

**Texas A&M University – San Antonio**  
**BIOL 2402 Human Anatomy and Physiology 2**  
**Spring 2025 Syllabus**

**Instructor:** David Brooks, Ph.D.  
**E-mail:** [dbrooks@tamusa.edu](mailto:dbrooks@tamusa.edu)  
**Office Hours:** (F2F or virtual); MW mornings, Th afternoon by appointment

**Other Anatomy & Physiology Instructors**

**Dr. Humberto Lara-Villegas** - [humberto.laravillegas@tamusa.edu](mailto:humberto.laravillegas@tamusa.edu)  
**Alejandro Nunez Cardenas**- [anunezcarde@tamusa.edu](mailto:anunezcarde@tamusa.edu)

**Class Times**

BIOL 2402-002	M, W, F	STEM room 231	2:00 to 2:50 PM
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**Lecture and Lab class:** all assignments and class materials are embedded within the **Blackboard lecture course** utilizing the **McGraw-Hill Connect website**.

**Lecture Course Description as per the Academic Course Guide Manual of The Texas Higher Education Coordinating Board:** Anatomy and Physiology 2 is the second part of a two-course sequence. It is a study of the structure and function of the following organ systems: endocrine, cardiovascular (heart and blood), lymphatic, immune, respiratory, digestive, urinary, and reproductive systems. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

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**

**Exams:** Five exams worth 380 total points.

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

**Quizzes:** 14 quizzes worth 8 pts each for 112 total points.

**Chapter Assignments** total of 104 points

**Comprehensive Final Exam:** 120 points

**TOTAL LECTURE POINTS** 700 (+16 ExC)

\*\*\*Students must use Respondus Lockdown Browser with webcam when taking quizzes and exams.

\*\*There is no point deduction for late submission of Exams (after EXAM1) up to final due date .

### BIOL 2402 Lecture Quiz Topics

1/22	Week 1	(MLK) CH17
1/27	Week 2	CH18 Quiz 1 - 17/18 Endocrine system
2/03	Week 3	CH19 Quiz 2 - 19 Blood
2/10	Week 4	CH20 Quiz 3 – 20 Heart Lecture Exam 1 - Due by 3/01
2/17	Week 5	CH21 Quiz 4- 21 Blood Vessels
2/24	Week 6	CH22 Quiz 5- 22A Lymphatics
3/03	Week 7	CH23 Quiz 6 – 22B Immune system Lecture Exam 2
3/10	Week 8	<b>SPRING BREAK</b>
3/17	Week 9	CH24 Quiz 7 - 23 Respiratory system
3/24	Week 10	CH25 Quiz 8- 24 Digestive
3/31	Week 11	CH26 Quiz 9 - 25 Metabolism, and Body temperature regulation Lecture Exam 3
4/07	Week 12	CH27 Quiz 10 – 26 Urinary
4/14	Week 13	CH28 Quiz 11- 27 Fluid electrolyte, and Acid-base balance
4/21	Week 14	CH28 Quiz 12 – 28 Reproduction Lecture Exam 4
4/28	Week 15	CH29 Quiz 13- 29A Pregnancy Quiz 14 – 29B Heredity Lecture Exam 5
<b>5/05</b>	<b>LAST DAY OF CLASSES... EVERYTHING DUE</b>	

5/07- 5/11

**Lecture Final Exam:** A comprehensive final exam will be administered electronically through Blackboard 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 second 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.

**LAB ASSIGNMENTS**

*Lab Assignments = 150 points*

- ✓ Online labs = 100 pts.
- ✓ In Person labs = 50 pts.

*Lab Practicals = 150 points*

- ✓ 3 Virtual labs = 54 pts. (18 pts. each)
- ✓ 3 In Person labs = 102 pts. (34 pts. each)

**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%.**

**TOTAL COURSE EVALUATION.**

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

<b>Lecture Course Grade Calculation (700 pts.)</b>	
Lecture Exams	380 pts.
Lecture Quizzes	100 pts.
Lecture Assignments	100 pts.
Laboratory Grade	300 pts.
Final Lecture Exam	120 pts.
<b>Laboratory Course Grade Calculation (300 pts.)</b>	
Online Lab Practical	50 pts.
In Person Lab Practical	100 pts.
Laboratory Assignments	150 pts.

### REQUIRED MATERIALS.

**Required Text:** *Seeley's Anatomy and Physiology*, VanPutte, 13<sup>th</sup> edition, with connect access  
**ISBN: 9781265348649**

- The textbook will be provided by your instructor and available in Blackboard as an eText when you are given your McGraw-Hill's access code. You can also purchase a hard copy at the indicated website.

**COLLEGE POLICIES AND PROCEDURES.** These policies and procedures are presented in the [College Catalog](#). 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 Code of Conduct](#) (Academic and Non-Academic Grievance)
- [Student Handbook](#)

**Attendance.** Students must attend lecture and lab in person. In lecture, 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 or through BlackBoard. 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 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 have 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 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.
- The following provides information on [Academic Integrity Disciplinary and Appeal Process](#).
- 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 [dbrooks@tamusa.edu](mailto:dbrooks@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 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](mailto: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.

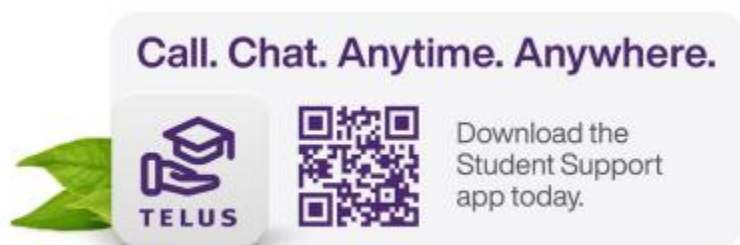
Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing [tutoring@tamusa.edu](mailto: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](http://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. 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://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](mailto: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](mailto: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](mailto: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.html>).

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

#### **Important Dates:**

<b>January 21</b>	<b>First class day</b>
<b>January 28</b>	<b>Last day to register</b>
<b>February 5</b>	<b>Census Date</b>
<b>February 24-March 7</b>	<b>Midterm grading period</b>
<b>March 10-March 15</b>	<b>Spring Break</b>
<b>April 18</b>	<b>Study day - No classes</b>
<b>April 21</b>	<b>Last day to drop with an automatic grade of "W"</b>
<b>April 28</b>	<b>Last day to withdraw from the university</b>
<b>May 5</b>	<b>Last day of scheduled classes for weekday classes</b>
<b>May 6</b>	<b>Study day - No classes</b>
<b>May 7-May 13</b>	<b>Final examinations</b>

*The complete academic calendar is available online:*

<https://www.tamusa.edu/academics/academic-calendar/index.html>.