

HUMAN PHYSIOLOGY

BSC 3096 ~ 3 CREDITS ~ SPRING 2021

INSTRUCTOR:

Joslyn Ahlgren, Ph.D. (she/her/hers)

Office: FLG 108

Office Phone: 352-294-1728

Email: jahlgren@ufl.edu Preferred: CANVAS email

PERSONAL NOTE FROM DOC. A: If you are totally overwhelmed by the stresses of your semester and feel like you just can't handle the pressure, please reach out to me—I'd like to help.

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 would like to acknowledge your preferred name and pronouns that reflect your identity. You may also change your "Display Name" in Canvas. Canvas uses the "Display Name" as set in myUFL. The Display Name is what you want people to see in the UF Directory, such as "Ally" instead of "Allison." To update your display name, go to one.ufl.edu, click on the dropdown at the top right, and select "Directory Profile." Click "Edit" on the right of the name panel, uncheck "Use my legal name" under "Display Name," update how you wish your name to be displayed, and click "Submit" at the bottom. This change may take up to 24 hours to appear in Canvas. This does not change your legal name for official UF records.

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 actively anti-racist and feel more comfortable, competent, and caring when discussing controversial issues related to the human body. 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.

OFFICE HOURS: All office hours will be held via zoom and a schedule with login information will be posted in CANVAS

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

MEETING LOCATION: For students enrolled in the live section: **LAR 330**
For students enrolled in the 80-99% online section: **Zoom**

COURSE FORMAT: In order to adhere to the physical distancing guidelines, only students registered in the live section may attend lectures in the classroom. During those lectures, online students can “attend” via a zoom link that will be provided in CANVAS. Students will attend, take notes, and participate in lectures (be ready...Doc. A asks a lot of questions during lectures!) three days each week. Students will complete weekly homework assignments which are open-resource and will take four mid-term exams which are closed-notes. Along with each exam, students will complete a reflection assignment. Students who are dissatisfied with their grade at the end of the semester may CHOOSE to take a comprehensive final exam that will replace their lowest midterm exam score.

GENERAL 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.

PREREQUISITES: 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.

COURSE GOALS: 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.
- Generate hypotheses about physiological processes, design experiments to test these hypotheses, and then analyze, interpret and report experimental results.

REQUIRED COURSE MATERIALS/TEXT:

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):

1. 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.
2. 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 POLICIES:

ATTENDANCE POLICY: Attendance will not count toward your grade in any way. Students who attend live lectures will need to display their "cleared" status on their cell phone as they enter the classroom. Anyone not "cleared" to be on campus is not permitted to attend live lectures. All lectures will be recorded and posted in CANVAS.

FERPA: Aspects of this course may be recorded for students in the class to revisit. If you participate with your camera engaged or utilize a profile image, you are agreeing to have yourself/image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image during recorded sessions. Students who un-mute during class and participate orally during recorded sessions are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded, you will need to keep your mute button activated and communicate using the "chat" feature.

MAKE-UP POLICY: To arrange a make-up exam or homework due date extension, please fill out the **make-up request form** posted in CANVAS and submit it to your course instructor via CANVAS email. Documentation will be required. Make-ups will not be granted for personal travel/vacations. Additionally, many students will encounter having multiple exams in one day. Only if another exam is scheduled for the same

time/overlaps with this course's exams will a request be considered. In the case that a student misses an exam due to an unexcused reason (i.e. overslept, mixed up the exam time, forgot about differences in time zones, 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 exam time.

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 illness, family emergency or death, please contact the Dean of Students Office (www.dso.ufl.edu) and follow the DSO Care Team procedures for documentation and submission of a request for make-up assignment (<https://care.dso.ufl.edu/instructor-notifications/>). The DSO will contact the instructor. Do not provide any documentation to the instructor regarding illness or family emergency. This is your personal and protected information. The DSO is qualified to receive and verify the documents you provide. The instructor will follow the recommendations from the DSO.

Requirements for class attendance and make-ups, assignments, and other work are consistent with the university policies that can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

USABILITY, DISABILITY AND DESIGN: I am committed to creating a course that is inclusive in its design. If you encounter barriers, please let me know immediately so that we can determine if there is a design adjustment that can be made or if an accommodation might be needed to overcome the limitations of the design. I am always happy to consider creative solutions as long as they do not compromise the intent of the assessment or learning activity. You are also welcome to contact the Disability Resource Center's Getting Started page at <https://disability.ufl.edu/students/get-started/> to begin this conversation or to establish accommodations for this or other courses. I welcome feedback that will assist me in improving the usability and experience for all students. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. *It is imperative that you verify your specific access needs with your course instructor at least 48 hours PRIOR to scheduled assessments.*

PERSONAL CONDUCT POLICY: Students are expected to exhibit behaviors that reflect highly upon themselves and our University:

- Read and refer to the syllabus
- Arrive to lecture and lab on time (*a few minutes early*)
- Show respect for the authority of the course instructor through politeness and use of proper titles (e.g., "Dr. Ahlgren" or "Doc. A" or "Mrs. Ahlgren")
- Use of professional, courteous standards for all emails and discussions:
 - Descriptive subject line
 - Address the reader using proper title and name spelling
 - Body of the email should be concise but have sufficient detail

- Give a respectful salutation (e.g., thank you, sincerely, respectfully)
- No textspeak (e.g., OMG, WTH, IMO)
- No texting or checking Face Book (or the like) during class/lab instruction time
- No personal conversations during class/lab instruction time
- Adherence to the UF Student Honor Code:
 - <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>
 - Honor code violations of any kind will not be tolerated and sanctions will be determined by the course instructor for first-time violators
 - Any use, access, or handling of technology during an exam will result in a zero on the exam **and** further sanctions (potential failure of the course)
 - All allegations, regardless of the severity, will be reported to the Dean of Students Office for University-level documentation and processing

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 at <https://gatorevals.aa.ufl.edu/students/>. 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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

GRADING:

The table below outlines point-accruing components of the course and their relative weight in the overall grading scheme.

Evaluation Components	% of Total Grade
Midterm Exams (4)	60%
MasteringA&P Homework	30%
Reflections (4)	10%
Comprehensive Final (optional)	Replace lowest midterm exam grade

Midterm Exams – Each midterm exam will assess baseline knowledge and application/transfer of information from the student learning objectives (SLOs) associated with chapters covered in that particular module. *Studying at the last minute is strongly discouraged.* Each exam could consist of multiple-choice, multiple-answer, true-false, fill-in-the-blank, ordering, and matching types of questions. *Exams are intended to be challenging but fair.* The number of questions on each exam may vary (30-40), but you will have 50 minutes to complete the exam. *Exams will be completed in the form of a CANVAS quiz.*

Mastering A&P Homework – There will be questions available from each chapter that correspond with the reading assignments from the text. These will be due each Friday at 11:59pm EST. These homework problems are NOT designed as a study guide/practice for the exams. Instead, these are to be used as a mechanism to keep you on-task and consistently checking your comprehension of basic physiological concepts/facts as you work through each chapter. The following grading policies apply to Mastering HW:

- You may open/close each homework as many times as you wish up to the due date.
- Late submissions will be penalized 25% per day late.
- For multiple choice and true/false questions, incorrect responses will be deducted: $100\% / (\# \text{options} - 1)$
- For other types of questions (such as drag and drop), you will get a 10% deduction for each incorrect submission attempt up to the final attempt. You are permitted six attempts.
- For fill in the blank questions, spelling and grammar count.

Reflections – Following each exam, students will answer a few questions prompting them to reflect on what they have learned in that particular module. These will be CANVAS assignments and specific instructions will be provided within those assignments.

Comprehensive Final Exam – The final exam is optional. Anyone who chooses to take the final exam is opting to use that score to replace their lowest midterm exam score. The comprehensive final will be given during finals week, so students will have two hours to complete it. This exam will be administered as a quiz in CANVAS.

GRADING SCALE: Any discrepancies with the gradebook should be pointed out to the instructor before the last reading day. **There is no curve for this course and final grades will not be rounded up.** See the UF undergraduate catalog for information regarding current UF grading policies: <https://catalog.ufl.edu/search/?search=grading+policies>.

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

Any requests for extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e., asking for preferential treatment) and will be handled

accordingly. Minus grades are not assigned for this course. A minimum grade of C is required for all critical tracking courses.

GETTING HELP:

HEALTH AND WELLNESS

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575
- Counseling and Wellness Center: <https://counseling.ufl.edu/>, 352-392-1575
- Sexual Assault Recovery Services (SARS) - Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies)
<http://www.police.ufl.edu/>

ACADEMIC RESOURCES

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. <https://career.ufl.edu/>
- Library Support, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- Student Complaints On-Campus: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/> On-Line Students Complaints: <http://distance.ufl.edu/student-complaint-process/>

INCLUSION, DIVERSITY, EQUITY, AND ACCESSIBILITY (IDEA) RESOURCES

For suggestions or concerns related to IDEA, please reach out to any of the following:

- Dr. Leo Ferreira, APK IDEA Liaison, ferreira@hhp.ufl.edu
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

COURSE SCHEDULE:

Any changes to this schedule will be posted in CANVAS as an announcement.

Week	Dates	Weekly Content/Chapter/Topic
1	Jan 11 – Jan 15	Chapter 1 – Intro to Physiology Chapter 2 – Molecular Interactions Chapter 3 – Compartmentation: Cells and Tissues

2	Jan 18 – Jan 22	Mon: Holiday – no class! Chapter 4 – Energy and Cellular Metabolism Chapter 5 – Membrane Dynamics
3	Jan 25 – Jan 29	Chapter 6 – Communication, Integration, and Homeostasis
4	Feb 01 – Feb 05	Mon Feb 01: Exam 1 – 9:35am EST - CANVAS Chapter 7 – Intro to the Endocrine System
5	Feb 08 – Feb 12	Chapter 8 – Neurons: Cellular and Network Properties
6	Feb 15 – Feb 19	Chapter 9 – The Central Nervous System
7	Feb 22 – Feb 26	Chapter 11 – Efferent Division: ANS and Somatic Motor Control Fri Feb 26: Exam 2 – 9:35am EST – CANVAS
8	Mar 01 – Mar 05	Chapter 12 - Muscles Chapter 13 – Integrative Physiology I: Control of Movement
9	Mar 08 – Mar 12	Chapter 14 – Cardiovascular Physiology
10	Mar 15 – Mar 19	Chapter 15 – Blood Flow and Control of Blood Pressure
11	Mar 22 – Mar 26	Mon Mar 22: Exam 3 – 9:35am EST - CANVAS
12	Mar 29 - Apr 02	Chapter 17 – Mechanics of Breathing Chapter 18 – Gas Exchange and Transport
13	Apr 05 – Apr 09	Chapter 19 – The Kidneys
14	Apr 12 – Apr 16	Chapter 20 – Fluid-Electrolyte Balance

15	Apr 19 – Apr 23	Mon Apr 19: Exam 4 – 9:35am EST - CANVAS Wed: Review for final exam Thurs/Fri: Reading days – no classes
Comprehensive Final Exam (if you choose to take it) – Mon Apr. 26, 10am-12pm		

STUDY and SUCCESS TIPS:

- Read the textbook and watch any video links in the chapters
- **Review the chapter learning objectives prior to reading and use these to guide your studying**
- Study both independently AND with others
- Snowball your studies. Each time you review your course notes, start from the first chapter of the exam material.
- Read and attempt to complete the MasteringA&P homework problems before attending lecture and active learning sessions each week
- Attend office hours and/or reach out to the course instructor ASAP if you feel you are getting off-track...do not wait until late in the semester
- Set aside dedicated time to study for this class every week (preferably every day). Put it in your planner and stick to the plan!
- Ask questions in and outside of class. If your syllabus doesn't have the answer, please ask!
- Don't get behind! This class will cover a LOT of content, so staying on-task is imperative.
- Make sure you understand the figures and graphs...this is a topic that most new physiology students struggle with and/or simply overlook. You should be able to look at just about any graph and describe what story it is telling. What are the axes? What are the variables? What the heck is going on and why? What might make this graph change and why? This is where studying with others can really be helpful! 😊
- ***Check the CANVAS announcements daily. Changes to the schedule are possible.***
- ***Set up your CANVAS notifications so you receive announcements immediately.***