

BIOLOGY 2402 – ANATOMY & PHYSIOLOGY 2; FOUR CREDIT HOURS
COURSE SYLLABUS, AMANDA R. RAKHSHANDEH, PH.D.
FALL 1 2023

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Office Hours: Please always feel free to make an appointment to meet with me at a time other than those listed below, if you give me at least 48 hours advance notice. I typically answer emails within 24 hours on weekdays. Emails received on Fridays or over the weekend will typically be answered on Mondays.

- Mondays & Wednesdays: 10:45 AM – 12:00 PM
- Tuesdays & Thursdays: 10:45 AM – 12:30 PM
- Fridays: 10 AM - 12 PM

To meet with me online, please either email me or use the Blackboard link to schedule an appointment during my office hours.

Required materials:

1. **Required Notes:** *Human Anatomy & Physiology 2 Study & Note-taking Guide*. By Amanda Rakhshandeh. (Available pre-printed at the SPC bookstore or online through Blackboard.)
2. **Required Hardware:** An external webcam is required for one quiz and all major exams. One option is to purchase a webcam economically, using financial aid funds, through the SPC bookstore.

Recommended materials:

1. **Recommended Text:** *Human Anatomy & Physiology*. Eleventh Edition. By Marieb & Hoehn. (Hard back and loose-leaf versions available through the SPC bookstore. e-text version available through the [publisher website](#).)

Optional materials that some students find useful:

1. **Online Materials:** *Mastering A&P – Human Anatomy & Physiology*; access code for online content. (Note: the purchase of a new textbook bundle will include *A Brief Atlas of the Human Body* and the *Mastering A&P* access code. You may also buy the textbook and atlas used and then purchase a *Mastering A&P* access code separately through the [publisher website](#).)
2. **Other resources:** *A Brief Atlas of the Human Body*. Second edition. By Hutchinson, Mallatt, Marieb, & Wilhelm.

Purpose: To provide a general understanding of human anatomy and physiology for those students in the allied health fields and to meet requirements for an Associate of Arts Degree or Associate in Science Degree.

Objectives:

1. To help the students acquire knowledge of normal development, structures, and functions of the human body
2. To provide a foundation for the undergraduate college and university student
3. To provide a foundation for understanding deviations from the normal in physiological function.

Course description (from State ACGM): Anatomy and Physiology 2 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.

Learning Outcomes (from State ACGM):

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.

BIOLOGY 2402 TENTATIVE TOPICAL AGENDA FALL 1 2023

Week	Date	Topic
1	Aug 28 – Sep 1	Chapter 18
2	Sep 5 – 8	Chapter 19
	Sep 10	Lecture exam 1 (Chs. 18 & 19) and Lab practical exam 1 (Chs. 18 & 19)
3	Sep 11 – 15	Chapters 17, 20 & 21
	Sep 17	Lecture exam 2 (Chs. 17, 20 & 21)
4	Sep 18 – 22	Chapters 16 & 27
	Sep 24	Lecture exam 3 (Chs. 16 & 27) and Lab practical exam 2 (Chs. 16, 17, 20 & 27)
5	Sep 25 – 29	Chapters 23 & 24
	Sep 31	Lecture exam 4 (Chs. 23 & 24) and Lab practical exam 3 (Ch. 23)
6	Oct 2 – 6	Chapter 22
7	Oct 9 – 13	Chapters 25 & 26
8	Oct 16 – 19	Chapter 25 & 26
	Oct 18	Lecture exam 5 (Chs. 22, 25 & 26) and Lab practical exam 4 (Chs. 22 & 25)
	Oct 19	Optional comprehensive final exams – lecture & lab (Chs. 16 – 27)

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

OTHER IMPORTANT DATES: FALL 1 2023

Date	Event
Aug 28	First day of classes
Sep 4	Labor day holiday, College is closed
Sep 5	Last day to drop the course without it showing on your transcript
Oct 11	Last day to drop the course with a 'W' on your transcript
Oct 19	Finals day

BIOLOGY 2402 TENTATIVE ASSIGNMENTS & TESTS SCHEDULE FALL 1 2023 – ALL ASSIGNMENTS ARE DUE AT 11:59 PM CST ON THE DATE LISTED
YOU ARE WELCOME TO WORK AHEAD AT ANY TIME!

Due Date	Week 1 assignments	How to access	Webcam?
M – Aug 28	Orientation Videos (#1 through 4) Study Schedule	Link in Blackboard; any web browser Download file from Blackboard, fill out with Excel, turn in using Blackboard link	--- ---
	Video: scanning when testing	Link in Blackboard; any web browser	---
	Email quiz	Link in Blackboard; any web browser	---
	The Am I Ready? Quiz	Link in Blackboard; any web browser	---
	Student learning survey	Link in Blackboard; any web browser	---
	Prior knowledge quiz	Use Chrome, link in Blackboard, uses Proctorio	Yes
T – Aug 29	Chapter 18 videos (#1, 2, 7, 10 & 12)	Link in Blackboard; any web browser	---
W – Aug 30	Chapter 18 videos (#3 through 6)	Link in Blackboard; any web browser	---
Th – Aug 31	Chapter 18 video (#8, 9 & 11)	Link in Blackboard; any web browser	---
F – Sep 1	Chapter 18 lab quiz & chapter quiz Discussion board	Open Chrome, link in Blackboard, uses Proctorio Link in Blackboard; any web browser	--- ---
Due Date	Week 2 assignments	How to access	Webcam?
T – Sep 5	Chapter 19 videos (#1 & 2)	Link in Blackboard; any web browser	---
W – Sep 6	Chapter 19 videos (#3 through 5)	Link in Blackboard; any web browser	---
Th – Sep 7	Chapter 19 videos (#6 through 8)	Link in Blackboard; any web browser	---
F – Sep 8	Chapter 19 lab quiz & chapter quiz Discussion board	Open Chrome, link in Blackboard, uses Proctorio Link in Blackboard; any web browser	--- ---
Sun – Sep 10	Lab practical 1 (Chs. 18 & 19) Lecture exam 1 (Chs. 18 & 19)	Use Chrome, link in Blackboard, uses Proctorio Use Chrome, link in Blackboard, uses Proctorio	Yes Yes

Due Date	Week 3 assignments	How to access	Webcam?
M – Sep 11	Chapter 17 videos (#1 through 7)	Link in Blackboard; any web browser	---
T – Sep 12	Chapter 17 videos (#8, 9 & 10)	Link in Blackboard; any web browser	---
W – Sep 13	Chapter 20 & 21 videos (#1 through 4)	Link in Blackboard; any web browser	---
Th – Sep 14	Chapters 20 & 21 videos (#5 through 9)	Link in Blackboard; any web browser	---
F – Sep 15	Chapters 17/20 lab quiz, chapter 17 quiz & chapter 20/21 quiz	Open Chrome, link in Blackboard, uses Proctorio	---
	Discussion board	Link in Blackboard; any web browser	---
Sun – Sep 17	Lecture exam 2 (Chs. 17, 20 & 21)	Use Chrome, link in Blackboard, uses Proctorio	Yes
Due Date	Week 4 assignments	How to access	Webcam?
M – Sep 18	Chapter 16 videos (#1 through 4)	Link in Blackboard; any web browser	---
T – Sep 19	Chapter 16 videos (#5 & 6)	Link in Blackboard; any web browser	---
W – Sep 20	Chapter 27 videos (#1 through 7)	Link in Blackboard; any web browser	---
Th – Sep 21	Chapter 27 videos (#8 through 10)	Link in Blackboard; any web browser	---
F – Sep 22	Chapter 16 lab quiz & chapter quiz	Open Chrome, link in Blackboard, uses Proctorio	---
	Chapter 27 lab quiz & chapter quiz	Open Chrome, link in Blackboard, uses Proctorio	---
	Discussion board	Link in Blackboard; any web browser	---
Sun – Sep 24	Lab practical 2 (Chs. 16, 17, 20 & 27)	Use Chrome, link in Blackboard, uses Proctorio	Yes
	Lecture exam 3 (Chs. 16 & 27)	Use Chrome, link in Blackboard, uses Proctorio	Yes
Due Date	Week 5 assignments	How to access	Webcam?
M – Sep 25	Chapter 23 videos (#1 through 5)	Link in Blackboard; any web browser	---
T – Sep 26	Chapter 23 videos (#6 through 11)	Link in Blackboard; any web browser	---
W – Sep 27	Chapter 23 videos (#12 through 14)	Link in Blackboard; any web browser	---
Th – Sep 28	Chapter 24 videos (#1 through 6)	Link in Blackboard; any web browser	---
F – Sep 29	Chapter 23 lab quiz and Chapters 23/24 quiz	Open Chrome, link in Blackboard, uses Proctorio	---
	Discussion board	Link in Blackboard; any web browser	---
Sun – Oct 1	Lab practical 3 (Ch. 23)	Use Chrome, link in Blackboard, uses Proctorio	Yes
	Lecture exam 4 (Chs. 23 & 24)	Use Chrome, link in Blackboard, uses Proctorio	Yes
Due Date	Week 6 assignments	How to access	Webcam?
M – Oct 2	Chapter 22 videos (#1 through 3)	Link in Blackboard; any web browser	---
T – Oct 3	Chapter 22 videos (#4 through 7)	Link in Blackboard; any web browser	---
W – Oct 4	Chapter 22 videos (#8 through 11)	Link in Blackboard; any web browser	---
Th – Oct 5	Chapter 22 videos (#12 through 16)	Link in Blackboard; any web browser	---
F – Oct 6	Chapter 22 lab quiz & chapter quiz	Open Chrome, link in Blackboard, uses Proctorio	---
	Discussion board	Link in Blackboard; any web browser	---
Due Date	Week 7 assignments	How to access	Webcam?
M – Oct 9	Chapter 25 videos (#1 through 3)	Link in Blackboard; any web browser	---
T – Oct 10	Chapter 25 videos (#4 through 8)	Link in Blackboard; any web browser	---
W – Oct 11	Chapter 25 videos (#9 through 11)	Link in Blackboard; any web browser	---
Th – Oct 12	Chapter 26 videos (#1 through 6)	Link in Blackboard; any web browser	---
F – Oct 13	Chapter 26 videos (#7 & 8)	Link in Blackboard; any web browser	---
	Discussion board	Link in Blackboard; any web browser	---
Due Date	Week 8 assignments	How to access	Webcam?
M – Oct 16	Chapter 25 lab quiz & chapter quiz	Open Chrome, link in Blackboard, uses Proctorio	---
T – Oct 17	Chapter 26 quiz	Open Chrome, link in Blackboard, uses Proctorio	---
W – Oct 18	Lab practical 4 (Chs. 22 & 25)	Use Chrome, link in Blackboard, uses Proctorio	Yes
	Lecture exam 5 (Chs. 22, 25 & 26)	Use Chrome, link in Blackboard, uses Proctorio	Yes
Th – Oct 19	Optional comprehensive final lecture exam	Use Chrome, link in Blackboard, uses Proctorio	Yes
	Optional comprehensive final practical exam	Use Chrome, link in Blackboard, uses Proctorio	Yes

Tips for Success:

- **Plan to study 20 hours a week outside of attending class.** To pass this course, most students need to study around 20 hours per week outside of watching course videos. It's best to work consistently, in small doses. "Cramming" for an exam is rarely successful. I suggest that you plan your study time at the beginning of each week. Begin by marking down the times that you have family, work, or other non-negotiable time commitments. Then plan the specific days, hours, and places that you will study throughout the week. Pick a study location that is as free from distractions as possible. Stick to your plan and then reward yourself at the end of the week for a job well-done.
- **Take good notes.** In the videos, I will discuss the most significant concepts from your readings. At times, I will present examples that may not be given in your textbook. You are responsible for all of this information. Good note-taking will help you to remember which concepts were most important and why. Additionally, the act of note-taking helps you to stay actively engaged in the topic. The Note-taking guide is designed to help you structure your note-taking. I **highly recommend** that you print out the Note-taking Guide (or purchase the pre-printed version from the SPC bookstore) and take notes on it as you watch videos and work through material in class.
- **Ask questions.** If you don't understand something ask questions on the Discussion Board, attend my office hours, ask questions by email, or arrange to meet with me individually online. I welcome your questions, and if you're struggling, it's important to get help early. Additionally, by asking questions, you take charge of your own learning.
- **Use the tools that I provide.** As an instructor, I believe that my job is to help you rise up to the high standards of this course. Therefore, I will provide you with a number of tools to support you in your learning.
 - Videos – You may re-watch the videos of me talking through course concepts by visiting my YouTube channel for the course at any point (link found in the 'Course Resources' section).
 - Primal Pictures – This database contains a 3D, rotatable online anatomy tool. You can access this tool at your own home for free by visiting the SPC library's database links (<https://library.southplainscollege.edu/az.php?a=p>).
 - Note-taking guide – This guide helps you structure your note taking during class, know when you have missed important points, and better review material when studying at home. All videos, quizzes and exams are designed to match what is covered in the note-taking guide.
 - Online games – The 'Course Resources' section of the course contains additional online games for each chapter of the course. Use the games to check your note-taking guide, to fill in portions of your note-taking guide, and to help you test what you know. The games files also write about tough topics in a slightly different way than the textbook and have helpful videos embedded within them.
 - PowerPoint slides – The PowerPoint slides that I use for the course are included in the note-taking guide and in the 'Course Resources' section of the course.
 - Lecture exam reviews – Each exam review lists topics on which you will be tested. Exams cover only the topics listed on reviews, which are found in the Note-taking guide.
 - Practical exam "terms to know" – Each chapter contains many anatomical structures. I will test you on only a subset of these structures, which are listed on the "terms to know" sheets in the Note-taking guide.
 - Hands-on Models – If you're local, you can visit the SPC Science Center, the Texas Tech main library or the Plainview Center and check out models for on-campus use. Make time to study with these models if at all possible.
 - Tutoring: Free SPC Tutors are available to all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit [this link](#) to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors, and view tutoring locations.
- **Study effectively.** Any biology course these days will have a **lot** of information, so making the most of your study time is key. Begin by making your own study aids. For example, make outlines and flash cards of course material as you read and review your notes. Create visual study aids where you draw out important structures and label key features. Doing this will help you to not only remember course concepts, but also better understand how they relate to each other. I also suggest that you practice writing out and linking concepts **by memory**, use blank versions of the note-taking guide as a study aid, create lists of questions that help you remember the material, and then practice answering those questions, filling out a blank note-taking guide, or recreating visual study aids **by memory**. You should do at least one or two of these activities each day. Finally, please note that reading text, notes, review guides, or images over and over again is the **LEAST EFFECTIVE** way to study for this class. Students who do not test their memories of course concepts when studying typically earn around a 40 to 50% on major examinations.

Evaluation Criteria:

- **Videos (4%)** –

- **Videos** – You will watch videos for each chapter of the course that have questions embedded within them. You should fill out your note-taking guide as you watch these videos. Write down questions about material that you do not understand and list your questions in the discussion board for each week.

The lowest five grades from this category will be dropped; therefore, no make-up work will be allowed. All other grades will be averaged and will be worth 4% of your final grade.

- **Lab quizzes and chapter quizzes (4%)** –

- **Lab quizzes** – Lab quizzes will be given in a fill-in-the-blank format. They are designed to mimic the lab practical exam format to give you a “heads-up” about how well you know the material, prior to major examinations, giving you time to adjust your study strategies.
- **Chapter quizzes** – Chapter quizzes will be a combination of multiple-choice, true/false, matching, identifications, fill-in-the-blank, and short answer questions. These quizzes are designed to give you a “heads-up” about how well you know course material, prior to major examinations, giving you time to adjust your study strategies. You may repeat chapter quizzes up to five times, receiving different questions each time. After the due date, you may view your entire quiz to guide your study efforts.

The lowest four grades from this category will be dropped; therefore, no make-up work will be allowed. All other quiz grades will be averaged and will be worth 5% of your final grade.

- **Attendance (2%)** – You must fulfill a weekly attendance requirement by making one Discussion Board entry each week that contains at least two questions on the video topics for the week. For a question to count, it must list a specific concept or idea for which you have a question. Questions that state something along the lines of, “I don’t get the entire video. Can you explain?” or “I don’t get the entire chapter” or “Is there an easy way or a trick to learn this?” will not count for credit. A great way to think of questions to ask is to look for blank spots in your note-taking guide and ask for help filling them out. Or, you can ask, “This is my understanding of concept X: (INSERT YOUR IDEAS HERE). Is this correct?” I will post my answers to your questions on the Discussion Board, so that all students can learn from each other’s questions and my answers. Discussion Board entries are generally due on Friday’s at 11:59 PM, except when Friday is a holiday. In those cases, Discussion Board entries are due the day before the holiday begins at 11:59 PM. The lowest grade from this section will be dropped; therefore, no make-up opportunities will be given.
- **Lecture examinations (65%)** – Five lecture exams will be given throughout the semester. The lecture exams will contain mostly multiple-choice questions. No lecture exam grades will be dropped. Please see the makeup policy for missed exams.
- **Practical examinations (25%)** – Your lab grade for the semester will be based on four lab practical examinations given in a fill-in-the-blank format. Word banks will not be given and terms must be spelled correctly for full credit. No lab practical grades will be dropped. Please see the makeup policy for missed exams.

Final grade determination: Grades are not curved under any circumstances and extra credit is not given.

90 - 100% = A 80 - 89% = B 70 - 79% = C 60 - 69% = D <60 = F

Class Policies:

- 1. Attendance:** Regular engagement with course material is necessary for satisfactory achievement. Therefore, I have made some sort of course assignment due every day. If you have four days' worth of non-submitted assignments, I may drop you from the course. If you are dropped from this course by me, you will receive a grade of "X", rather than "W", on your transcript. If you decide to stop attending class, it is your responsibility to immediately drop this course through the registrar's office to avoid being dropped by me for non-attendance. It is your responsibility to verify that you are dropped from this course using your student online account.
- 2. Withdrawal policy:** The last day to withdraw/drop with a grade of "W" is October 11th. It is your responsibility to withdraw from this course. Otherwise, you will be assigned their earned letter grade at the end of the course. Course averages will be updated at least twice each week, and guidance is available throughout the term to help you decide whether you need to drop the class or not. For more information regarding drops and withdrawals, please visit <https://www.southplainscollege.edu/admission-aid/apply/schedulechanges.php>.
- 3. Technical difficulties:** If you experience technical difficulties on a major exam, please *immediately* visit Proctorio support (<https://proctorio.com/support>) and open up a live chat with their 24/7 support staff from a computer (not a phone). If they cannot resolve your problem, please *immediately* email me and notify me about your difficulties, providing screenshots and other documentation as needed. After emailing me, regularly check your email over the next hour, in case of a reply. For other technical difficulties, please *immediately* call the SPC help desk at 806.716.2600.
- 4. Major exam protocol:** All major exams will be given online and these exams *must* be proctored. Therefore, you will be required to use webcam software ([Proctorio](#)) and an external webcam that records you while taking exams. You will be required to show official picture identification prior to the start of the exam and will not earn credit, regardless of your score, without showing identification.

The following table lists additional conduct requirements for online exams, as well as consequences for conduct violations:

Exam conduct requirement	Consequence for violation of exam conduct
Correct placement of webcam	A 30% penalty will be given for webcam placement that doesn't allow the instructor to view the testing environment, including your face and both hands, during the exam. See the video on Blackboard for a demonstration of correct webcam placement.
Complete environment scan	A 30% penalty will be given for an incomplete or insufficient scan of the testing environment. See the video on Blackboard for a demonstration of how to completely scan your testing environment.
Sufficient lighting of the testing environment	A 30% penalty will be given for an exam taken without enough lighting for the instructor to view the testing environment during the exam.
Student remains in webcam view during exam	A student who leaves the webcam view during an exam for any reason will receive a zero for that exam. If you have child or pet care issues mid-exam, be sure to take your computer and webcam with you, so that you remain on screen the entire time.
No unauthorized materials near desk area	A student who has any unauthorized materials (books, notes, blank paper, phone, another computer, etc.) near the testing area will receive a zero for that exam. You will be able to access a blank white board through the Proctorio exam settings that you can use as scratch paper during the exam.
No talking with other adults during the exam, no playing of music or other audio recordings, no wearing headphones.	A student who has any music or audio recordings playing during exams, who wears headphones, or who talks with any adult for any reason during the exam, will receive a zero for that exam. If you're worried about childcare during the exam, please contact me immediately for help brainstorming solutions. Generally, taking care of a child – particularly young children – mid-exam is not a problem, as long as you remain on camera the entire time.

Consequences for violating the above requirements will be suspended on the prior knowledge quiz, so that I can help you correct your honest mistakes. Look for an email from me with feedback on how your testing environment looked after you take the prior knowledge. Consequences will be suspended only on the prior knowledge quiz.

4. **Make-up policy for small assignments:** If you experience computer problems or miss an assignment, you will not be able to make up or retake the assignment. A missed assignment will result in a zero on that assignment, no exceptions. Instead, you are allowed to drop grades, as listed in the above sections. Therefore, I suggest that you use your dropped grades wisely.
5. **Make-up policy for major exams:** I know that life events sometimes arise and that unexpected computer problems sometimes occur. Therefore, if you experience computer problems or miss a major exam, you are allowed to make up the following, without providing me with an excuse: 1) one and only one practical exam; and 2) one and only one lecture exam. The make-up day for all missed exams is either within one week of the missed exam or on the Friday before final exams – whichever you prefer (as long as all missed exams are made up prior to the last day of the semester). Any other missed exams will result in a zero, regardless of the reason. Therefore, use these “free passes” wisely. If you already know of a conflict with an exam date, plan to take it early. Exams are open all semester long.

In addition to your free passes, you are welcome to take a comprehensive final lecture exam and/or a comprehensive final practical exam to replace one and only one lecture exam grade, as well as one and only one lab exam grade.

6. **Cyber bully:** Disorderly conduct, such as verbally abusive or intimidating emails, or subjecting another person to inappropriate, abusive, threatening, or demeaning actions will be subject to disciplinary action. Students who behave in a disorderly fashion may be required to withdraw from the course.
7. **Cheating:** Honesty and ethical behaviors are imperatives in any career. Therefore, cheating will not be tolerated. South Plains College’s “Student Conduct” guidelines will apply to all work in this course. Cheating includes, but is not limited, to all of the following:
 - Copying from another student’s paper.
 - Using test materials not authorized by me during the test.
 - Collaborating with or seeking aid from another student during a test without permission from the test administrator.
 - Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
 - The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
 - Substituting for another student, or permitting another student to substitute for one’s self, to take a test.
 - Bribing another person to obtain an unadministered test or information about an unadministered test.
 - The use of any testing materials that are prohibited.

If you have any questions about what constitutes your own work, definitely ask!

8. **COVID-19:** For information and resources about COVID-19, please visit <https://www.southplainscollege.edu/emergency/covid19-faq.php>.
9. **Other syllabus statements:** For information regarding Intellectual Exchange, Disabilities, Non-Discrimination, Title IX Pregnancy Accommodations, CARE (Campus Assessment, Response, and Evaluation) Team, and Campus Concealed Carry, please use the following link: <https://www.southplainscollege.edu/syllabusstatements/>.