week 6:** October 2nd
 - Lab 5: The Skeleton (axial & appendicular)
- **Week 7:** October 9th
 - Lab 6: Muscles and Muscle Tissue
- **Week 8:** October 16th
 - Lab 7: Muscular system (Axial & Appendicular)

Week 9: Lab Practical 2 on Wednesday, October 23rd

- **Week 10:** October 30th
 - Lab 8: Nervous tissues
 - Central Nervous system
 - Sheep's Brain Dissection
- **Week 11:** November 6th
 - Lab 9: Peripheral Nervous system
 - Autonomic Nervous system
- **Week 12:** November 13th
 - Lab 10: Special senses
 - Sheep's Eye Dissection

Week 13: Lab Practical 3 on Wednesday, November 20th

Final Exam: A comprehensive final exam will be administered in person at the end of the semester.

Bonus Credit:

- **Class pre-test** - bonus point opportunity before class starts and will be due the first week of class. No need to study anything. This attempt is to find out what you know about entering the class. It does not count against the class grade.
- **Assignment bonus points** - embedded within certain McGraw-Hill Lab assignments. You must turn in assignments before their completion date to be eligible for bonus points.
- **End of course surveys** – two end-of-class surveys are worth bonus points.

LABORATORY. *Students are **not** required to purchase a laboratory manual. All laboratory materials are available through McGraw-Hill Connect.*

Laboratory Course Description (as per the Academic Course Guide Manual of The Texas Higher Education Coordinating Board): This laboratory course offers a hands-on learning experience, allowing students to explore human system components and basic physiology. Students will use anatomical models for anatomy studies and conduct physiology experiments using Vernier equipment.

Laboratory Course Outcomes. Upon successful completion of this course, students will:

Upon successful completion of this course, students will be able to:

1. Apply appropriate safety and ethical standards.
2. Locate and identify anatomical structures.
3. Utilize laboratory equipment such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations effectively.
4. Collaborate with peers to perform experiments.
5. Demonstrate the steps of the scientific method.
6. Communicate the results of scientific investigations, analyze data, and formulate conclusions.
7. Employ critical thinking and scientific problem-solving skills—including inferring, integrating, synthesizing, and summarizing—to make decisions, recommendations, and predictions.

EVALUATION

Grade Points Scale	
A	1000 – 900 pts.
B	899 – 800 pts.
C	799 – 700 pts.
D	699 – 600 pts.
F	below 600 pts.

Lecture Course Grade Calculation (700 pts.)

- Lecture Exams: 400 pts.
- Chapter Homework Assignments: 100 pts.
- Lecture Quizzes: 100 pts.
- Final Lecture Exam: 100 pts.
- Total (Lecture): 700 pts. (70% of final grade)

Laboratory Course Grade Calculation (3000 pts.)

- Online Lab Practical: 750 pts.
- In-Person Lab Practical: 750 pts.
- McGraw-Hill Assignments: 1500 pts.
- Total (Lab): 3000 pts. (30% of final grade)

Overall Course Grade Calculation

- Total (Lecture): 70%
- Total (Lab): 30%
- **Total (Lecture + Lab): 100%**

REQUIRED MATERIALS.

Required Text

- Textbook: *Seeley's Anatomy and Physiology*, VanPutte, 13th edition.
- The textbook is available in Blackboard as an e-text. You can also purchase a hard copy at the indicated website.
- It is important that you log in to the e-text with your TAMUSA e-mail for proper integration with Blackboard.

COLLEGE POLICIES AND PROCEDURES. These policies and procedures are presented in the [Rules, Procedures, and Guidelines](#). Quick links to Student Code of Conduct, Scholastic Dishonesty, Plagiarism, Collusion, and Student Handbook are noted as follows.

- [Academic Standards](#) (Attendance, Grades, Academic Standing and Probation, Eligibility for Participation in College-Sponsored Programs and Events, and Honors)
- [Student Rights and Responsibilities](#)
- [Student Handbook](#)

Attendance. Students must attend lectures and lab in person. In lectures, student attendance counts as a lecture exam grade. In lab, you cannot miss more than three in person labs, or your grade will not be higher than 50.

- Laboratory assignments need to be electronically submitted to McGraw-Hill. It is important that students remain cognizant of McGraw-Hill work through the McGraw-Hill website. Remember, **LATE** electronic submissions are accepted anytime during the semester, along with a possible point deduction. McGraw-Hill work completed after the due date will post as no credit. Your instructor can correct the final grade for the assignment upon completion of the assignment.

Process for Drops or Withdrawals:

- Prior to the Census Date (noted in the schedule): Faculty will process drops for students who have never attended in person since the first day of class.
- Participation – students who do not consistently attend in person class may be dropped.
 - Leading up to the Census Date students must submit all assignments as outlined in the schedule in addition to meeting the attendance policy.

Instructor Response Time: One week is required to complete grading on some assignments. In some cases, it may be longer, depending on the nature of the assignment. However, students will always be alerted of any delays.

- If the student emails, please allow at least 24 – 48 hours for the instructor to respond.

STUDENT RESPONSIBILITIES.

- First and foremost, students are responsible for meeting all course requirements regardless of personal events outside of the classroom environment. If these events begin to interfere with meeting the course requirements, students should contact the instructor to discuss their options, if any, to continue with the course in a productive manner.
- The reviews posted for each chapter will assist students in knowing which information to focus on for each exam. Therefore, it is important that students PRACTICE the designated chapters material A LOT to LEARN the concepts covered in the chapter and exam reviews.
- It is important that students regularly participate in class to be successful. If the student is not actively participating, the instructor will schedule a zoom conference with the student.
- Students are required to inform the instructor, IMMEDIATELY, if they are having any problems accessing the course. They cannot use this as an excuse for not submitting assignments. If the problem cannot be alleviated in a timely manner, the instructor will work with the student to ensure they do not fall behind.
- Electronic communication with students will occur through the use of the Inbox which is the email application in Blackboard. However, if Jagwire or Blackboard is not accessible students may use their personal email service to contact the instructor at hlaravilleg@tamusa.edu. Students are to communicate with the instructor using proper English rather than “texting” language.

- Contact the Texas A&M University - San Antonio Helpdesk if technological errors occur when using Jagwire or Blackboard.

IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Persons 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, please contact Disability Support Services in the Central Academic Building, Suite 210, or at (210) 784-1335 or visit <https://www.tamusa.edu/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 and their instructors 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/or 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.

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2'). For more information and self-help resources, please visit www.tamusa.edu/studentcounseling

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/campus-information/safety/university-police-department/documents/emergency-operations-plan.pdf> and <https://www.tamusa.edu/about->

us/campus-information/safety/university-police-department/documents/emergency-action-plan.pdf

Download the SafeZone App for emergencies or call (210) 784-1911. Non-Emergency (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 the first week of class. Any student receiving federal financial aid who does not attend 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://bit.ly/WLDCCenter>.

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 contact the Dean of Students (DOS@tamusa.edu) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources they may possess.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to communicate, in advance if possible, and special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations). You are also encouraged to visit the Patriots’ Casa in-person 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 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, equality of 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 or 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 reasonable accommodations to pregnant students that would be provided to a student with a temporary medical condition and 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.

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, 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, Student Code of Conduct, on our website, University Catalog and to comply with them, as well as 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 an environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notification.

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. Behaviors that infringe 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.

Artificial Intelligence Policies

No Use of Generative AI Permitted. BIO 2401 assumes that all work submitted by students will be generated by the students themselves, working individually or in groups. Students should not have another person/entity do the writing of any portion of an assignment for them, which includes hiring a person or a company to write assignments and/or using artificial intelligence (AI) tools like ChatGPT. Use of any AI-generated content in this course qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

Violations of Academic Conduct (Section 14.5 Student Handbook)

As a member in an academic community, students at Texas A&M University-San Antonio are expected to exhibit a high level of honesty and integrity in their pursuit of higher education, be mature, be self-directed and be able to manage their own affairs. Students who are unwilling to abide by these basic expectations will find themselves facing academic and/or disciplinary sanctions. Students are expected to share in the responsibility and authority with faculty and staff to challenge and make known acts that violate the Texas A&M University-San Antonio Code of Conduct. For more information, please visit the Office of Student Rights & Responsibilities website <http://bit.ly/TAMUSAStudentRR>.

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. Academic misconduct includes, but is not limited to, cheating, plagiarism,

prohibited use of artificial intelligence, multiple submissions, collusion, lying and bribery. For more information, refer to the Student Code of Conduct, Article III: Conduct Rules and Regulations. Texas A&M University-San Antonio faculty has the discretion to impose grade penalties as deemed necessary.

Faculty members are required to report such serious breaches of academic honesty to their chair, their dean and the Office of Student Rights and Responsibilities. In cases of academic misconduct, students may be subject not only to grade sanctions in courses but to disciplinary action. Grade sanctions may be imposed only by faculty members, but suspension or expulsion may be imposed only by the Vice President for Student Affairs. If a student wishes to appeal the decision of suspension or expulsion due to violations of academic misconduct, they must initiate their appeal as outlined within the Student Code of Conduct. Extenuating circumstances may cause the University to deviate from the defined time frames.

All student term papers and other written assignments are subject to analysis by anti-plagiarism and anti-AI software. Posting of any class work given to student, or solutions, or discussion, on publicly accessible forums, social media, or artificial intelligence is not permissible. Considering the potential consequences of academic misconduct, it is obviously in students' best interests to avoid even the appearance of such behavior. If a student is unclear whether a specific act might constitute academic misconduct, please she/he should contact the instructor for an assessment of the situation.