

Texas A&M University – San Antonio

BIOL 2401 001 Human Anatomy and Physiology 1 (Lecture)

BIOL 2401 002 Human Anatomy and Physiology 1 (Lecture)

BIOL 2401 01L Human Anatomy and Physiology 1 (Lab)

BIOL 2401 02L Human Anatomy and Physiology 1 (Lab)

BIOL 2401 03L Human Anatomy and Physiology 1 (Lab)

Spring 2024 Syllabus

Instructor: Dr. Humberto H. Lara MD, PhD
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Office Hours: Monday and Wednesday 1:00 to 3:00 PM by appointment only.

Class Times

BIOL 2401 001	Tue, Thu S&T room 121	9:30 to 10:45 am
BIOL 2401 003	M, W, F S&T room 121	14:00 to 14:50 pm
BIOL 2401-01L	Wednesday STEM LAB 337	11:00 am - 13:45 pm
BIOL 2401-02L	Thursday STEM LAB 337	11.00 am – 13.45 pm
BIOL 2401-03L	Thursday STEM LAB 337	15:30 pm - 18:15 pm

****Office hours' meetings are by appointment only. Please send me an e-mail about office hours to set appointments.**

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 THECB.

They are:

- 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

Total score worth 700 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.
- ✓ Final Exam = 100 pts.
- ✓ Quizzes (10) = 100 pts.
- ✓ Assignments (15) = 100 pts.

***Students must use **Respondus Lockdown Browser** when taking exams. Failure to use the lockdown browser appropriately with your camera on during exams may result in a grade of zero.

**There is no point deduction for late submission.

BIOL 2401 Lecture Topics

Week 1	Quiz 1 - Human Body and Chemistry
Week 2	Quiz 2 - Cells
Week 3	Lecture Exam 1
Week 4	Quiz 3 – Tissues and Integumentary system
Week 5	Quiz 4 - Joints
Week 6	Lecture Exam 2
Week 7	Quiz 5 - Muscular system
Week 8	Quiz 6 – Nervous tissue
Week 9	Spring Break
Week 10	Lecture Exam 3
Week 11	Quiz 7 - Central Nervous system

Week 12	Quiz 8 - Peripheral Nervous system
Week 13	Lecture Exam 4
Week 14	Quiz 9 – Autonomic Nervous system
Week 15	Quiz 10 – Special Senses
Week 16	Lecture Exam 5

LAB ASSIGNMENTS

Lab Assignments = 1500 points

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

Lab Practical Exams = 1500 points

- ✓ **3** Virtual lab Exams = 750 pts. (250 pts. each)
- ✓ **3** In Person lab Exams = 750 pts. (250 pts. each)

Total = 3000 points

BIOL 2401 Lab Topics

Week 1	Lab 0 – Introduction
Week 2	Lab 1 - Human Body Microscopy Chemistry (elements, periodicity, subatomic particles, bonds, pH)
Week 3	Lab 2 - Cells (organelles, cell division, macromolecules, and cell membrane)
Week 4	Lab 3 - Tissues (epithelial, connective, muscular, and nervous) Integumentary sys.
Week 5	Lab practical 1
Week 6	Lab 4 - Bones and Skeletal tissue Articulations (joints) The Skeleton (axial)
Week 7	Lab 5 - The Skeleton (axial & appendicular)
Week 8	Lab 6 - Muscles and Muscle tissue Muscular sys. (Axial & Appendicular)
Week 9	<i>Spring Break</i>

Week 10	Lab 7 - Muscular sys. (Axial & Appendicular)
Week 11	Lab Practical 2
Week 12	Lab 8 - Nervous tissues Central Nervous sys.
Week 13	Lab 9 - Peripheral Nervous sys. Autonomic Nervous sys.
Week 14	Lab 10 - Special senses
Week 15	Lab Practical 3

Final Exam: A comprehensive final exam will be administered electronically through Blackboard in person at the end of semester. Students will use the Respondus LockDown browser with webcam.

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 entering the class. It does not count against 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.

These are the **ONLY** options for bonus points.

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

Students must attend in-person labs. If a student misses more than three labs their final lab grade will be no higher than 50.

Laboratory Course Description as per the

Academic Course Guide Manual of The Texas Higher Education Coordinating Board: The lab provides a hands-on learning experience for exploration of human system components and basic physiology.

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

1. Apply appropriate safety and ethical standards.
2. Locate and identify anatomical structures.
3. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware,
physiology data acquisition systems, and virtual simulations.
4. Work collaboratively to perform experiments.

5. Demonstrate the steps involved in the scientific method.
6. Communicate results of scientific investigations, analyze data, and formulate conclusions.
7. Use critical thinking and scientific problem-solving skills, including, but not limited to, 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.
Assignments	100 pts.
Final Lecture Exam	100 pts.
Total Lecture Score	700 pts.
Laboratory Grade	300 pts.
Laboratory Course Grade Calculation (300 pts.)	
Online Lab Practical	75 pts.
In Person Lab Practical	75 pts.
McGraw-Hill Assignments	150 pts.

REQUIRED MATERIALS.

- **Required Text:** *Seeley's Anatomy and Physiology*, VanPutte, 13th edition. The textbook will be available in Blackboard as an e-text, you don't need to purchase your McGraw-Hill's access code.

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 be posted 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.
 - After the Census Date, in addition to meeting the attendance policy, students must be earning at least a 65 or higher (in both lecture and lab), earning a project average of 70 or better as well as having taken all lecture exams scheduled up to that point.

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** accompanying each chapter serve as a valuable guide for students, directing their focus towards key exam-relevant information. Hence, dedicating ample time to practice the material from these specified chapters is crucial to grasp the concepts outlined in both the chapter content 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.
- Students may use their personal email service to contact the instructor at llaravilleg@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: The Americans with Disabilities Act of 1990, as amended, and the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights protection for individuals with disabilities. Title II of the ADA and Section 504 of the Rehabilitation Act require that students with disabilities be guaranteed equal access to the learning environment through the provision of reasonable and appropriate accommodations of their disability. If you have a disability that may require accommodation, please contact Disability Support Services (DSS) for the coordination of services. The phone number for DSS is (210) 784-1335 and email is dss@tamusa.edu.

Academic Learning Center: All currently enrolled students at Texas A&M University-San Antonio can utilize the Academic Learning Center for subject-area tutoring. The Academic Learning Center is an appointment-based center where appointments are made through the Navigate platform. Student's access Navigate through Jagwire in the Student Services tab. The Center is active on campus outreaching to students to highlight services offered. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu or calling (210)-784-1332. Appointments can also be made through JagWire under the services tab.

Counseling 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 or someone you know is experiencing life stressors, emotional difficulties, or mental health concerns at Texas A&M University – San Antonio, please contact the Student Counseling Center (SCC) located in Modular C, Room 166 (Rear entrance) or call 210-784-1331 between the hours of 8 a.m. and 5 p.m., Monday – Friday. After-hours crisis support is available by calling 210-784-1331. Please contact UPD at 911 if harm to self or harm to others is imminent.

All mental health services provided by the SCC are free, confidential (to the extent permitted by law), and are not part of a student's academic or university record. SCC provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information, please visit www.tamusa.edu/studentcounseling

Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification system. In the event of an emergency, such as inclement weather, students, staff, and faculty who are registered in JagE Alert, will have the option to receive a text message, email, and/or phone call with instructions and updates. To register or update your information visit: <https://tamusa.bbcportal.com/>. More information about Emergency Preparedness and the Emergency Response Guide can be found here: <https://www.tamusa.edu/upd/index.html>.

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. The 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.

Jaguar Writing Center: The Jaguar Writing Center provides writing support to graduate and undergraduate students in all three colleges. Writing tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Students can schedule appointments with the Writing Center in JagWire under the student services tab. More information about what services we offer, how to make an appointment, and how to arrange your appointment can be found on our website at www.tamusa.edu/Writing-Center. The Writing Center can also be reached by emailing writingcenter@tamusa.edu.

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. In addition, you may notify the instructor if you are comfortable doing so.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to communicate, in advance, if possible, about 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@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 A&M System 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, diversity, pluralism, 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, or gender expression. 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 helping create 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 has staff members trained to support survivors 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 university. Please be aware that all A&M-San Antonio

employees (other than those designated as confidential resources such as counselors and other healthcare providers) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about an incident of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator. If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact the Student Counseling Center at (210) 784-1331, Modular C.

Students' Rights and Responsibilities: The purpose of the following statement is to enumerate the essential provisions of students' freedoms and responsibilities to learn at Texas A&M University-San Antonio. All students are required to follow all policies and regulations as set forth by The Texas A&M University System, including the A&M-San Antonio Student Code of Conduct.

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 procedure 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, genetic information, 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 staff, and the administration.
2. A student has the responsibility to be fully acquainted and compliant with the University Student Rules found in the Student Handbook, Student Code of Conduct, on our website, and in the University Catalog.
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.
6. 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.