

Anatomy & Physiology I

BIOL 2301

Dr. Ferhat Ozturk

Sul Ross State University — Eagle Pass Campus

Fall 2026 | Tuesday & Thursday, 12:30–1:45 PM | Room 0A119, Amy St. Building

In-Person Instruction

An integrative study of the structure and function of the human body, from cells and tissues through the integumentary, skeletal, muscular, and nervous systems.

Instructor: Dr. Ferhat Ozturk, Department of Natural and Behavioral Sciences

Email: Ferhat.Ozturk@SulRoss.edu

Phone: (830) 703-4832

Office: Eagle Pass Campus, Building B – B121

Student Hours: Wednesday, 10:00 AM – 1:00 PM (or by appointment)

Class Meets: Tuesday & Thursday, 12:30–1:45 PM, Room 0A119, Amy St. Building, Eagle Pass Campus

Important Note: This syllabus is subject to change at the discretion of the instructor. Any changes or corrections to course materials, assignment dates, or other updates will be communicated to students ahead of time. It is your responsibility to check Blackboard regularly for updates.

Course Information

This is the first of a two-course sequence providing an integrative study of the anatomy and physiology of the human body, with an emphasis on the structure, function, and interrelationships between organ systems. Topics covered include cell and tissue biology and the integumentary, skeletal, muscular, and nervous systems.

Prerequisite: BIOL 1306/1106 (Biology for Majors I & Lab), or equivalent; concurrent enrollment in the Anatomy & Physiology I Laboratory is recommended.

About Me & My Teaching Philosophy

I am Dr. Ozturk, and I am excited to be part of your academic journey this semester. With over a decade of teaching experience, I joined Sul Ross State University in Fall 2025 as Associate Professor of Biology and Founding Program Director of Biology at the Eagle Pass Campus. My academic background includes a Ph.D. in Cellular and Molecular Biology from the University of Nevada, Reno, followed by postdoctoral research at the University of Nebraska Medical Center. Before moving to Texas, I served as department chair and director of the Honey Research Center in Samsun, Turkey.

From Spring 2022 through Summer 2025, I taught BioSciences I (BIO 1203) at UTSA for seven semesters, where I also served as Program Director of the HONEY Pathway, a USDA-funded initiative. Through this program and my Medicinal Properties of Honey course, I have mentored more than 70 student scientists. Many of these students have gone on to medical school, dental school, graduate programs, careers in industry, and teaching positions.

My research and teaching are deeply rooted in the study of honey and its medicinal properties — particularly its antimicrobial, antioxidant, and anti-inflammatory properties, and the development of a collagen-honey wound gel. As you'll see in our Integumentary System unit, wound healing is a place where anatomy, physiology, and my own research meet directly — I'll bring real examples from my lab to that discussion. I believe education is a collaborative journey where curiosity, critical thinking, and inclusivity play central roles.

Course Objectives

- Use accurate anatomical and physiological terminology to communicate information about the human body.
- Identify human anatomical structures and explain the physiological functions of the integumentary, skeletal, muscular, and nervous systems.
- Apply anatomical knowledge to predict physiological consequences, and use knowledge of function to predict the features of anatomical structures.
- Recognize and explain the interrelationships within and between these body systems.
- Correlate and apply anatomical and physiological knowledge to diseases and conditions of clinical significance, and discuss their therapeutic treatments.

Marketable Skills

- Fluency in clinical and anatomical terminology used across health-professional fields.
- 3D anatomical visualization and spatial reasoning, using tools such as the Complete Anatomy app.
- Ability to organize, analyze, and interpret physiological data.
- Effective time management and meeting deadlines.
- Ability to speak and write clearly about anatomy and physiology topics.
- Professional email communication skills.

Required Course Materials

Required (E-Book): Tortora & Derrickson, *Principles of Anatomy and Physiology* (Wiley, 16th ed., ISBN 978-1-119-66268-6 or the edition assigned by your TopHat course code) — delivered digitally through TopHat; no separate purchase is required beyond your TopHat access.

Required: TopHat — used for your Wiley e-book readings, weekly assignments, and in-class assessments (see Activities & Grading below, 15% of your grade). TopHat registration instructions are posted on Blackboard. Please connect TopHat to Blackboard so grades sync automatically.

Required: Blackboard access — for the TopHat registration link, course announcements, secure grade messages, and this syllabus.

Recommended: Complete Anatomy (phone/tablet/desktop app, 3D4Medical/Elsevier) — a free-to-download, interactive 3D anatomy platform you can use to explore structures covered each week (skeleton, musculature, nervous system, and more) from any angle. It's an excellent visual study companion to lecture and to your lab work, though it does not replace reading the assigned Wiley chapters.

Grade Distribution and Letter Grade

Please note: All grades posted on Blackboard are shown as percentages, not points. The contribution of each activity type (TopHat, Unit Exams, Final) is listed below and used to calculate your Weighted Total for the Midterm and Final Grades. There are no extra-credit opportunities, and no late work is accepted.

Grade	Percentage	Grade	Percentage
A+	97.5 – 100%	C+	77.5 – 80%
A	95 – 97.5%	C	75 – 77.5%
A-	90 – 95%	C-	70 – 75%
B+	87.5 – 89%	D+	67.5 – 70%
B	85 – 87.5%	D	65 – 67.5%
B-	80 – 85%	D-	60 – 65%

Grade	Percentage	Grade	Percentage
		F	< 60%

Activities and Grading

Activity	Quantity	Percentage
TopHat Assignments & In-Class Assessments (Wiley e-book)	Weekly + each class session	15%
Unit Exams (4 given; lowest automatically dropped — top 3 count)	4	60%
Final Exam – Comprehensive, In-Person (never dropped)	1	25%
TOTAL		100%

TopHat Assignments & In-Class Assessments (15%)

Each week you will complete a TopHat reading assignment from our Wiley e-book (due Sunday at 11:59 PM, opening the Monday of the assigned week) and answer TopHat questions during most lecture sessions using your phone, tablet, or laptop. You must be physically present in class (or, on our one online session during Thanksgiving week, complete that session's materials by the posted deadline) to receive credit — there is no individual makeup option for missed TopHat activity.

Unit Exams (4 given; top 3 count — 60%)

There are 4 (four) Unit Exams, each covering roughly 2½–3 weeks of material, taken IN PERSON in our classroom (Room 0A119) on the designated dates in the Course Schedule below. There is no online, remote, or take-home option. Your lowest of the 4 exam scores is automatically dropped; your top 3 scores are averaged at 20% each to determine 60% of your final grade. Because this drop already exists, individual exams cannot be excused or made up under any additional circumstance.

Final Exam (25%)

The comprehensive, end-of-course Final Exam is taken IN PERSON, with no exceptions and no makeup option. About two-thirds of the exam covers our final unit (the Brain, Cranial Nerves, and Autonomic Nervous System), and about one-third is cumulative, drawing from material across the entire course. Its score is never dropped and contributes 25% of your final grade. Failure to take the Final Exam may result in failure of the course.

Attendance

Attendance is required. You are expected to attend at least 90% of our scheduled class meetings — no more than 3 absences across the semester. Any absence must be reported to Dr. Ozturk BEFORE the missed class or immediately on the day of the absence, by email or Blackboard message. Our one online session (Nov. 24, Thanksgiving travel week) still requires participation — completing that day's recorded lecture and TopHat assignment by the posted deadline counts as attendance for that session.

Notifying me of an absence lets me check in on you, but it does not exempt you from missed work: because there is no makeup for TopHat in-class questions or exams, an absence will still cost you those points beyond the built-in drop described above.

Please Read the Following Section Carefully

Your final course grade is automatically calculated from your total course percentage using the grade table above.

At the end of the course, sometimes I receive emails from students saying things like, “I have an 88.3%. Can’t you just round up my grade to an A?” The answer is no. Your final course grade is determined by your

percentage grade, not by how close you are to the next letter. I can't "give" students points to reach the next grade, nor can you do extra work to earn extra points. Every point must be earned, and every point is important — be prepared for each exam.

Communication Plan

There are several ways you can communicate with me:

- Email: You may email me at Ferhat.Ozturk@sulross.edu. Please begin your message with a professional greeting such as Good morning, Hello, or Dear Dr. Ozturk. Casual greetings like hey, yo, or whassup are not appropriate for academic communication.
- Course Messages in Blackboard: Use this option if you need to send me a private message regarding grades or other sensitive information. This is the only secure way to discuss grades. You must log in to Blackboard to send and receive course messages.
- Response Time: I will respond to all messages within 24–48 business hours.

Don't hesitate to reach out and to join me during Student Hours (office hours). I will be in my office to answer questions and help you better understand the subject matter.

Course Management and Policies

Instructor-Initiated Drops

This course uses instructor-initiated drops for students who exceed the attendance limit described above. Up to the last day for students to withdraw from an individual course — Friday, November 6, 2026 — you may be dropped for exceeding 3 absences (more than 10% of scheduled class meetings). Students will receive at least one courtesy warning when approaching this limit, sent via Blackboard to the student's email address. A subsequent absence may result in being dropped from the course; notification of the drop will also be sent via Blackboard. This drop does not affect enrollment in your other courses. Please consult the Dropping Courses webpage for further details on the process and appeals.

Please see the Sul Ross Academic Calendar for official Drop and Withdrawal dates and procedures.

Essential Student Information

SRSU Disability Services

Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartz Grisham, LPC, SRSU's Accessibility Services Director, or Ronnie Harris, LPC, Counselor, at 432-837-8203 or by email at mschwartz@sulross.edu or ronnie.harris@sulross.edu. Eagle Pass and RGC students can also contact Alejandra Valdez at 830-758-5006 or alejandra.valdez@sulross.edu. The office is located on the first floor of Ferguson Hall, room 112; mailing address: P.O. Box C122, Sul Ross State University, Alpine, Texas 79832.

Academic Integrity

Students are expected to demonstrate scholarly behavior and honesty in all work. Submit only your own work, cite sources properly, and do not reuse assignments from other courses or copy from online materials. Unauthorized collaboration or the use of AI tools without permission is prohibited.

AI-use policy, in plain terms: Generative AI tools (e.g., ChatGPT) may be used only for personal study and self-quizzing — organizing notes, generating practice questions, or clarifying a concept in your own words. They may

not be used to generate answers you submit for TopHat assignments, exams, or any graded work. If you are ever unsure whether a particular use is permitted, please ask before submitting.

Violations may result in failing grades on assignments or the course, as well as further university consequences. I take academic dishonesty very seriously — but remember, citations are your friend. There is a difference between intentional dishonesty and honest mistakes made while learning. If you are unsure, please ask.

Do:

- Cite all sources used in assignments and presentations.
- Ask me if you are unsure whether a resource or tool is permitted.
- Submit only your own original work.

Don't:

- Use AI tools to generate answers you submit for TopHat, exams, or graded assignments.
- Collaborate on individually assigned work without permission.
- Reuse assignments from another course without instructor approval.

Classroom Climate of Respect

This course is built on free expression, critical inquiry, and open discussion of ideas. Together, we share the responsibility of creating and sustaining an atmosphere of tolerance, civility, and respect for one another's viewpoints.

Disagreement and debate are valuable parts of learning, but they must always be conducted with professionalism and courtesy. Intimidation, harassment, or personal attacks of any kind will not be tolerated. Likewise, no one should be belittled or discriminated against on the basis of race, religion, ethnicity, age, gender, national origin, sexual orientation, or personal identity.

Challenging topics, including politically or socially sensitive issues, may arise in the study of anatomy and physiology and its broader impact. Our classroom will remain a respectful and safe space where all voices can be heard, questions can be asked, and learning can take place.

Commitment to Your Success

I believe education is a collaborative journey where curiosity, critical thinking, and inclusivity are central. My goal is to create a supportive learning environment that values your unique perspectives and experiences. I understand that challenges such as health concerns, financial pressures, or unexpected life events may affect your ability to fully engage in class.

My commitment is to support you not only in mastering the course material but also in developing the skills and confidence needed for lifelong learning and success. If you encounter difficulties inside or outside of class that impact your performance, please reach out to me. Together we can find strategies and resources to help you succeed.

As part of the Sul Ross Familia, I see each student as more than just a grade — I see you as a future scientist, professional, or educator. Many of my former students have gone on to medical school, dental school, graduate programs, industry positions, and teaching careers. I am here to challenge you, encourage you, and provide guidance as you explore your own path in anatomy and physiology.

SRSU Library Services

Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), ScanIt, and Direct Mail to get materials delivered to you at home or via email.

Course Schedule — BIOL 2301, Fall 2026

All TopHat assignments open the Monday of the week assigned and are due by Sunday at 11:59 PM of that same week. Chapter numbers reference Tortora & Derrickson's Principles of Anatomy and Physiology (Wiley, 16th ed.); your TopHat course code may reflect a slightly different edition. Dates and topics are subject to change; announcements will be posted on Blackboard.

Thanksgiving week note: our Tuesday, November 24 session will be delivered fully online (recorded lecture + TopHat assignment, no in-person meeting) so students may travel; Thursday, November 26 is the university-observed Thanksgiving Holiday.

Wk	Day	Date	Lecture Topic	Ch.	Assessment / Notes
1	T	Aug 25	Course Introduction & Syllabus Review; The Organization of the Human Body	1	TopHat: Ch. 1 due Sun.
1	R	Aug 27	The Organization of the Human Body (levels of structure, homeostasis, anatomical terminology)	1	TopHat in-class
2	T	Sep 1	The Cellular Level of Organization I (plasma membrane & organelles)	3	TopHat in-class; Ch. 3 due Sun.
2	R	Sep 3	The Cellular Level of Organization II (cell division & protein synthesis)	3	TopHat in-class
3	T	Sep 8	The Tissue Level of Organization I (epithelial & connective tissue)	4	TopHat in-class; Ch. 4 due Sun.
3	R	Sep 10	The Tissue Level of Organization II (muscle & nervous tissue; membranes) + Exam 1 Review	4	—
4	T	Sep 15	EXAM 1 (Ch. 1, 3, 4) — In-Person	—	Unit Exam 1
4	R	Sep 17	The Integumentary System I (skin layers & accessory structures)	5	TopHat in-class; Ch. 5 due Sun.
5	T	Sep 22	The Integumentary System II (functions & wound healing)	5	TopHat in-class
5	R	Sep 24	The Skeletal System: Bone Tissue (structure, growth, remodeling)	6	TopHat in-class; Ch. 6 due Sun.
6	T	Sep 29	The Axial Skeleton (skull, vertebral column, thoracic cage)	7	TopHat in-class; Ch. 7 due Sun.
6	R	Oct 1	The Appendicular Skeleton (pectoral & pelvic girdles, limbs)	8	TopHat in-class
7	T	Oct 6	Joints (overview) + Exam 2 Review — Unit 2	9	TopHat in-class; Ch. 8–9 due Sun.
7	R	Oct 8	EXAM 2 (Ch. 5, 6, 7, 8) — In-Person	—	Unit Exam 2
8	T	Oct 13	Muscle Tissue I (skeletal, cardiac & smooth muscle physiology)	10	TopHat in-class; Ch. 10 due Sun.
8	R	Oct 15	Muscle Tissue II (the contraction mechanism)	10	TopHat in-class
9	T	Oct 20	The Muscular System I (head, neck & trunk muscles)	11	TopHat in-class; Ch. 11 due Sun.
9	R	Oct 22	The Muscular System II (upper & lower limb muscles) + Exam 3 Review	11	—

Wk	Day	Date	Lecture Topic	Ch.	Assessment / Notes
10	T	Oct 27	EXAM 3 (Ch. 10, 11) — In-Person	—	Unit Exam 3
10	R	Oct 29	Nervous Tissue I (neurons, neuroglia & the resting membrane potential)	12	TopHat in-class; Ch. 12 due Sun.
11	T	Nov 3	Nervous Tissue II (action potentials, synaptic transmission & neurotransmitters)	12	TopHat in-class
11	R	Nov 5	The Central Nervous System I (spinal cord, spinal nerves & reflexes)	13	TopHat in-class; Ch. 13 due Sun.
12	T	Nov 10	The Central Nervous System II continued + Exam 4 Review	13	—
12	R	Nov 12	EXAM 4 (Ch. 12, 13) — In-Person	—	Unit Exam 4
13	T	Nov 17	The Brain and Cranial Nerves I (brain regions, protection & blood supply)	14	TopHat in-class; Ch. 14 due Sun.
13	R	Nov 19	The Brain and Cranial Nerves II (cranial nerves & higher mental functions)	14	TopHat in-class
14	T	Nov 24	ONLINE SESSION — The Autonomic Nervous System (recorded lecture; no in-person meeting, Thanksgiving travel week)	15	TopHat: Ch. 15 due Sun.
14	R	Nov 26	THANKSGIVING HOLIDAY — No Class	—	—
15	T	Dec 1	The Autonomic Nervous System, continued + Comprehensive Final Exam Review — LAST DAY OF CLASSES	15	—
16	—	Dec 4, 7–9	FINAL EXAM WEEK — Comprehensive Final Exam, In-Person (⅔ from Ch. 14–15, ⅓ cumulative) — most likely Mon., Dec. 7 (subject to change)	All	Final Exam

Final Exam — Comprehensive, In-Person: most likely Monday, December 7, 2026, during Finals Week (Dec. 4 and 7–9) — subject to change until the Registrar publishes the official Fall 2026 Final Exam Schedule. The confirmed date/time will be announced on Blackboard.