

Human Physiology

BSC 3096 | Class #17125 | 3 Credits | Spring 2026

Course Info

INSTRUCTOR	Joslyn Ahlgren, PhD *Study tips and a personal note from Doc. A are on the last page Office: FLG 108 Office Phone: 352-294-1728 Email: jahlgren@ufl.edu Preferred Method of Contact: CANVAS email
OFFICE HOURS	Both live and virtual office hours will be offered this semester. A schedule, tips for how to best use office hours, and zoom info for office hours will be posted in CANVAS. Students can expect at least two office hours/week.
MEETING TIME/LOCATION	M,W,F Period 3 (9:35 – 10:25 AM) TUR L011

COURSE DESCRIPTION

The course involves the study of the functioning of human tissues, organs and organ systems, emphasizing the physical, chemical and mechanistic bases of normal physiology and the integrated function of the human body. The course also introduces pathophysiological changes associated with some human diseases.

PREREQUISITE KNOWLEDGE AND SKILLS

Either Integrated Principles of Biology 2 (BSC 2011) or Applied Human Physiology with Laboratory (APK 2105C), and General Chemistry 2 (CHM 2046) or Basic Chemistry Concepts and Applications 2 (CHM1031), all with a minimum grade of C, or permission of instructor.

REQUIRED AND RECOMMENDED MATERIALS

COURSE WEBSITE (E-LEARNING): Class materials, including the syllabus, grades, and other information related to the course will be posted on the CANVAS website for this course. You are responsible for all announcements posted on the course website for this class. For help with CANVAS, call the UF Computing Help Desk at 352-392-4357, or visit E-Learning support: <https://lss.at.ufl.edu/help.shtml>.

PRIMARY COURSE TEXTBOOK: Human Physiology: An Integrated Approach. 8th Edition, by Dee Unglaub Silverthorn. Pearson, 2015. ISBN-13: 978-0321981226

Please note that this course will be participating in the UF All Access program. Students have two options to gain access to the REQUIRED MasteringA&P with materials when classes begin (both options provide access to the same materials). Students will have the choice to "opt-in" to MasteringA&P access through Canvas once classes begin for a reduced price and pay for these materials through their student account. Students who do not choose to "opt-in" will be able to purchase a standalone MasteringA&P access code through the UF Bookstore. There will also be a loose-leaf print version of the textbook available at the UF Bookstore for students who wish to have a physical copy of the text.

COURSE FORMAT

Students will physically attend a one-period class three days each week. Students should read required textbook pages and print out or download PDF slides posted in CANVAS before attending lecture. This is an in-person course with no pre-recorded lectures. **Attendance is mandatory; attendance quizzes will be graded.**

COURSE LEARNING OBJECTIVES

By the end of this course, students should be able to...

- **Explain** physiological mechanisms of humans by applying basic principles of biology and chemistry.
- **Describe** the fundamental mechanisms underlying normal function of cells, tissues, organs, and organ systems in humans.
- **Explain** the basic mechanisms of homeostasis by integrating the functions of cells, tissues, organs, and organ systems.
- **Effectively solve** basic problems in physiology, working independently and in groups.
- **Apply** knowledge of functional mechanisms and their regulation to explain the pathophysiology underlying common diseases.

Course & University Policies

Details for all UF Course Policies can be found at [UF Academic Policies and Resources](#).

ATTENDANCE

Attending class is the only way to complete pop quizzes, which will take place across the term at regular intervals. **Pop quizzes cannot be made-up, but the lowest two scores will be dropped.** If you are absent from a class meeting for any reason, please get the notes from a friend in class or check the Sharing is Caring discussion board (where students regularly post their notes and audio recordings of the lecture). Keep all records for missed classes. If at the end of the term, you have more than two missed quizzes due to valid, documented reasons (e.g., illness with a doctor's note), the course instructor will work with you individually to develop a fair make-up.

PERSONAL CONDUCT & ACADEMIC INTEGRITY

All suspected honor code violations will be reported. Specifically, any use, access, or handling of technology or resources during an exam will result in a zero on the exam and further educational sanctions per the University.

APPROPRIATE USE OF AI TECHNOLOGY

The UF Honor Code strictly prohibits cheating. The use of any materials or resources prepared by another person or Entity (inclusive of generative AI tools) without the other person or Entity's express consent or without proper attribution to the other person or Entity is considered *cheating*. Additionally, the use of any materials or resources, through any medium, which the Faculty / Instructor has not given express permission to use and that may confer an academic benefit to a student, constitutes *cheating*. Best uses of AI technology in THIS course include things like generating practice exam questions or consolidation of information for better

understanding of complex concepts. Please note: not all AI resources provide accurate information. Students should use good judgement when consuming or using information from AI sources.

IN-CLASS RECORDING

In THIS course, students are permitted to post their notes and audio recordings only to the **Sharing is Caring discussion board** in CANVAS. Recordings of any kind may not be shared on any other platform or mechanism.

MAKE-UP POLICY

Step 1: Get documentation of your illness or emergency. A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. If you have an emergency/life event you wish to remain more private, you may contact the [Dean of Students Office](#) and follow the [DSO Care Team procedures](#) for assistance. **Your instructor has the final say on whether or not an absence is considered "excused."**

Step 2: Fill out the make-up request assignment in canvas – orientation module. Make-ups will not be granted for personal travel. Additionally, many students will have multiple exams in one day. Only if another exam is scheduled for the same time as an exam in this course will a make-up request be considered.

Should a student miss an exam due to an unexcused reason (e.g., overslept, mixed up the exam time, etc.), the exam can be taken with a 20% penalty if taken within 24 hours of the original exam time or with a 40% penalty if taken within 48 hours of the original time.

ACCOMMODATING STUDENTS WITH DISABILITIES

Students who are already registered with UF's DRC should share their accommodation letter with the course instructor and discuss their access needs as early as possible in the semester. You are also welcome to contact the [Disability Resource Center's Getting Started page](#) to begin this conversation or to establish accommodations for this or other courses. Your instructor welcomes feedback that will assist in improving the usability and experience for all students.

Grading

COURSE COMPONENTS & CALCULATING YOUR GRADE

The following table outlines the point-accruing components of this course. Any changes to this due to mid-semester interruptions will be posted as an announcement in CANVAS. Grades will be determined using the percentages in the table below.

Evaluation Components	Percent of Total Grade
Mastering A&P Homework	15%
Drawings	12%
Module Exams (3)	40%
Attendance Pop Quizzes (variable)	15%
Reflections (3)	3%
Partner Project (1)	15%

Mastering A&P Homework – Homework in MasteringA&P will be due Fridays at 11:59pm EST. Homework will include readings from the text. Additionally, there will be a handful of multiple choice, true/false, fill in the

blank, multiple answer, and/or matching questions. These questions are specific to the textbook, so that should be the primary resource for answering those questions. These are open-resource assignments, so students are encouraged to work on these question sets with peers. These assignments are NOT intended to be used as the primary study tool for preparing for exams. The function of the homework assignments is to (a) get students more familiar with the textbook, and (b) to get students eased into answering physiological questions. The following are specific homework grading guidelines to keep in mind:

- You may open/close an assignment as many times as you wish until it is due.
- For the fill in the blank questions, spelling and proper tense of the word matters for accuracy.
- Late submissions will be penalized 25% per day.

Drawings – At various points in the semester (weekly or biweekly), students will be asked to submit drawings of course content. Some of these drawings will be completed during lectures...others will be in the form of “homework.” These will be graded on completion and accuracy...*not on artistry*. Each drawing will be worth 2 points total. There will be a 1-point deduction for an incomplete drawing...and a 1-point deduction for an inaccurate drawing. **Late submissions will not be accepted.**

Module Exams – Module exams will assess students only the chapters presented in each module. Exams will be multiple choice and true/false style questions. Exams will be taken during normal class times and in the same location as the lectures (see schedule below for dates). Exams will assess students on the Chapter Learning Objectives for each chapter covered in the module, as well as ability to use that information to solve clinically, scientifically relevant problems. These tests aim to assess depth of knowledge.

Attendance Pop Quizzes – Pop quizzes will be given in-class between 8-12 times during the semester. Quizzes cannot be made up since the lowest two scores are dropped (extenuating circumstances should be reported to the course instructor). For attendance, simple completion of a quiz will count as full credit per quiz. Accuracy of the quiz answer can earn students extra credit. In total, students can earn up to 5 points of extra credit from pop quizzes. Each quiz will contain 1-3 questions from the previous lecture’s content. Studying on a daily basis is the best way to prepare for these quizzes.

Reflections – At the conclusion of each module, students will answer a few short essay questions prompting them to reflect on various aspects of the content. These will be CANVAS assignments and specific instructions will be provided. These will be graded on completion and alignment of the response to the prompt. **Late submissions will not be accepted.**

Partner Project – You will work with a partner of your choice on a multi-part project that explores a clinical or scientific topic in the field of physiology. This project will involve selection of a unique topic (no one else in class can have the same topic), both scientific/medical explanations as well as lay explanations, exploration of the history and scholarship of the topic selected. A detailed rubric will be provided in canvas.

Extra Credit – A total of 7 points of extra credit can be earned in this class (see list below) and this will be treated as “exam recovery”. That is, all extra credit will be added to your module exam scores up to a perfect score (cannot score higher than perfect on any one exam). Detailed descriptions and grading rubrics for each of these options will be posted in canvas. All extra credit must be completed by the last regular class meeting.

- 5 points - accuracy of answers on attendance pop quizzes
- 1 point - help the course instructor learn your name
- 1 point - oral presentation of a clinical/scientific correlation during office hours

GRADING SCALE

There is no curve for this course and final grades will not be rounded up. The percentages shown in the table below will be used to calculate grades. Plus and minus grades ARE employed in this course. More detailed

information regarding current UF grading policies can be found at [UF Grades and Grading Policies](#). *It is entirely inappropriate to ask your instructor for individualized exceptions to this grading scale. Any such requests will be respectfully ignored.*

Letter Grade	Percent Needed for Each Letter Grade	GPA Impact
A	93.00-100%	4.0
A-	90.00-92.99%	3.67
B+	87.00-89.99%	3.33
B	83.00-86.99%	3.0
B-	80.00-82.99%	2.67
C+	77.00-79.99%	2.33
C	73.00-76.99%	2.0
C-	70.00-72.99%	1.67
D+	67.00-69.99%	1.33
D	63.00-66.99%	1.0
D-	60.00-62.99%	0.67
E	0-59.99%	0

Weekly Course Schedule

CRITICAL DATES & UF OBSERVED HOLIDAYS

- Jan 12: Classes Begin
- Jan 12-16: Drop/Add
- Jan 19: MLKJ Day
- Mar 14-21: Spring break
- Apr 22: Last day of classes
- Apr 23-24: Reading days
- Apr 25 - May 1: Finals week

WEEKLY SCHEDULE

The following table represents current plans for the term. Any changes to this plan will be posted in CANVAS.

Read the syllabus, look at all pages of the orientation module in canvas, and take the course orientation quiz before coming to class on day one. Earning a 100% on the syllabus quiz will give you access to course modules.

Week	Dates	Lecture Topics (<i>Reading</i>)	Due Dates
1	Jan 12 – Jan 16	Ch. 1-4 Highlights Ch. 5 – Membrane Dynamics	HW due Fri at 11:59pm
2	Jan 19 – Jan 23	Mon, Jan 19 – Honor MLKJ, a great human – no class Ch. 5 Continued	HW due Fri at 11:59pm
3	Jan 26 – Jan 30	Ch. 6 – Communication, Integration, Homeostasis Ch. 7 – Introduction to The Endocrine System	HW due Fri at 11:59pm

4	Feb 02 – Feb 06	Ch 7 Continued Wed, Feb 04 - Module 1 Exam Ch. 8 – Neurons, Cellular and Network Properties	Reflection 1 - Mon at 11:59pm HW due Fri at 11:59pm
5	Feb 09 – Feb 13	Ch. 8 Continued Ch. 9 – Central Nervous System	Project Part 1 – Fri at 11:59pm HW due Fri at 11:59pm
6	Feb 16 – Feb 20	Ch. 9 Continued Ch. 10 – Sensory Physiology	HW due Fri at 11:59pm
7	Feb 23 – Feb 27	Ch. 11 – The Efferent Division	Project Part 2 – Fri at 11:59pm HW due Fri at 11:59pm
8	Mar 02 – Mar 06	Ch. 12 – Muscles Ch. 13 (time-permitting)	HW due Fri at 11:59pm Reflection 2 - Fri at 11:59pm
9	Mar 09 – Mar 13	Mon, Mar 09 – Module 2 Exam Ch. 14 – Cardiovascular Physiology	HW due Fri at 11:59pm
10	Mar 16 – Mar 20	Spring Break	
11	Mar 23 – Mar 27	Ch. 15 – Blood Flow and Control of Blood Pressure	Project Part 3 – Fri at 11:59pm HW due Fri at 11:59pm
12	Mar 30 – Apr 03	Ch. 17 – Mechanics of Breathing	HW due Fri at 11:59pm
13	Apr 06 – Apr 10	Ch. 18 – Gas Exchange and Transport	HW due Fri at 11:59pm
14	Apr 13 – Apr 17	Ch. 19 – The Kidneys Ch. 20 – Fluid and Electrolyte Balance	Project Part 4 – Fri at 11:59pm HW due Fri at 11:59pm
15	Apr 20 – Apr 24	Wed, Apr 22 – Module 3 Exam Thurs/Fri, Apr 23-24 – Reading Days – No Class	Reflection 3 - Mon at 11:59pm HW due Tues at 11:59pm

There is no final exam in this course...the last exam will be the last class meeting.

Study and Success Tips

STUDY TIPS

- **Read from the text BEFORE attending the lectures.** *Do not take notes, underline, highlight, or attempt to memorize anything...JUST READ and enjoy!*
- **Snowball your notes.** Begin studying lecture material immediately after the first day. Then, after the second lecture, begin your studies with day one notes. Continue this all the way up to the exam.
- **Study from lectures notes...not the text.** If there is something in the textbook that was NOT covered in lectures, you are not expected to know it. There is a lot in the text that we don't have time to cover.

- **Google novel images.** For example, if there is a picture of the brainstem in your lecture notes, Google “brainstem images” and see if you can identify the structures from the lecture on a different image.
- **Google diseases.** For example, if we are studying bone tissue, Google “bone disease.” Click on any link and just read a paragraph to see if you can understand based on what you now know about bone tissue anatomy. If you don’t understand it, that’s okay...did you recognize any words?
- **Study with others!** This does not mean review ppt slides together...you can do that on your own. When you study with others, do something more productive, like working on the sample test questions, googling things to discuss, or even creating practice exam questions for yourselves.
- **Study from the Learning Objectives for each chapter.** It is highly recommended that as you study (especially with others), you follow along with the learning objectives for each chapter. Many students share google docs and split up the work to make comprehensive study guides.

SUCCESS TIPS

- **Stay on top of your schedule.** This course moves at a FAST pace...and you can easily get overwhelmed if you procrastinate. Complete the homework as you go and study for the exam on a daily basis.
- **Stay organized.** Keep track of all important due dates and move through each day in a uniform manner so that you are always aware of what you have done and what is left to be completed.
- **Utilize office hours.** Office hours are a time for you to engage with the instructor as well as classmates. You can ask clarification questions, listen to questions from others, and discuss related clinical topics.
- **Join the class group me.** Your instructor posts updates there, it’s a nice way to build a fun learning community, and your instructor prefers to answer quick questions THERE rather than discussion boards in canvas. A link will be posted in canvas announcements.
- **Set up canvas notifications so that you receive and read all class announcements.**
- **Avoid Smokin’ Notes...**seriously...don’t get me started on how bad these are for *LEARNING*. Take your own notes...swap notes with friends in class for comparison...but for goodness sake, don’t spend extra money on notes for this class.
- **Have a positive attitude! *THIS STUFF IS COOL!***

PERSONAL NOTE FROM DOC. A

Physiology is all about the human body—and the best possible use of this content is to use it to advocate for yourself and others in medical situations. Another fabulous use of this content is to use it to drive your curiosity and dive deeper into topics that interest you so that you can contribute scientifically to a greater body of knowledge, which helps everyone. As you learn about physiology this semester, I encourage you to use this time to lean into difficult moments, learn from your mistakes, and embrace all aspects of the learning journey...knowing that what you are doing is deeply meaningful.

Welcome to Human Physiology...it's going to be a great semester!