

## APPLIED HUMAN PHYSIOLOGY WITH LAB

APK 2105C -- 4 CREDITS -- SPRING 2020

**INSTRUCTOR:** **Diba Mani, Ph.D.**  
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 Preferred Method of Contact: Canvas

**OFFICE HOURS:** Posted on Canvas

**MEETING TIME/LOCATION:** You will NOT attend lectures in a classroom. Instead, lectures will be available online in Canvas. You will need your UFID to access the lecture videos. You WILL attend labs in a classroom on campus (107D or 107E), as well as for the four exams (TURL L007).

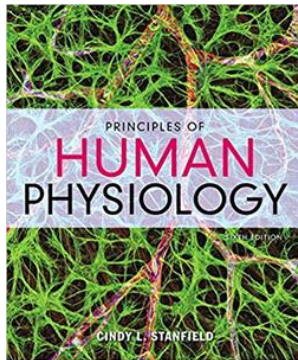
CLASS #	SECTION #	LAB DAY & TIME	LAB LOCATION
10634	3H60	T   Period 1-2 (7:25 AM – 9:20 AM)	FLG 107D
10648	8212	W   Period 1-2 (7:25 AM – 9:20 AM)	FLG 107E
10641	5658	W   Period 3-4 (9:35 AM – 11:30 AM)	FLG 107E
10644	7590	W   Period 6-7 (12:50 PM – 2:45 PM)	FLG 107D
10694	2H85	W   Period 9-10 (4:05 PM – 6:00 PM)	FLG 107E
10643	7589	R   Period 5-6 (11:45 AM – 1:40 PM)	FLG 107D
10647	8210	R   Period 7-8 (1:55 PM – 3:50 PM)	FLG 107D
10645	7785	R   Period 8-9 (3:00 PM – 4:55 PM)	FLG 107E
10646	7990	F   Period 4-5 (10:40 AM – 12:35 PM)	FLG 107D
10642	7588	F   Period 4-5 (10:40 AM – 12:35 PM)	FLG 107E

**COURSE DESCRIPTION:** This physiology course will introduce students to the functions of the human body at the cellular, tissue, organ, systemic, and organismal levels with heavy emphasis on mechanisms of action.

**PREREQUISITE KNOWLEDGE AND SKILLS:** Sophomore, Junior, or Senior status. Any previous experiences in the following areas may be helpful to students: medical terminology, anatomy, physics, chemistry, and/or biology. Students do *not* need to have taken any of these courses to be successful in this course.

**REQUIRED AND RECOMMENDED MATERIALS:** For this course, students must access two resources: (1) the textbook, and (2) Mastering A&P website (where lab modules will be completed). There are a couple options regarding how to gain access to these required course materials.

Textbook: Stanfield, Cindy L. *Principles of Human Physiology*. 6<sup>th</sup> edition. Mobile, AL: Pearson, 2017.



Mastering A&P online program access. Students may “opt-in” to acquire access via link in Canvas for a reduced price and pay for these materials through their UF student account, which gives access to an e-version of the textbook and access to Mastering A&P. To do this, log into your Canvas account and navigate to the APK 2105C course homepage. On the left-hand side of the window, select “My Lab and Mastering”, and then follow the prompts accordingly. Students who do not choose this option will be able to purchase an access code through the UF Bookstore. Both options provide access to the same online materials. There will also be a discounted, loose-leaf print version of the textbook available at the UF Bookstore for students who would like a physical text for the course. Copies of the textbook are available through the UF library system course reserves.

If you already have a copy of the textbook, you will still need to purchase the access code that provides you access to My Lab and Mastering/Mastering A&P; there is not a way to purchase an access code without the e-textbook, these materials are bundled together.

**COURSE FORMAT:**

Lectures: Students will watch pre-recorded lecture videos. It is recommended that you read the text in advance of this and then take good notes during the lectures.

Labs: Students will meet during their lab times with a graduate Teaching Assistant (TA), who will lead them through experiments and discussions. About half of the labs will be completed through Mastering A&P (accessed via Canvas). For these online modules, students will perform simulations and then answer a series of questions. The graduate TAs are the primary resource for the lab component of the course (activities, quizzes, and related grades).

Exams: Students will meet with the course instructor for a total of four exams. These exams will take place in TURL L007.

**COURSE LEARNING OBJECTIVES:** Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems. Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments. The following table describes the UF General Education student learning outcomes (SLOs) and the specific learning objectives for APK 2105C. By the end of this course, students should be able to:

General Ed SLOs	APK 2105C Course Goals	Assessment Method
<p><b>Content:</b> Demonstrate competence in the terminology, concepts, methodologies, and theories used within the discipline.</p>	<ul style="list-style-type: none"> <li>• Describe the basic structures as well as the basic and more complex functions of the cell, the endocrine, nervous, muscular, cardiovascular, respiratory, and renal systems</li> <li>• Name and give examples of key physiological themes and basic regulatory mechanisms for sustaining life/health (e.g. homeostasis, negative and positive feedback)</li> <li>• Explain how major systems of the body are integrated and how these interactions influence homeostasis</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly lab quizzes</li> <li>• Lecture exams</li> <li>• Online homework</li> <li>• Online lab modules</li> </ul>
<p><b>Communication:</b> Communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.</p>	<ul style="list-style-type: none"> <li>• Use correct anatomical, physiological, scientific, and medical terminology to describe and explain physiological phenomena, experiments used to study such phenomena, and how disease or injury impacts those processes</li> </ul>	<ul style="list-style-type: none"> <li>• Lab discussions</li> </ul>

<p><b>Critical Thinking:</b> Analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.</p>	<ul style="list-style-type: none"> <li>• Predict how perturbations (e.g., disease, experimental manipulations) will alter physiological function and identify the mechanisms of action involved</li> <li>• Generate and interpret various graphical representations of physiological data</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly lab quizzes</li> <li>• Lecture exams</li> <li>• Lab discussions</li> </ul>
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## COURSE AND UNIVERSITY POLICIES:

### ATTENDANCE POLICY:

**Lecture:** There is no attendance for lectures of this course since all lectures will be pre-recorded and available in Canvas. Saving, sharing, or posting the pre-recorded lectures anywhere or with anyone is strictly prohibited and will be processed as an Honor Code violation.

**Lab:** Attendance will be taken in lab but with no points directly associated. Attend the lab section for which you are enrolled. If you have to miss your lab for any reason, please make arrangements with your TA to attend another lab section that week. You must fill out a lab make-up form (posted in Canvas) and have the TA of the lab section you attended sign it and return it to your TA. The arrangements should be made with your TA *before* your missed section. Any un-made-up lab will result in a partial letter grade penalty. For example, if you earned a B+ in the course, but missed two labs that were not made-up by attending another section, you would receive a B in the course. The following are not excuses for missing lab: work, volunteer position, personal travel/vacation.

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

- Read and refer to the syllabus.
- Show respect for the course instructor and classmates by not holding personal conversations during class time (specifically relevant during labs).
- Use professional, courteous standards for any web exchanges (i.e. emails).
  - Descriptive subject line
  - Address the reader with the proper title and name spelling
  - Be concise but provide sufficient detail in the body of the message
  - Give a respectful salutation
  - Avoid undefined acronyms
- UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the

following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions.

- Again, any and all lecture video links are specific for students currently registered for the web-based lectures of APK 2105C only. Sharing or posting of the lecture videos anywhere is strictly prohibited and will be processed as an Honor Code violation. Students who are aware of such sharing/posting of the lecture videos are obligated to disclose that information to their course instructor.
- Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel.

**EXAM MAKE-UP POLICY:** Make-up quizzes and exams will be given at the discretion of the instructor or TA (for lab quizzes). To schedule a make-up quiz or exam, please fill out the make-up exam request form posted in Canvas and e-mail it to your course instructor or TA for exams or quizzes, respectively. This must be done with appropriate time *in advance* of the missed exam or quiz. Documentation will be required. Unexcused missed quizzes and exams will result in a zero on that item (this includes contacting the instructor after the exam if you are ill). Please make travel arrangements accordingly, as this is not an excusable activity. If you have a serious emergency or life event, please contact the Dean of Students Office ([www.dso.ufl.edu](http://www.dso.ufl.edu)) and they will contact your instructor so that you do not have to provide documentation to individual instructors to make-up a quiz or exam. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

**ACCOMMODATING STUDENTS WITH DISABILITIES:** Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive; therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations. Homework assignments and lab modules are intentionally accessible for at least 2-4 weeks prior to the due date to account for those who may need more time for completion.

Students registered with the DRC: It is strongly recommend that you submit all of your lecture exam requests through the DRC in the *first week of classes* to ensure that they are approved in time.

**COURSE EVALUATIONS:** Student evaluations are conducted through GatorEvals. This evaluation system is designed to be more informative to instructors so that teaching effectiveness is enhanced and to be more seamlessly linked to the University's Canvas learning management system. Students can complete their evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/> . Thank you for serving as a partner in this important effort.

## GETTING HELP:

### Health and Wellness

- U Matter, We Care: If you or a friend is in distress, please contact [umatter@ufl.edu](mailto: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](mailto: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/>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>
- 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/>

## GRADING:

The following table outlines the point-accruing components of the course. To calculate the final grade, total points earned in the course will be summed and divided by 590.

Evaluation Components	Points Possible (out of 590)	% of Total Grade
Lecture Exams (4)	50 pts X 4 exams = 200 pts	200 / 590 = 33.9%
Lab Quiz/Assessment (10)	15 pts X 10 quizzes = 150 pts	150 / 590 = 25.4%
Lab Modules (PhysioEx) (7)	10 pts X 7 modules = 70 pts	70 / 590 = 11.9%

Homework (4)	40 pts X 4 assignments = 160 pts	160 / 590 = 27.1%
Syllabus Quiz (1)	10 pts X 1 quiz = 10 pts	10 / 590 = 1.7%

**Syllabus Quiz** - The syllabus quiz consists of 10 questions, 1 point per question. The quiz is based on any and all content found in this syllabus. Students will be given an unlimited number of attempts on the quiz. It is recommended that students complete the quiz as soon as possible in order to unlock the course material. Students will receive a zero for the syllabus quiz if it is not completed prior to taking Exam 1.

**Lecture Exams** – Each exam will consist of 40 questions, 1.25 points per question. Questions may be multiple choice and true/false. Students are not permitted access to any kind of materials (this includes calculators and smart watches) or notes during these exams. Exam questions are generated by the course instructor and the majority of focus should be given to the lecture notes when studying. Content from the textbook, including Clinical Connections and Toolboxes, should also be reviewed for the exams. Students will take exams in the classroom noted on One.UF, unless otherwise announced, and will be permitted 50 minutes (a class period) to complete the exam (except Exam 4, which will be conducted during Final Exam Week, and provide up to two hours for completion).

The lecture exams are scheduled for the following days in TUR L007:

- Thursday, January 30th 7:25 AM-8:15 AM (Period 1)
- Thursday, February 27<sup>th</sup> 7:25 AM-8:15 AM (Period 1)
- Thursday, April 2<sup>nd</sup> 7:25 AM-8:15 AM (Period 1)
- Wednesday, April 29<sup>th</sup> 5:30-7:30 PM (Final Exam Week)

If you are late to an exam and the exam has already started: you will still be allowed to take the exam provided no one has already turned in their exam and scantron and has left the room, and you will only have the remaining time in the exam period to finish. If a student has already handed in their exam and left, you will not be permitted to take the exam and may be given a zero.

Once lecture exam grades are posted, students are encouraged to come to “exam review” office hours to review their exams. Office hours will not be held on the day of exams, and exam review will likely be held the week following exams (exceptions primarily being holiday weeks). This will allow students to go through the questions and see their correct/incorrect answers and have any questions regarding the exam answered. Review will be available after all students have taken the exam and grades posted; this will be announced on Canvas. You will not be allowed to review all your previous lecture exams simultaneously at the end of the semester. You will be allowed to review your exams up until the start of the week of the next lecture exam (i.e. can only review Lecture Exam 1 before students take Lecture Exam 2, etc.).

**Homework** – Each of the four homework assignments is due according to the dates specified in the course schedule. Homework assignments will be open for several weeks prior to their due date. It will be your responsibility to know the due dates and to complete the homework assignment in a timely manner. Requests for homework assignment due date extensions will be denied. It is highly recommended that students complete their homework assignment early rather than waiting last minute (i.e. the night it is due). Technological issues presented within 24 hours of the deadline will not be acceptable. Homework assignments can be accessed through Mastering A&P on Canvas. Homework assignments comprise multiple choice, true/false, fill in the blank, and some matching. These questions are specific to the textbook, so that should be your primary resource for answering those questions. These assignments are not intended to be used as the primary study tool for preparing for the 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 physiology 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/plurality of the word counts. For example, if a question asked for the name of the cells which carry oxygen, the correct response would be erythrocytes (plural).
- 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 of homework will not be accepted.** However, if you complete some of the questions, but fail to complete all questions prior to the deadline, those completed will be automatically submitted at the due date/time and added to the gradebook. Again, technological errors/mis-submissions due to attempted submissions within 24 hours of the due date will not be excusable.
- **There may be a delay in the gradebook update between Mastering A&P and Canvas,** so please allow for up to 24 hours to pass before contacting the course instructor with grade issues for homework or lab modules.

**Lab Modules** – Each lab module is a PhysioEx lab that can be accessed through MasteringA&P through CANVAS. **PhysioEx Labs will close Friday at 11:59 PM the week a PhysioEx lab is due.** While the deadline for each PhysioEx Lab is on a Friday, it will be imperative for you to complete the lab module prior to your lab for that particular week (i.e. even though it is due on a Friday but you have lab on Tuesday, you need to complete the PhysioEx before your lab on Tuesday).



You have 6 hours to complete each lab module and accompanying questions; however, these should not take longer than 2 hours each. **If you miss the submission deadline, you will not be allowed to complete the lab for credit.** Once you open the lab, you can close it and return to complete it, but the timer will not stop, so please plan to complete the lab module and questions in one sitting to avoid being timed out and ensure that you have access to a reliable internet source while completing the lab module.

**Lab Quizzes** – Each lab quiz/assessment is worth 15 points, comprising multiple choice, true/false, fill-in-the-blank, matching, short answer, and/or labeling questions. Lab quizzes will cover material learned in the PhysioEx lab modules, lab experiments, and lab discussions, and will be generated by your lab TA. The following rubric will be employed to assess responses to short answer questions:

<b>Unsatisfactory (U)</b> Does Not Meet Minimum Expectations <b>(0-1.5 pt)</b>	<b>Satisfactory (S)</b> Meets Minimum Expectations <b>(1.6-3.0 pts)</b>	<b>Excellent (E)</b> Exceeds Expectations <b>(3.1-4 pts)</b>
<ul style="list-style-type: none"> <li>• Incomplete sentences</li> <li>• Excessive grammatical errors, including spelling (<math>\geq 3</math>)</li> <li>• Parts of the question were unanswered</li> <li>• Answers demonstrates lack of understanding</li> </ul>	<ul style="list-style-type: none"> <li>• Complete sentences</li> <li>• Few grammatical errors, including spelling (<math>&lt; 3</math>)</li> <li>• All components of the question were answered</li> <li>• Answer demonstrates <u>basic</u> understanding</li> <li>• Mostly correct use of scientific/medical terminology</li> </ul>	<ul style="list-style-type: none"> <li>• Complete sentences</li> <li>• Little to no grammatical errors, including spelling (<math>\leq 1</math>)</li> <li>• All components of the question were answered</li> <li>• Answer demonstrates a more <u>comprehensive</u> understanding</li> <li>• Correct use of scientific/medical terminology</li> </ul>

Students who fail to reach the satisfactory level of achievement according to this rubric will be asked to submit a one-page written report on a related physiological topic for re-assessment, due at the next lab meeting. Students who do not submit a re-assessment following an unsatisfactory rating will earn a zero on the lab assessment that week.

**GRADING SCALE:** All grades will be posted directly into the Canvas gradebook. Any discrepancies with points displayed in gradebook should be pointed out to the instructor before the last day of class. Any lab activity grades must be discussed with your graduate TA as soon as possible, and no later than the last day of your lab meeting. Again, requests for excused lab attendance should be made *before* the lab meeting. **There is no curve for this course and final grades will not be rounded up.** See the UF

undergraduate catalog web page for information regarding current UF grading policies:  
[www.registrar.ufl.edu/catalog/policies/regulationgrades](http://www.registrar.ufl.edu/catalog/policies/regulationgrades).

*Any requests for additional 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 General Education courses, such as this one.

Letter Grade	Points Needed to Earn Each Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
A	531-590.0	90.00-100%	4.0
B+	513.30-530.99	87.00-89.99%	3.33
B	472.00-513.29	80.00-86.99%	3.0
C+	454.30-471.99	77.00-79.99%	2.33
C	413.00-454.29	70.00-76.99%	2.0
D+	395.3-412.99	67.00-69.99%	1.33
D	354.00-395.29	60.00-66.99%	1.0
E	0-353.99	0-59.99%	0

## WEEKLY COURSE SCHEDULE:

The table below is a tentative course overview. Any changes to this schedule will be posted in Canvas.

Follow the chapters and sections listed in Canvas based on the following topics. Chapter learning goals and “points of focus” will be elaborated on Canvas. Those sections and chapters not listed will not be included in exams.

All PhysioEx lab modules are due on Friday at 11:59 PM the week a PhysioEx lab is scheduled, but should be completed before your individual lab section meets. Homework exams are due the night before an exam (except HW 4 due one the last day of class). Note the due dates in advance, as late submissions will not be accepted.

	Dates	Lecture	Lab Activities/Assessments ( <i>due dates</i> )
<b>Week 1</b>	Jan 6-10	Syllabus Intro to Physiology Cell Structure & Function	<b>No labs</b>
<b>Week 2</b>	Jan 13-17	Cell Structure & Function Cell Metabolism	<b>Lab 1</b> – Intro to Lab/Graphs/Reports (2hrs)
<b>Week 3</b>	Jan 20-24	Cell Metabolism	<b>Lab 2</b> –Transport Mechanisms <b>Quiz 1</b> <i>Complete PhysioEx 1 on your own prior to lab</i> <i>MLK, Jr. observance (no labs) on Monday, Jan 20; Monday attend a different section.</i>
<b>Week 4</b>	Jan 27-31	<b>Exam 1 – Chapters 1, 2, and 3: Thurs, Jan 30</b> HW 1 due Wed, Jan 29 at 11:59 PM Cell Membrane Transport	<b>Lab 3</b> – Enzyme Kinetics (2hrs) <b>Quiz 2</b>
<b>Week 5</b>	Feb 3-7	Chemical Messengers Endocrine System	<b>Lab 4</b> – Metabolism (2hrs) <b>Quiz 3</b>
<b>Week 6</b>	Feb 10-14	Endocrine System Neural Signaling	<b>Lab 5</b> – Endocrine Physiology (2hrs) <b>Quiz 4</b> <i>Complete PhysioEx 4 on your own prior to your lab</i>
<b>Week 7</b>	Feb 17-21	Neural Signaling Neural Integration	<b>Lab 6</b> – Neurophysiology <i>Complete PhysioEx 3 on your own prior to lab</i> <b>Quiz 5</b>
<b>Week 8</b>	Feb 24-28	Neural Integration <b>Exam 2 – Chapters 4, 5, 6, 7, and 8: Thurs, Feb 27</b> HW 2 due Wed, Feb 26 at 11:59 PM	<b>Lab 7</b> –Neuromuscular (2hrs)

		Muscle Physiology	
<b>Week 9</b>	Mar 2-6	<i>Spring Break</i>	<b>No labs</b>
<b>Week 10</b>	Mar 9-13	Muscle Physiology Cardiac Function	<b>Lab 8</b> – Muscle Physiology <b>Quiz 6</b> <i>Complete PhysioEx 2 on your own prior to lab</i>
<b>Week 11</b>	Mar 16-20	Vessels & Pressure	<b>Lab 9</b> – Cardiovascular Physiology (2hrs)
<b>Week 12</b>	Mar 23-27	Vessels & Pressure <b>Exam 3 – Chapters 12, 13, and 14: Thus, April 2</b> <b>HW 3 due Wed, April 1 at 11:59 PM</b> Pulmonary Ventilation	<b>Lab 10</b> – Cardiovascular Function <b>Quiz 7</b> <i>Complete PhysioEx 5 on your own prior to lab</i>
<b>Week 13</b>	Mar 30-April 3	Pulmonary Ventilation Gas Exchange	<b>Lab 11</b> – Pulmonary Function (2hrs) <b>Quiz 8</b>
<b>Week 14</b>	April 6-10	Gas Exchange Renal Function	<b>Lab 12</b> – Acid-Base Physiology <b>Quiz 9</b> <i>Complete PhysioEx 10 on your own prior to lab</i>
<b>Week 15</b>	April 13-17	Renal Function	<b>Lab 13</b> – Renal Physiology <b>Quiz 10</b> <i>Complete PhysioEx 9 on your own prior to lab</i>
<b>Week 16</b>	April 20-24	Fluid & Electrolyte Balance <b>HW 4 due Wed, April 22 at 11:59 PM</b>	<b>No labs</b> <i>Reading Days on Thursday and Friday</i>
<b>Week 17</b>	April 27-May 1	<b>Exam 4 – Chapters 16, 17, 18, and 19: Wed, April 29 at 5:30 PM</b>	<i>Final Exam week</i>

#### STUDY TIPS:

- Read from the text before watching the lectures. Do not take notes, underline, highlight, or attempt to memorize anything. Just read and enjoy!
- Snow-ball the lecture notes. Begin studying lecture material immediately after the first lecture. Then, after the second lecture, begin your studies with day one lecture material. Continue this all the way up to the exam.
- Sections you will not be required to know for the exams will be omitted in the list of chapters and chapter sections listed on Canvas. Do pay attention to special

announcements or lectures – these are fair game for the exams. Needless to say, Clinical Connections, Toolboxes, and analytical topics described in the textbook and lecture videos may also be included in the exam.

- Re-write questions. Taking complex questions and breaking them down to identify exactly what the question is REALLY asking for is very helpful. It is also very helpful to look at incorrect answer choices and identify what makes those choices wrong. Ask yourself, “How could I make that statement correct?”
- Practice questions: the critical thinking questions at the end of each chapter and the more complex homework questions are incredibly helpful!
- Google diseases or drug mechanisms of action. For example, if we are studying neurophysiology, Google “brain diseases”. Click on any link and just read a paragraph to see if you can understand based on what you now know about nervous tissue structure and function. If you don’t understand it, that’s okay! Rather, did you recognize any words? Did you at least have a *clue* what was going on? This makes for great discussion during group study... and, especially in an online course, are awesome to post and share with classmates on Canvas.
- If you have a study group or a study buddy, talk through the material out loud. Verbalizing the information is very different than knowing it in your head – talk in the mirror or even to your pet goldfish if you don’t have a friend around.
- If you are a visual learner, make a concept map. Try to see how different parts of the body relate to one another. What are similarities and differences between structures?
- Practice skills you’ll need to succeed in your future endeavors, especially: use your resources, like lab time, classmates, and the internet – hearing explanations and discussions about topics in more than one way will help you find the description that clicks for you! If you don’t understand a topic from the textbook, find a valid source online and watch a video. If that doesn’t help, chat with classmates at the end of the lab hour. Ask your TA if they’ve some nifty tip. And, certainly, swing by office hours and tell me what worked for you – or hasn’t. We’ll work to figure out what fits your learning style. The UGTAs also hold office hours, which may be very useful for you to attend and participate in.

### **SUCCESS TIPS:**

- Do not fall behind. This course moves at a fast pace and you can easily get overwhelmed if you procrastinate. Avoid studying at the last minute. Complete the homework as you go; do not leave it for the day before the exam.
  - I typically post all chapters for a given exam together, so you can plan ahead and read more in one week and less the next if that works with your schedule (i.e. other class projects, travel plans, illness).
- Come see me during office hours; if not to discuss course material, come say hello and tell me about what intrigues you about Human Physiology.

- 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.
- Check Canvas announcements/emails daily; just pretend it is Facebook or Insta for school. Your course instructor will post important and helpful information (such as friendly reminders of due dates) as announcements.
  - The Discussion board may be useful for conversations and resource sharing between classmates (i.e. share that cool YouTube video you came across about the Krebs cycle).
- Have a positive attitude: this stuff is pretty neat!

**PERSONAL NOTE:**

Things happen. That's life. If there are some majorly overwhelming things happening during your semester, send me an email, come by my office; we'll work together to catch our breaths and figure out what steps you should take to do in hopes of wrapping up the course well. Again, I'd love to meet each of you; come by and chat academia (grad school, anyone?), sports, and traveling the world some time during the term. 😊

