

# BSC3096 Human Physiology Syllabus

## Syllabus Policy

You are responsible for reading and following the instructions, guidelines and schedules in this syllabus, and for checking the e-Learning announcements at least weekly for announcements regarding any changes. Not having read the information in this syllabus or the announcements will not constitute an excuse for missing an assignment or deadline.

## Course Description

The course involves the study of the functioning of human tissues, organs and organ systems, emphasizing the physical, chemical and mechanistic basis of normal physiology and the integrated function of the human body. The course also introduces pathophysiological changes associated with human diseases. 3 credits.

The class will meet:

**MON** Period 2 (8:30-9:20) **TURL005**

**WED** Period 2 **CSE E231**

**FRI** Period 2 **CSE E231**

## Prerequisites

One semester of general biology (BSC 2010), and two semesters of general chemistry (CHM 2046 or CHM 2047 or CHM 2051 or CHM 2096) and two semesters of general physics (PHY 2049 or PHY 2061), all with a minimum grade of C.

## Instructors

### Course Instructor

Connie Rich, Ph.D,

Lecturer, Department of Biology

Office hours: Tuesdays 12:45-1:45 pm in 522A Carr Hall. If you need to meet outside of office hours, just email me. I will hold additional **virtual** office house Wednesdays 2-3pm.

The best way to contact your instructor is through the Canvas mail system. However, you may also use the following email: [c.rich@ufl.edu](mailto:c.rich@ufl.edu)

## Course TAs

Steve Cassidy

Ph.D. candidate, Department of Biological Sciences

## Course Schedule

As this is my first time teaching this course here, the schedule may change. However, I will alert you to any changes in assignment deadlines. Exams dates have been set.

## Course Fee

There is no course fee, but you will need to "opt-in" to MasteringA&P access through Canvas (\$116), which includes the etext (Human Physiology: An Integrated Approach. 8<sup>th</sup> Edition, by Dee Silverthorn. Pearson, 2019), MasteringA&P homework, and Learning Catalytics.

## Course Objectives

At the end of the 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, Software and Hardware

### Primary Course Textbook

Human Physiology: An Integrated Approach. 8<sup>th</sup> Edition, by Dee Unglaub Silverthorn. Pearson, 2019.

ISBN-13: 978-0-13-460519-7

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.

- 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. The price for UF All Access is **\$116.00**.
- Students who do not choose to "opt-in" will be able to purchase a standalone MasteringA&P access code through the UF Bookstore. The price for the standalone MasteringA&P access code is **\$156.00**. Both options provide access to the same materials. Note that the UF All Access is less expensive.

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. The price for the loose-leaf print version is about **\$38.00**.

### **MasteringA&P online system**

We will use the MasteringA&P online system to both aid in your understanding of the course material and for assessment of your understanding. If have difficulty registering for the Pearson course content see the document entitled “UF All-Access - Student Instructions Fall 2019.pdf” in the “Files” section of the course in Canvas. If you are still not able to register for the Pearson course content contact Brad Maynard, our Pearson Representative at “brad.maynard@pearson.com”. He can answer all Pearson related issues.

### **Classroom Response System**

We will use Learning Catalytics, a classroom response system, to both aid and assess your understanding of the course material. You can access Learning Catalytics through Canvas by clicking on “MyLab and Mastering” and then clicking “Open MyLab & Mastering.” Then click on “Course Home.” You will see a “Learning Catalytics” button. This is the best way to access Learning Catalytics to ensure that it is using your UF email address as your user ID. This allows for your Learning Catalytics grade to be transferred to Canvas.

Learning Catalytics is a software utilizing your personal device (computer, smartphone, and tablet) for in-class assessment. The systems page is listed below.

<https://www.pearson.com/us/higher-education/products-servicesteaching/learning-engagement-tools/learning-catalytics/training-support/systemrequirements.html>

The main takeaways are that you have the latest version of the browser, iOS, etc., and that your popup blocker is disabled! To join a Learning Catalytics session in class simply sign in at Learningcatalytics.com and type in the session ID. After you have participated in one session in the class, the ID should begin to appear for you to click on and join. This is also where you will review your previous class sessions. They will usually appear a couple hours after class has ended. When reviewing, you will see your responses and if they were correct or incorrect. Some questions may not have a correct/incorrect answer. TECH SUPPORT Any tech support questions should begin at the Pearson support website listed below.

<https://support.pearson.com/getsupport/s/>

Pearson tech support provides 24/7 assistance. You will always receive a “case number” that can be referenced later.

You are responsible for making sure that you bring a fully functioning responder (phone with text service or WIFI device) to each class meeting. There will be no make-up questions or other allowances made for failure of your unit to work properly. Please keep in perspective that there will likely be as many as 100 questions so missing any single question due to equipment failure only affects about 0.2 percentage points of your final grade. An incorrect response is worth 0.25 points, and a missing response is worth 0.0 points. You can drop 1/4th of your missed or incorrect response questions. It is YOUR responsibility to budget these for illnesses, post-graduate school interviews, university sanctioned events, religious holidays, sleeping-in, dead batteries, etc...

During most “lecture” sessions you will be asked to work with your classmates to answer questions and solve problems. You will use the classroom response system to provide your answers.

### **Digital Lessons**

All non-textbook course readings and lessons will be either directly accessible from the Canvas website or information in Canvas will be posted directing you to the appropriate website (<https://elearning.ufl.edu>).

### **Computer Requirement**

The course instructor will not provide any computer support. You may be able to get assistance from the UF Computing Help Desk, but in the past, most students have gotten the best support from other students in the course via discussion posts.

### **Course Website (E-Learning)**

Class material including the syllabus, exam results, and other information related to the course will be posted on the course E-Learning website (<http://lss.at.ufl.edu>). The course is found under “E-Learning in Canvas”. You are responsible for all announcements posted on the course website for this class. For help with E-Learning, call the UF Computing Help Desk at 352-392-4357, or visit the E-Learning support website: <https://lss.at.ufl.edu/help.shtml>.

### **Activities and Assessments**

The class content will include textbook reading, in-class lessons, in-class problem-based learning (“active learning” questions), and a group project.

## MasteringA&P

You will be asked to answer questions and solve problems. You will provide your answers using an online system (MasteringA&P). You are allowed to collaborate with others on MasteringA&P homework.

## Exams

There will be **three exams**: two midterms and a final. These will consist mostly of problem-based, multiple choice, fill-in-the-blank, ordering and numeric (calculation) questions. Each midterm will consist of approximately 40 questions.

## Final Exam

The final exam will focus primarily on the last portion of the course but assumes that you have retained the general principles and information that you learned in earlier in the course. It will also consist of approximately 40 questions and will be administered during the final exam period (2 hours duration). Exams will be closed-book and you will not be allowed to use notes. You will be allowed to use scratch paper and a calculator.

## Grading

### Assessments

Assessment Type	Quantity	Percent of Total
MasteringA&P	20	15%
Learning Catalytics		15%
Group project- report		15%
Group project- presentation		10%
Midterm Exams	2	30%
Final Exam	1	15%
<i>Total</i>		100%

## Grade Distribution

Point Range (%)	Letter Grade	Point Range (%)	Letter Grade
93.33 or higher	A	73.33-76.65	C
90-93.32	A-	70-73.32	C-
86.66-89.99	B+	66.66-69.99	D+
83.33-86.65	B	63.33-66.65	D
80-83.32	B-	60-63.32	D-
76.66-79.99	C+	< 60	E

The letter grades will be assigned by based on the point ranges given in the table above. Note that a “C-” will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. More information on grades and grading policies is here: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

## Extra Credit

I may choose to provide rare opportunities for extra credit during the semester, however requests for extra credit will be denied.

## Time Commitment

The UF College of Liberal Arts and Sciences assumes that you will devote 3-4 hours per week per credit-hour to each course during the regular fall and spring semesters. Because this course is 4 credits (including the Discussion session), you should therefore expect to devote 12-16 hours per week to this course. If you find yourself spending more than 12 hours per week on average, discuss this with your course instructor to see if you can refine your work and study habits. If you find yourself spending less than 12 hours per week on average, you should recognize that you may have difficulty fully learning and comprehending the material in this time, which will probably be reflected in poor performance on the various assessments, causing you to receive a lower overall course grade.

## Communication

Updates and changes to the course schedule, this syllabus, and any other aspects of the class content and structure will be communicated to you via announcements on the course e-Learning site. You are responsible for checking this site regularly for announcements.

## Communicating electronically with the Instructor and Graduate Teaching Assistant

There are two primary modes of electronic communication for this class -- the discussion forum and Canvas mail. To ensure that your questions are answered as promptly as possible, please follow the communications guidelines below:

**Discussion Forum:** This course is participatory. Use the discussion forum on the course website for questions/answers about the course content, structure, assignments and activities. You are strongly encouraged to respond to your peers if you know the answer or can provide guidance. The instructor will monitor this area, but the instructor may not be able to read every posting and therefore this should **not** be used to communicate with the instructors.

**Direct Canvas Mail to the Instructors:** Direct email to Dr. Rich should be used only for messages that are **private** in nature or that have been posted to the Discussion Forum but were not solved. Use the Mail tool in Canvas for all such direct email. If you use any other email tool, it may be filtered as spam or otherwise not be seen by your instructor.

## Technical Support

MasteringA&P: Contact Brad Maynard, our Pearson representative at [brad.maynard@pearson.com](mailto:brad.maynard@pearson.com).

E-Learning in Canvas. For help with E-Learning, call the UF Computing Help Desk at 352-392-4357, or visit the E-Learning support website: <https://lss.at.ufl.edu/help.shtml>.

## Course Policies

### Academic Honesty

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-honorcode/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TA in this class.

### Policy Related to Absences and Make-up Work

Requirements for class attendance and make-up exams, assignments, and other work are consistent with university attendance policies:

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

If you must miss an assignment or exam due to an allowable scheduled absence (for example, to participate in a sanctioned university function), you must notify the instructor as soon as the event is scheduled or during the first week of classes. If you miss an assignment or exam due to an allowable but unscheduled and unpredictable absence (e.g., illness), you must contact the instructor as soon as possible. You must submit proper documentation to the Dean of Students Office before you will be allowed a makeup.

### Late Work

Late work will not be accepted unless it is the direct result of an allowable but unscheduled and unpredictable absence (e.g., illness), as defined above, at the discretion of the instructor.

### Using Electronic Devices in Class

The class will meet in a computer classroom and you will have access to the UF computers for all in-class activities, including the classroom response system. Therefore, you are not expected to bring a computer to the lectures to utilize the classroom (Wednesdays and Fridays). If you use a personal computer in the classroom for activities that are a distraction to any other members of

the class, you will be warned that you are being disruptive. Multiple disruptions will be considered grounds for the assignment of a failing grade.

## Campus Resources

### Health and Wellness

**Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.**

### Academic Resources

*E-learning technical support:* 352-392-4357 (select option 2) or e-mail to [Learningsupport@ufl.edu](mailto:Learningsupport@ufl.edu). <https://lss.at.ufl.edu/help.shtml>.

*Career Resource Center:* Reitz Union, 392-1601. Career assistance and counseling. <http://www.crc.ufl.edu/>

*Library Support:* <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

### Accommodations for Students with Disabilities

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.



## Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

## Course Schedule (subject to change)

Course Schedule (subject to change)

Wk #	Week of	Reading Topic (Chapter)
1	Aug 20	Wed: Introduction, syllabus review, Chapter 1 (if time) Fri: Chapter 1
2	Aug 26	Mon: Chapter 2 Wed: Chapter 3 Fri: Chapter 3
3	Sep 2	Mon: *Labor Day! No class* Wed: Chapter 4 Fri: Chapter 4
4	Sep 9	Mon: Chapter 5 Wed: Chapter 5 Fri: Chapter 6

5	Sep 16	Mon: Chapter 6 <b>Wed: Exam 1 - Chapters 1-6, 8:35 CSE E231</b> Fri: Chapter 7
6	Sep 23	Mon: Chapter 7 Wed: Chapter 8 Fri: Chapter 8
7	Sep 30	Mon: Chapter 9 Wed: Chapter 11 Fri: *Homecoming! No class*
8	Oct 7	Mon: Chapter 11 Wed: Chapter 12 Fri: Chapter 12
9	Oct 14	Mon: Chapter 12 Wed: Chapter 13 Fri: Chapter 13
10	Oct 21	Mon: Chapter 14 <b>Wed: Exam 2 - Chapters 7, 8, 9, 11, 12, 13, 8:35 CSE E231</b> Fri: Chapter 14

11	Oct 28	Mon: Chapter 14 Wed: Chapter 15 Fri: Chapter 15
12	Nov 4	Mon: Chapter 15 Wed: Chapter 17 Fri: Chapter 17
13	Nov 11	Mon: *Veteran's Day! No class* Wed: Chapter 18 Fri: Chapter 18
14	Nov 18	Mon: Chapter 19 Wed: Chapter 19 Fri: Chapter 20
15	Nov 25	Mon: Chapter 20 Wed: *Thanksgiving! No class* Fri: *Thanksgiving! No class*
16	Dec 2	Mon: Exam review <b>Wed: Final Exam - Chapters 14, 15, 17, 18, 19, 20, 8:30 CSE E231</b>

*Assignments are due at 11:59 p.m. on the date indicated on the course e-Learning site schedule*

## **SUGGESTED STUDY METHODS**

### **Come to class and participate**

There is tremendous variation in how people learn and in the foundation they have upon entering this course. However, one thing that is certain is that you will not do well if you do not attend class. Seniors have failed or withdrawn from this class and had to repeat it. Some of them had GPAs above 3.5 and were already conditionally accepted to medical or dental schools. They

decided they would miss class and get through by cramming for exams. They were wrong and it cost them. You will need to “participate” in the class and work hard to do well.

### **Understand the concepts behind the Learning Catalytics questions**

Learning Catalytics is used to help you learn concepts while in class in an “active learning” environment. It will also introduce you to the types of questions and concepts that will be on the exams. Review questions and try to anticipate how different versions of the questions might show-up on exams.

### **Answer and understand the concepts behind the homework and Learning Catalytics questions.**

There is a large amount of material covered. Exams will be limited to the concepts and material in the homework questions and Learning Catalytics questions. Work on these questions as we progress. Compare your answers with those of other students, ask Dr. Rich and Steve for guidance, and share answers and uncertainties with other students on the discussion boards (see below). Dr. Rich will not post complete answers to all of these questions, as the best way to learn is to discover the answer yourself. However, we are always happy to help YOU come to the correct answers or CONFIRM if you are correct.

### **Participate in discussion boards and chats**

There are many other students in the class trying to learn the same material. Post and answer general questions and comments in the chat related to daily lectures and Learning Catalytics questions. Use the discussion boards to ask and answer questions about the study questions as you prepare for exams. Teaching other students is a great way to make sure you know the material. I will monitor and direct the discussions as necessary. These are read by all students and instructors, so make sure your comments are appropriate and respectful.

### **Keep up with material**

This is likely to be one of the most conceptually difficult courses you will take. It also has the potential to be one of the most stimulating and rewarding. You will be required to build on what you have learned in other courses and to apply concepts as opposed to memorizing facts. Physiology is where you actually get to apply what you learned in courses like algebra, physics, chemistry, biochemistry, and cell biology. You will need to be able to interpret graphs, calculate quantitative physiological variables, and integrate multiple physiological systems to understand and predict outcomes. This will require you to learn incrementally and build on concepts as they are learned. Everyone learns differently, but the best advice I can give you is to stay current on the notes, study questions, reading, and synthesis of material.

## A Final Note...

I really want you to do well in this class! And I want you to go on to do well wherever you go from here! You're happy, I'm happy, everybody wins. So if you're unhappy or stressed or overwhelmed, please come talk to me or talk to someone at UF's Counseling and Wellness Center. We are here for you, because without you we don't have a job and don't get to do what we love.

