CBIO3710
Principles of Physiology
Fall 2018
Biological Sciences, room 404D
TR 12:30pm – 1:45pm
Office Hours: By appointment

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REQUIRED MATERIALS

TEXT **Human Physiology.** Fox, S.I. New York: McGraw-Hill Education (2016)
ISBN 978-0-07-783637-5

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OBJECTIVES

Principles of integrative systems physiology, emphasizing humans and current mammalian animal research models. Organismal homeostasis, including cardiovascular, respiratory, renal, digestive, and reproductive systems. Emphasis on the integrative actions of the nervous and endocrine systems.

GRADING SCHEME

Grades will be based on the following: POINTS

Exams **600**

There will be 4 in-class exams during the semester, totaling 600 points. The lowest score will be dropped.
There will be no make up exams allowed.
Exams may include multiple choice, short answer, true-false, matching or essay questions.

Quizzes **100**

Weekly quizzes (either announced or "pop") will be given.
The ten best quiz grades will be included in the final grade.

Sample Questions / Problem Sets (online) **100**

Comprehensive Final Exam (OPTIONAL) **200**

The final exam will include material from the entire semester.
Students missing one regularly scheduled exam during the semester, or students wishing to replace a low exam score, may take the comprehensive final exam. (Students must take some combination of 4 of the 5 scheduled exams)

The following grading scale will be used to assign overall course grades:

Excellent	Above Average	Average	Below Average	Failing
	865-894 = B+	765-794 = C+	595-694 = D	< 594 = F
925-1000 = A	825-864 = B	725-764 = C		
895-924 = A-	795-824 = B-	695-724 = C-		

The grading scale used in this course is consistent with the grading system of The University of Georgia: http://www.reg.uga.edu/grades

Lecture Calendar – Fall 2018

Date	Lecture Topics and Readings
8.14 (Tuesday) **8.16 (Thursday)**	Introduction; Homeostasis; Biological Molecules; Protein Synthesis Review Cell Structure; Protein Synthesis; Gene Expression; Enzyme Activity
8.21 (Tuesday) **8.23 (Thursday)**	Transport Processes Across the Membrane: Passive transport processes; Active transport processes Transport Processes (continued); Cell signaling; The Endocrine System: Overview and review; Signaling pathways inside cells; Pituitary and hypothalamus control; hormones of the adrenal glands and the pancreas
8.28 (Tuesday) **8.30 (Thursday)**	Endocrine System: Overview and review; Signaling pathways inside cells; Pituitary and hypothalamus control; hormones of the adrenal glands and the pancreas **Lecture Exam 1**
9.4 (Tuesday) **9.6 (Thursday)**	Neuronal Excitability: Electrical signals; Signal Transmission; Neurotransmitters Neuronal Excitability (continued); The Autonomic and Somatic Nervous Systems: Sympathetic and parasympathetic control; Comparison of autonomic and somatic nervous systems
9.11 (Tuesday) **9.13 (Thursday)**	The Autonomic and Somatic Nervous Systems: Sympathetic and parasympathetic control; Comparison of autonomic and somatic nervous systems The Cardiovascular System: The Heart: Gross anatomy and histology review; conduction system and conducting cell properties; EKG
9.18 (Tuesday) **9.20 (Thursday)**	The Cardiovascular System: The Heart: Cardiac cycle; cardiac output and Starling's Law The Cardiovascular System: The Heart: Cardiac cycle; cardiac output and Starling's Law (continued); Blood Vessels and Hemodynamics: Histology review; circulatory system overview; introduction to blood pressure and control
9.25 (Tuesday) **9.27 (Thursday)**	The Cardiovascular System: Blood Vessels and Hemodynamics: Histology review; circulatory system overview; introduction to blood pressure and control; Capillary and fluid-flow; blood pressure control mechanisms **Lecture Exam 2**

Date	Lecture Topics and Readings
10.2 (Tuesday)	CH15 – The Cardiovascular System: Blood Vessels and Hemodynamics: Capillary and fluid-flow; blood pressure control mechanisms ; blood pressure control mechanisms; baroreceptor and chemoreceptor reflexes
10.4 (Thursday)	The Cardiovascular System: Blood: Overview; Structure and function of erythrocytes; hemostasis
10.9 (Tuesday)	The Cardiovascular System: Blood: Hemostasis (continued); ABO blood typing groups
10.11 (Thursday)	The Respiratory System: Overview and anatomy review; Pulmonary ventilation
10.16 (Tuesday)	The Respiratory System: Gas exchange and transport; oxygen transport and the function of hemoglobin; control of respiration
10.18 (Thursday)	The Respiratory System: Gas exchange and transport; oxygen transport and the function of hemoglobin; control of respiration (continued)
10.23 (Tuesday)	The Urinary System: Overview and anatomy review; Urine formation; Renal mechanisms regulating homeostasis
10.25 (Thursday)	**Lecture Exam 3**
10.30 (Tuesday)	The Urinary System: Overview and anatomy review; Urine formation; Renal mechanisms regulating homeostasis (continued)
11.1 (Thursday)	The Urinary System: Overview and anatomy review; Urine formation; Renal mechanisms regulating homeostasis (continued)
11.6 (Tuesday)	Fluid, Electrolyte and Acid-Base Balance
11.8 (Thursday)	Fluid, Electrolyte and Acid-Base Balance
11.13 (Tuesday)	The Digestive System: Overview and anatomy review; acid secretion into the stomach and its control; Control of digestive processes
11.15 (Thursday)	The Digestive System: Overview and anatomy review; acid secretion into the stomach and its control; Control of digestive processes (continued)
11.20 (Tuesday)	**Thanksgiving Holiday**
11.22 (Thursday)	**Thanksgiving Holiday**

Date	Lecture Topics and Readings
11.27 (Tuesday) **11.29 (Thursday)**	**Lecture Exam** **Last Day of Class - Review**
	Final Exam: Thursday 12.6, 12:00N – 3:00pm

This schedule is tentative. I reserve the right to make changes as deemed necessary.

Policies Related to Assessments and Grading

Lecture Exams

Exams will consist of objective-style questions (multiple choice, T/F, matching); short-answer and essay questions are possible. Scantron forms will be provided for each exam.

No Makeup Exams: Students are not permitted to make up any lecture exam, regardless of the excuse. Students missing a lecture exam may take the optional comprehensive final exam to replace this missing score.

Student IDs and Exams: For each exam in lecture you must remember to bring your UGA ID card with you. The TAs are responsible for matching the student ID# (81#) on your card with that on the scantron you are turning in. **A student who turns in an exam without a matching UGA ID card will be given a zero on that exam.**

Exam Review and Grade Appeal: Once graded and posted to eLC, you will be able to review your exam in person by signing up to review your exam during office hours, in my office. Opportunities for exam review during office hours are limited. You will not be allowed to bring your phone or computer or tablet device to your review appointment. Students who are observed using any electronic device during exam review will be referred to the Office of Academic Integrity. See the Academic Misconduct Zero Tolerance Policy later in this document.

Students who do not make an appointment to review their exam will not be allowed to review their exam.

Final Comprehensive Exam: The final exam is scheduled according to the UGA Registrar's exam calendar found here (http://www.reg.uga.edu/). On the Registrar's page, click "Calendars" in the menu on the left. Then, scroll down to "Final Exam Dates" and select the link for the appropriate semester. You'll see the final exam calendar with information listed below the calendar regarding final exam schedule conflicts. Please read this carefully and check your class schedule at the beginning of the semester to

prepare in advance for conflicts. If you think you have a final exam conflict, consult the Office of Curriculum Systems' page on exam conflicts by clicking here.

Students may use their score from the optional final exam to replace an exam that was missed, or to replace their lowest exam score.

Quizzes
Quizzes will be given frequently in class. Quizzes are short-answer. Students can earn a MAXIMUM of 100 points from in-class quizzes.

No Makeup Quizzes: If you miss class, you will miss the quiz. Likewise, students who arrive late to class (or who leave early) may miss the quiz that day. Students who miss class, or who attend class but miss the quiz may not make it up.

Your Name Must Be On Your Quiz to Get Credit: Students cannot get credit for quizzes that do not have their name and/or UGA ID on it.

Other Policies Related to this Course

You are responsible for your own learning and education. You are expected to read / review assigned materials and be prepared for lecture discussions. Numerous animations, tutorials, videos and links to other resources will be available on eLC for students to view and use at their convenience.

Attendance and Enrollment
You, as a student, are responsible for managing your enrollment in this class. Students should add/drop/withdraw using ATHENA. You may drop this class during the regularly scheduled registration period without academic or financial penalty.

The last day to drop this class without academic penalty is October 17, 2018.

You, as a student, are responsible for all information and material presented in class. There is no required attendance for lecture, however, attendance is strongly encouraged.

Grade Challenges
If you receive a grade that you believe is in error, you may challenge the grade in writing. You must submit to me the question, the answer you originally submitted, the answer which received full credit, and brief explanation detailing your reasons for requesting an increase in your score. I will only consider written requests.

Americans with Disabilities Act
The University of Georgia complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Students with disabilities who seek academic accommodations must first take appropriate documentation to the Disability Resources Center (https://drc.uga.edu/). It is the responsibility of DRC to assess the documentation of each student requesting academic accommodations based on disability.

If you believe that you possess a disability for which reasonable accommodation must be made, you must consult with the instructor before the close of the second class meeting.

"Civility Clause"
Students are expected to behave toward me and fellow students with courtesy and consideration. This means that talking and disruptive behavior will be kept to a minimum. Students who must arrive late to class should enter quietly and be prepared for class (ie, not fumbling with calculators, backpacks, papers, etc…) Students who need to leave a class early should sit near an exit, then leave quietly. Cell phones, pagers, and other electronic devices should be silenced in the classroom. The University's Student Code of Conduct can be found at
(http://uga.edu/judicialprograms/2008-2009%20Code%20of%20Conduct.pdf)

Academic Misconduct Policy
The Office of the Vice President for Academic Affairs provides all students registered at this University with a booklet titled "A Culture of Honesty at the University of Georgia". This booklet specifies the policies to which you must adhere. *All academic work must meet the standards contained in "A Culture of Honesty".* Students are responsible for informing themselves about those standards before performing any academic work. If you have any questions regarding this policy, please contact me.

Any student suspected of academic misconduct as defined by "A Culture of Honesty at the University of Georgia" will be reported to the Office of the VP for Instruction resulting in a facilitated discussion between the instructor and student. A student who has been found responsible for academic misconduct will receive a "0" on the lecture or lab assignments, quizzes, or exams in question and, depending upon the severity of the academic misconduct, could be subject to additional sanctions (ranging from a further reduction in the overall course grade to expulsion).
The link to more detailed information about academic honesty can be found at http://www.uga.edu/honesty/ahpd/culture_honesty.htm

Communication with the Instructor

Email is the preferred way to contact me. To ensure that I can address your issue in a timely manner, please include the following in your message…

1. **the problem** (which should also be included in subject line) that requires a decision or action
2. **the background - why are you making this request?** What is the policy outlined in the syllabus?
3. **options available to you** - first choice, second choice, and why each is an option.
4. **your specific request** (which might also be included in the subject line)
5. **the deadline** by which your request must be met

The subject line should include LAST NAME, COURSE and CRN, and the problem or request stated very succinctly. Email messages without this information in the subject line may not receive a response. (eLC will include this automatically, but sending emails through eLC is a little problematic. Feel free to use your regular UA email.)