

**BIOLOGY 2402 – ANATOMY & PHYSIOLOGY I; FOUR CREDIT HOURS; IN-PERSON FORMAT
COURSE SYLLABUS, AMANDA R. RAKHSHANDEH, PH.D.**

Faculty & Course Information

Email: arakhshandeh@southplainscollege.edu Phone: (806) 716 – 2317 Office: Science Bldg. 135

Office Hours: You are welcome to request an appointment outside the listed times with at least 48 hours' notice. I typically respond to emails by the next business day.

Mondays & Wednesdays: 12:30–3:00 PM

Fridays: 10:00 AM–1:00 PM

Required Materials:

1. **Textbook:** Human Anatomy & Physiology, 11th ed., Marieb & Hoehn. A Blackboard-accessible e-text is available starting the first day of class and was already paid for with your tuition fees. Opt-out instructions are posted on Blackboard.
2. **Study Guide:** Human Anatomy & Physiology I: Study & Note-Taking Guide, Amanda Rakhshandeh (272 pages). Download from Blackboard and print for free.
3. **Hardware:** An external webcam is required for one quiz and all major exams. Check out from the SPC library or purchase on your own (typical cost - \$20 to \$30).

Course description: Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Pre-requisite: BIOL 2401 with a "C" or better.

Learning Outcomes:

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
7. Apply appropriate safety and ethical standards.
8. Locate and identify anatomical structures.
9. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
10. Work collaboratively to perform experiments.
11. Demonstrate the steps involved in the scientific method.
12. Communicate results of scientific investigations, analyze data and formulate conclusions.
13. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

Essential questions we will ask together this semester:

1. How does the shape of a body part (from the smallest to the largest) cause it to function in a specific way?
2. What new functions can be seen once different anatomical structures begin working together?
3. How do different parts of the body sense their environment? How does it then respond?
4. How do different parts of the body obtain and use energy?
5. How do biologists describe the body to one another?
6. How are different biological structures similar? How are they different? How are different biological functions similar? How are they different?

How do I succeed in this class?

Spend enough time studying. Expect to spend approximately

- 12 hours per week outside of class for a 16-week course
- 20 hours per week outside of class for an 8-week course
- 30 hours per week outside of class for a 5-week course.

Plan to spend time on the course every day for the entire course. Avoid cramming. Plan your study schedule at the start of each week by blocking out non-negotiable commitments first, then scheduling specific study times and locations. Choose a low-distraction environment and work in smaller, regular sessions.

Watch videos and fill out the note-taking guide BEFORE CLASS. If you don't watch videos before class, you've missed lecture. I don't re-lecture in class. Print the note-taking guide and actively take notes while watching videos. Pause often. Details matter, so write them down. Write down questions.

Ask questions early. Enter questions in the open-ended question at the end of each video. The more specific you are, the better I can help. Ask questions in class until you fully understand everything and your note-taking guide is completely filled out. Meet with me during my office hours for extra help.

Use the provided learning tools. I post learning aids for every section in the weekly folders and in the Course Resources section:

- **Videos:** Rewatch course videos anytime via the course YouTube channel (linked in Course Resources).
- **Primal Pictures:** A free, 3D, rotatable anatomy database available through the SPC Library.
- **Online tutorials and games:** Chapter tutorials with games are found in Course Resources and help reinforce difficult topics.
- **PowerPoint slides:** Included in the Note-Taking Guide and Course Resources.
- **Lecture exam reviews:** Exams test only the topics listed on the reviews in the Note-Taking Guide.
- **Practical exam "terms to know":** Only listed structures will be tested.
- **Instructor-made flashcards:** Provided for the practical exam structures.
- **Hands-on models:** Models can be checked out from the SPC Science Center desk. Models can also be used at the Lubbock Downtown Center outside of scheduled classes.

Quiz your memory repeatedly. Make your own study aids, such as outlines, drawings, diagrams or mind maps as you review your notes. Quiz your memory over and over again using any of the following: blank versions of the note-taking guide, practical exam flash cards, extra online tutorials, lecture exam reviews. Only use your notes to briefly jog your memory when you forget something. Then, close them and continue testing your memory. **Re-reading notes or slides repeatedly is the LEAST EFFECTIVE strategy and typically results in poor exam performance.**

Use SPC resources as needed. Life can impact learning, but SPC can help. The SPC Health & Wellness Center has several resources that can help you, should unexpected emergencies arise, including food assistance, help paying bills, medical care, mental health counseling and referrals, other free or reduced cost programs. Visit this link to learn more: <https://www.southplainscollege.edu/health/studenthealth.php>

Car break down? Don't worry, there's a shuttle service between Lubbock & Levelland. Visit this link to learn more: <https://spartanpublictransit.com/spc-express.php>

What are the assignments for this class?

Lecture Exams (70%): Five lecture exams assess your understanding of physiology concepts and anatomical “mental maps.” Two of these exams are divided into 1) memorization (online) and 2) critical thinking (in class with learning aids). One due-date extension is allowed for a missed exam. If you begin an exam online, you may not exit the exam and then request a due-date extension. Re-takes are not permitted. No lecture exam grades are dropped; however, an optional comprehensive final lecture exam may replace your lowest lecture exam score.

Lab (Practical) Exams (25%): Six lab practical exams assess your ability to identify anatomical structures. Five of those exams are fill-in-the-blank with no word bank; correct spelling is required for full credit. The cat practical exam is an oral, group exam; correct pronunciation is required for full credit. One due-date extension is allowed for a missed exam. If you begin a practical exam online, you may not exit the exam and then request a due-date extension. Re-takes are not permitted. No lab practical grades are dropped; however, an optional comprehensive final lab exam may replace your lowest practical exam score.

Videos (6%): Each chapter includes instructional videos with graded questions. Videos allow two attempts per question. No due-date extensions are allowed; the lowest two grades are dropped.

Attendance (2%): For full credit, show up on time, fully participate when present, and stay to the end of class. The lowest one attendance grade is dropped.

Orientation to the Course Assignments (2%): Orientation assignments introduce the course structure, expectations, and learning tools. These include materials in the Start Here section and required Chapter 18 quizzes and tutorials. Quizzes and tutorials for later chapters are available in Course Resources but are optional. No due-date extensions are allowed; the lowest one orientation grade is dropped.

Do you curve grades or offer extra credit? Grades are not curved, and extra credit is not offered. Several easy assignments are due during the first days of the course in the Orientation section; these provide an early grade cushion, so do not miss them. All exam keys are reviewed for accuracy, and all fill-in-the-blank exam questions are hand-graded.

Grading Scale: A = 90–100% B = 80–89% C = 70–79% D = 60–69% F = <60%

What if I'm on the borderline? Because grades are dropped, cutoffs are strict. An 89.49 earns a B. An 89.50 earns an A.

What are the other policies for your course?

Engagement. Regular attendance is required. I may drop you from the course after you miss two days, resulting in a grade of "X," not "W." If you stop attending, it is your responsibility to immediately drop the course through the registrar; otherwise, you will be assigned the grade you earn at the end of the semester.

Technical Difficulties. If you experience technical difficulties during a major exam, **immediately** contact HonorLock support using either the in-exam chat feature (bottom right of the screen) or the live chat at <https://HonorLock.com/support>. For non-exam technical issues, contact the SPC Help Desk at 806-716-2600.

Major Exam Proctoring Requirements. Most major exams are given online and **must** be proctored using HonorLock with an **external** webcam. I personally review exam recordings to ensure grading accuracy and to verify flagged misconduct. You are responsible for meeting all requirements below.

- **Valid photo ID shown.** The exam software prohibits taking the exam until your identity is verified.
- **Complete room/environment scan.** Incorrect or incomplete scans result in a zero.
- **Correct webcam placement.** Your computer, both hands, and face must be visible throughout the exam. Incorrect placement results in a zero.
- **Microphone on and recording.** A zero will be awarded if the microphone is not on and recording for the entire exam. Ensure clear audio (no fans, TVs, or excessive background noise).
- **Sufficient lighting.** Insufficient lighting results in a zero on the exam.
- **Remain in webcam view.** Leaving the webcam view for any reason results in a zero. If you need to take care of a childcare mid-exam, take the camera/computer with you so you remain on screen.
- **Approved testing environment and surface.** Exams taken on a bed receive a zero. You are not required to test at home. Contact me for troubleshooting help about your testing location.
- **No unauthorized materials.** Any unauthorized materials (books, notes, blank paper, phones, additional devices, headphones/earbuds or AI tools) near the testing area result in a zero.
- **Autofill and spellcheck disabled.** Use of autofill, predictive text, or spellcheck results in a zero.
- **Do not close or exit the exam.** Once you begin an exam, you may not close it unless instructed by HonorLock support for technical reasons (with chat verification). A 10% penalty per instance applies.
- **Appropriate attire.** Dress as you would for a face-to-face class. Inappropriate attire results in a zero.
- **No talking, music, or audio.** Talking with any adult, playing music, or playing audio recordings results in a zero. Communication with children for childcare reasons is permitted if you remain on camera.
- **Professional conduct.** Vulgar or disrespectful language regarding the exam or course results in a zero.

Consequences for violations are suspended on the prior knowledge quiz only, which is used to identify and correct issues. Feedback will be provided after this quiz. Penalties apply to all subsequent exams.

Academic Integrity. Honesty and ethical behavior are expected, and South Plains College Student Conduct guidelines apply to all work in this course. Violations will result in a zero and may be referred to the college for additional disciplinary action. If you are unsure whether something is allowed, ask before submitting work or beginning an exam.

Institutional Policies. Disabilities, Non-Discrimination, Title IX Pregnancy & Parenting Accommodations, CARE (Campus Assessment, Response & Evaluation), Intellectual Exchange, Campus Concealed Carry, COVID-19, and AI policies can be found at: <https://www.southplainscollege.edu/syllabusstatements/>

Where and when do we meet?

Levelland Campus, Science Building, Room 182

Plan to meet for the entire class period every day, except for any holidays noted below.

Important Dates

Jan 13	First day of class
Jan 19	Martin Luther King, Jr. holiday; All SPC campuses closed
Jan 27	Last day to drop without it showing on your transcript
Mar 16 – 20	Spring Break holiday; All SPC campuses closed
Apr 3	Easter holiday; All SPC campuses closed
Apr 23	Last day to drop with a “W” on your transcript
May 5	Final exams day

Biology 2402.005 Tentative Assignments Schedule Spring 2026

All assignments are due at 11:59 PM CST, except for in-class assignments. You are welcome to work ahead at any time!

Due Date	Week 1 assignments	Special Instructions	Done?
T – Jan 13	Chapter 18 videos (#1, 2 & 7)	---	
W – Jan 14	Chapter 18 videos (#3, 4 & 5)	---	
F – Jan 16	Orientation Videos	---	
	Study Schedule	---	
	Course Messages and Announcements quiz	---	
	The Am I Ready? Quiz	---	
	Student learning survey	---	
	Prior knowledge quiz	Online with an external webcam	

Due Date	Week 2 assignments	Special Instructions	Done?
M – Jan 19	Chapter 18 videos (# 6, 8, 9 & 11)	---	
W – Jan 21	Chapter 18 video (#10)	---	
F – Jan 23	Chapter 18: Quiz, Lab quiz & Tutorials	---	

Due Date	Week 3 assignments	Special Instructions	Done?
M – Jan 26	Chapter 19 videos (#1 through 5)	---	
W – Jan 28	Chapter 19 videos (#6 through 8)	---	

Due Date	Week 4 assignments	Special Instructions	Done?
Th – Feb 5	In-class evaluation – cat dissection	Must be present in class for pts.	
Sun– Feb 8	Lab practical 1 (Chs. 18 & 19)	Online with an external webcam	
	Lecture exam 1 – Memorization portion (Chs. 18 & 19)	Online with an external webcam	

Due Date	Week 5 assignments	Special Instructions	Done?
T – Feb 10	Lecture exam 1 – Critical thinking portion (Chs. 18 & 19)	In class with learning aids	
W – Feb 11	Chapter 17 videos (#1 through 7)	---	

Due Date	Week 6 assignments	Special Instructions	Done?
M – Feb 16	Chapter 17 videos (#8, 9 & 10)	---	
W – Feb 18	Chapter 20 & 21 videos (#1 through 4)	---	

Due Date	Week 7 assignments	Special Instructions	Done?
M – Feb 23	Chapters 20 & 21 videos (#5 through 9)	---	
W – Feb 25	Chapter 16 videos (#1 through 6)	---	
Sun – Mar 1	Lecture exam 2 (Chs. 17, 20 & 21)	Online with an external webcam	
	Lab practical exam 2 (Chs. 17 & 20)	Online with an external webcam	

Due Date	Week 8 assignments	Special Instructions	Done?
W – Mar 4	Chapter 27 videos (#1 through 6)	---	

Due Date	Week 9 assignments	Special Instructions	Done?
M – Mar 9	Chapter 27 videos (#7 through 10)	---	
W – Mar 11	Chapter 23 videos (#1 through 10)	---	
Sun–Mar 22	Lab practical 3 (Chs. 16, 17, 20 & 27)	Online with an external webcam	
	Lecture exam 3 (Chs. 16 & 27)	Online with an external webcam	

Due Date	Week 10 assignments	Special Instructions	Done?
M – Mar 23	Chapter 23 videos (#11 through 14)	---	
W – Mar 25	Chapter 24 videos (#1 through 6)	---	
Sun–Mar 29	Lab practical 4 (Ch. 23)	Online with an external webcam	
	Lecture exam 4 (Chs. 23 & 24)	Online with an external webcam	

Due Date	Week 11 assignments	Special Instructions	Done?
T – Mar 31	In-class evaluation – cat dissection	Must be present in class for pts.	
W – Apr 1	Chapter 22 videos (#1 through 11)	---	

Due Date	Week 12 assignments	Special Instructions	Done?
M – Apr 6	Chapter 22 videos (#12 through 15)	---	
W – Apr 8	Chapter 25 videos (#1 through 7)	---	

Due Date	Week 13 assignments	Special Instructions	Done?
M – Apr 13	Chapter 25 videos (#8 through 11)	---	

Due Date	Week 14 assignments	Special Instructions	Done?
M – Apr 20	Chapter 26 videos (#1 through 7)	---	
W – Apr 22	Chapter 26 video (#8)	---	

Due Date	Week 15 assignments	Special Instructions	Done?
T – Apr 28	In-class cat practical examination	Must be present in class	
W – Apr 29	Lecture Exam 5 – Memorization Portion (Chs. 22, 25 & 26)	Online with an external webcam	
Th – Apr 30	Lecture Exam 5 – Critical Thinking (Chs. 22, 25 & 26)	In class with learning aids	
Sun – May 3	Lab practical 5 (Chs. 22 & 25)	Online with an external webcam	

Due Date	Week 16 assignments	Special Instructions	Done?
T – May 5	Optional comprehensive final lecture exam	In class, no learning aids	
	Optional comprehensive final practical exam	In class, no learning aids	

The instructor reserves the right to make changes to this syllabus as necessary.