

# Human Physiology

BSC 3096 (18081) | 3 Credits | Spring 2025

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## 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 if you are a current student

### 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.

### LECTURE TIME & LOCATION

MWF Period 3 (9:35-10:25am)  
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

### ATTENDANCE POLICY

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.** There will also be some days that class time will be used for active learning exercises. Pop quizzes could occur on an active learning day, so attendance is strongly encouraged – *also these are fun learning days!* 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).

### PERSONAL CONDUCT POLICY

Students are expected to exhibit behaviors that reflect highly upon themselves and our University. University of Florida students are bound by the Honor Pledge. On all work submitted for credit by a student, the following pledge is required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The [Student Honor Code and Conduct Code \(Regulation 4.040\)](#) specifies a number of behaviors that are in violation of this code, as well as the process for reported allegations and sanctions that may be implemented. All potential violations of the code, regardless of severity, will be reported to Student Conduct and Conflict Resolution. If a student is found responsible for an Honor Code violation in this course, the instructor will enter a Grade Adjustment sanction which may be up to or including failure of the course. Specifically, any use, access, or handling of technology 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*.

## IN-CLASS RECORDING

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session. Publication without permission of the instructor is prohibited.

To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

## 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 you wish to remain more private, you may contact the [Dean of Students Office](#) and follow the [DSO Care Team procedures](#) for assistance.

**Step 2: Fill out the make-up request assignment in canvas.** Make-ups will not be granted for personal travel/vacations. 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.

Requirements for class attendance and make-ups, assignments, and other work are consistent with the university policies found [here](#).

## ACCOMMODATING STUDENTS WITH DISABILITIES

Your instructor is committed to creating a course that is inclusive in its design. If you encounter barriers, please let your instructor know immediately so they can determine if there are adjustments that can be made or if accommodation might be needed. 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.

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. Students who take their tests at the DRC testing center must get their tests approved in the [GATR Portal](#) at least 4 business days prior to each exam. Students who fail to do this will be expected to take their exams in class without accommodation.

## COURSE EVALUATIONS

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available [here](#). Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [this website](#). Summaries of course evaluation results are available to students at that site.

## Getting Help

### HEALTH & WELLNESS

- **U Matter, We Care:** If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- **Counseling and Wellness Center:** Visit the [Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the [Student Health Care Center website](#).
- **University Police Department:** Visit [UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; or visit the [UF Health Emergency Room and Trauma Center website](#).
- **GatorWell Health Promotion Services:** For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273-4450.

### ACADEMIC RESOURCES

- **E-learning technical support:** Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).
- **Career Connections Center:** Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- **Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources.

- **Teaching Center:** Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- **Writing Studio:** 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- **Student Complaints & Grievances:** Students are encouraged to communicate first with the involved person(s), but [here](#) is more information on the appropriate reporting process.

## APK ADMINISTRATORS

For suggestions or concerns related to APK courses or programming, please reach out to any of the following:

- Dr. David Vaillancourt (he/him), APK Department Chair, [vcourt@ufl.edu](mailto:vcourt@ufl.edu)
- Dr. Demetra Christou (she/her), APK Department Vice Chair, [ddchristou@hhp.ufl.edu](mailto:ddchristou@hhp.ufl.edu)
- Dr. Steve Coombes (he/him), APK Graduate Coordinator, [scoombes@ufl.edu](mailto:scoombes@ufl.edu)
- Dr. Joslyn Ahlgren (she/her), APK Undergraduate Coordinator, [jahlgren@ufl.edu](mailto:jahlgren@ufl.edu)

## 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.

Course Components (number of each)	% of Total Grade
Mastering A&P Homework	20%
Module Exams (3)	45%
Attendance Pop Quizzes (variable)	15%
Reflections (2)	5%
Partner Project (1)	15%
Extra Credit (can earn up to 10 pts)	0%

*Mastering A&P Homework* – Homework in MasteringA&P will be due Fridays at 11:59pm EST. Homework problems are multiple choice, true/false, fill in the blank, multiple answer, and matching. 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 counts.
- For multiple choice and fill-in-the-blank questions, you are penalized 50% if you miss on the first attempt and 100% if you miss on the second attempt.
- For true/false questions, you are penalized 100% if you miss on the first attempt.
- You are penalized a small fraction for opening a hint if one is available.
- Late submissions will be penalized 25% per day.

*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 content presented as well as ability to use that information to solve clinically, scientifically relevant problems. These tests aim to assess depth of knowledge, so focus should be given to lecture notes and chapter learning objectives when preparing.

*Attendance Pop Quizzes* – Pop quizzes will be given in-class between 8-12 times during the semester. The two lowest scores will be dropped. **Quizzes cannot be made up.** For attendance, simple completion of a quiz will count as full credit per quiz. Accuracy of the quiz answer can earn students extra credit (specific to the quiz...easier questions will be worth less; more challenging questions will be worth more). **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 midterm and at the end of the term, students will answer a few short essay questions prompting them to reflect on various aspects of the course. 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. Points will be removed for not answering the prompt(s) provided, incomplete answers, or lack of courtesy/professionalism. Out of respect for students who speak English as a second language or who may process language differently than the instructor, grammar and spelling will not be considered in grading. However, please use complete sentences where applicable (capital letter at beginning of sentences, punctuation at end of sentences, etc.). Any points removed will be explained in the comments section of the gradebook.

*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 10 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 day of class.

- 8 points of extra credit can be earned from accuracy of answers on attendance pop quizzes
- 1 point of extra credit can be earned by helping the course instructor learn your name
- 1 point of extra credit can be earned from an oral presentation of a clinical correlation during office hours
- 3 points of extra credit can be earned from hand-drawn images of challenging course content (one per module...due prior to each module exam)

## GRADING SCALE

There is no curve for this course and grades will not be rounded. Minus grades are not assigned. The percentages shown in the table below will still be used to calculate grades. More detailed information regarding current UF grading policies can be found [here](#). ***It is entirely inappropriate to ask your instructor or Lab TA for individualized exceptions to this grading scale. Any such requests will be respectfully ignored.***

Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
A	90.00-100%	4.0
B+	87.00-89.99%	3.33
B	80.00-86.99%	3.0
C+	77.00-79.99%	2.33
C	70.00-76.99%	2.0
D+	67.00-69.99%	1.33
D	60.00-66.99%	1.0
E	0-59.99%	0

## Weekly Course Schedule

### WEEKLY SCHEDULE

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

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 all course contents (lecture and lab slides, etc.).

Homework for each chapter is due every Friday at 11:59pm EST. You must register for MasteringA&P (instructions posted in CANVAS) to access the homework.

Specific pages to read from the textbook are posted in CANVAS for each chapter.

Week	Dates	Lecture Schedule (Text Chapters/Topics)
1	Jan 13 – Jan 17	Ch. 1-4 Highlights
2	Jan 20 – Jan 24	<i>Monday is a holiday – no class</i> Ch. 5 – Membrane Dynamics
3	Jan 27 – Jan 31	Ch. 5 Continued Ch. 6 – Communication, Integration, Homeostasis
4	Feb 03 – Feb 07	<b>Exam 1: Chapters 1-4 highlights, 5, 6 – Mon, Feb 03</b> Ch. 7 – Introduction to The Endocrine System
5	Feb 10 – Feb 14	Ch. 8 – Neurons, Cellular and Network Properties
6	Feb 17 – Feb 21	Ch. 9 – Central Nervous System Ch. 10 – Sensory Physiology
7	Feb 24 – Feb 28	Ch. 11 – The Efferent Division
8	Mar 03- Mar 07	Ch. 12 – Muscles Ch. 13 – Integration of Muscles with Nervous System
9	Mar 10 – Mar 14	<b>Exam 2: Chapters 7-13 – Mon, Mar 10</b> Ch. 14 – Cardiovascular Physiology
10	Mar 17 – Mar 21	<b>Spring break: do whatcha gotta do to be okay this week!</b>
11	Mar 27 – Mar 28	Ch. 15 – Blood Flow and Control of Blood Pressure



12	Mar 31 – Apr 04	Ch. 17 – Mechanics of Breathing
13	Apr 07 – Apr 11	Ch. 18 – Gas Exchange and Transport
14	Apr 14 – Apr 18	Ch. 19 – The Kidneys Ch. 20 – Fluid and Electrolyte Balance
15	Apr 21 – Apr 25	<b>Exam 3: Chapters 14, 15, 17-20 – Wed, Apr 23</b> Thurs & Fri are reading days – no class

## SUCCESS AND STUDY TIPS

The following tips have been provided by both your course instructor as well as students who've been successful in the course.

### 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**

Finally, Physiology is all about the human body. That includes subjects like differences and similarities from one individual to the next and identifying and correcting myths about how the body functions. I am committed to using this course content to help students become comfortable, competent, and caring when discussing controversial issues related to the body and dismantling systems which put some students at a greater disadvantage than others. These attributes can help us all advocate for ourselves and others. If you have ideas for me along these lines or feel uncomfortable at any point, please reach out to me—I'd love to hear your perspectives and have a conversation. Also, it is important to me that you feel welcome and safe in this class; and that you are comfortable communicating with me, your TA, and your classmates. If your preferred name is not what shows on the official UF roll, please let me know—I can show you how to change it. I would like to acknowledge the name and pronouns that reflect your identity.

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