



Texas A&M University – San Antonio

Biol 2401
Fall 2024 Syllabus

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Office Hours: Monday to Thursday from 9 am to 5 pm by appointment only.

Important dates

August 26	Monday	First class day
September 2	Monday	Labor Day Holiday
September 11	Wednesday	Census Date
November 11		Last day to drop with an automatic “W”
November 19		Last day to drop a course or withdraw
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 2401-002	09:30- 10:45	Tue, Thu -	Classroom Hall 102
Lecture class 2401-003	14:00 - 14:50	Mon, Wed, Fri	Science & Technology 161
Laboratory 2401 01L	15:00 – 17:45	Wed	Science & Technology 337
Laboratory 2401 02L	11:00 – 13:45	Tue	Science & Technology 337
Laboratory 2401 03L	14:00 – 16:45	Thu	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.

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

Week 1 Quiz 1 - Ch 1 Human Body and Ch 2 Chemistry

Week 2 Quiz 2 - Ch 3 Cells

Week 3: September 9 - September 15 Lecture Exam 1

Week 4 Quiz 3 - Ch 4 Tissues and Ch 5 Integumentary system

Week 5 Quiz 4 - Ch 6 - 8 The Skeletal System

Week 6: September 30 - October 6 Lecture Exam 2

Week 7 Quiz 5 - Ch 9 Muscular system

Week 8 Quiz 6 - Ch 10 Muscular system

Week 9 Quiz 6 - Ch 11 Nervous tissue

Week 10: October 28 - November 3 Lecture Exam 3

Week 11 Quiz 7 - Ch 12 Spinal Cord and Spinal Nerves

Week 12 Quiz 8 - Ch 13 Brain and Cranial Nerves

Week 13: November 18 - 24 Lecture Exam 4

Thanksgiving Holiday - 11/28 - 11/30

Week 14 Quiz 9 - Ch 16 Autonomic Nervous System

Week 15 Quiz 10 - Ch 15 Special Senses

Week 16: December 2 - 8 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 Schedule

1. **Week 1: August 26 - September 1, 2024:**
 - Introduction
 - **Lab 1:** Human Body
 - Microscopy
 - Chemistry (elements, periodicity, subatomic particles, bonds, pH)
2. **Week 2: September 2 - September 8, 2024**
 - **Lab 2:** Cells (organelles, cell division, macromolecules, and cell membrane)
3. **Week 3: September 9 - September 15, 2024**
 - **Lab 3:** Tissues (epithelial, connective, muscular, and nervous)
 - Integumentary system
4. **Week 4: Lab Practical 1 September 16 - September 22, 2024**
5. **Week 5: September 23 - September 29, 2024**
 - **Lab 4:** Bones and Skeletal Tissue
 - Articulations (joints)
 - The Skeleton (axial)
6. **Week 6: September 30 - October 6, 2024**
 - **Lab 5:** The Skeleton (axial & appendicular)
7. **Week 7: October 7 - October 13, 2024**
 - **Lab 6:** Muscles and Muscle Tissue
8. **Week 8: October 14 - October 20, 2024**
 - **Lab 7:** Muscular system (Axial & Appendicular)
9. **Week 9: Lab Practical 2 October 21 - October 27, 2024**
10. **Week 10: October 28 - November 3, 2024**

- **Lab 8:** Nervous tissues
- Central Nervous system
- [Sheep's Brain Dissection](#)

11. **Week 11:** November 4 - November 10, 2024

- **Lab 9:** Peripheral Nervous system
- Autonomic Nervous system

12. **Week 12:** November 11 - November 17, 2024

- **Lab 10:** Special senses
- [Sheep's eye dissection](#)

13. **Week 13: Lab Practical 3** November 18 - November 24, 2024

14. **Week 14:** November 25 - December 1, 2024

Thanksgiving Holiday – 11/28 – 11/30

These dates cover the first 15 weeks of your Fall 2024 semester.

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 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.
- Lecture Quizzes: 100 pts.
- Final Lecture Exam: 100 pts.
- Lecture Assignments: 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.

IMPORTANT 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/Disability-Support-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 and their instructors as soon as possible.

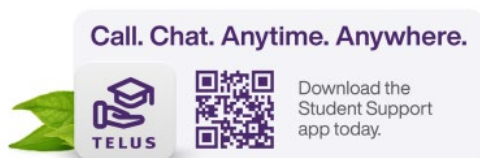
Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *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 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 tamusa.edu/studentcounseling

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 (<https://safezoneapp.com/>) 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. 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 <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/Student-Rights-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 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.

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 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, 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-and-responsibilities/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/academic-integrity.htm>).

Broader Use of Generative AI Permitted Within Guidelines

Use of artificial intelligence (AI) tools, including ChatGPT, is permitted in this course for students who wish to use them. To adhere to our scholarly values, students must cite any AI-generated material that informed their work (this includes in-text citations and/or use of quotations, and in your reference list). Using an AI tool to generate content without proper attribution qualifies as academic dishonesty and violates Texas A&M-San Antonio's standards of academic integrity.

NOTE: Guidance for how to cite AI-generators, like ChatGPT, can be found here <https://apastyle.apa.org/blog/how-to-cite-chatgpt>

