

## PMCY3000 Human Physiology

Class times: Monday, 1:50PM - 2:40PM; Tuesday/Thursday, 2:20PM - 3:35PM

Location: Pharmacy South, Room PS101

### Instructors:

Cory Momany, Ph.D. **Course Coordinator**

Email: [cmomany@uga.edu](mailto:cmomany@uga.edu)

Office: 372 Wilson Pharmacy Building

Cell phone/TEXTs: 706-296-9617

Phone: 706-542-5370 (but cell preferred)

Office hours: By appointment via email

Houjian Cai, Ph.D.

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Office Hours: By appointment via email

Diego Huet, Ph.D.

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Office: Paul D. Coverdell Center, Room 345A

Phone: 706-542-7305

Office Hours: By appointment via email

### REQUIRED TEXTS:

Texts: ***Human Physiology***, 16th Edition" by Stuart Ira Fox and Rompolski

Additional text book purchase options are available at the publisher's website,

<https://www.mheducation.com/highered/product/human-physiology-fox-rompolski/M9781260720464.html>

### COURSE FORMAT:

The course will be delivered in person. Some video assignments may be made to create discussion time in class or to enhance the learning process. Attendance is expected for success in the course and a bonus point will be assigned based on attendance. Classes will not be video recorded unless required by university or college of pharmacy guidelines.

### COVID-19 and College of Pharmacy-specific Policies:

Students are expected to follow all COVID-19 related policies, procedures, and guidelines set by the University of Georgia as well as the College of Pharmacy COVID-19 Addendum.

### COMMUNICATION

Class communication will be handled primarily through announcements posted to eLC, as well as email, and announcements in the classroom. For content questions, contact the instructor that is delivering content related to your questions first. Contact the course coordinator ([cmomany@uga.edu](mailto:cmomany@uga.edu)) for course-general questions and his section.

## ASSESSMENTS/EVALUATIONS

Four tests, each worth 25% of the grade, will constitute the grading of the course:

Test 1	September 15	2:20 PM – 3:35 PM
Test 2	October 13	2:20 PM – 3:35 PM
Test 3	November 8	2:20 PM – 3:35 PM
Test 4	December 12	12:00 PM – 1:15 PM

**All Tests will be delivered in the classroom using a Respondus Lock-down Browser interfaced to ELC.** A modern computer (Windows PC 7-10, Mac OS X10.12 or higher, or iPad iOS10.0) is critical for tests. **A student ID must be available during tests.** A practice syllabus quiz (1% of the grade as a bonus) will be made available in eLC to test equipment capabilities before tests and to evaluate knowledge of the syllabus. An additional 1% bonus will be assigned as a percentage of classes the student attends collected via TopHat.

**Tests** will be primarily multiple-choice format with some short answer or essay-format questions. Each test may be cumulative relative to previous tests. Test questions will be formed to evaluate a deep understanding of material beyond rote memorization or “googleable” facts. No assistance is allowed during the tests, and a significant investment in study is expected and necessary to be successful in this course. Tests are timed and given during scheduled class times only. Students are not allowed to have any items nearby or on their body that can communicate electronically via Bluetooth or WiFi – including, but not restricted to, digital watches, phones, microphones, earphones, video cameras, computers- any electronic resource near or on their person during the exams.

The course letter grade cutoffs will be determined by summing all available scores for the tests and attendance/syllabus quizzes. In the absence of a curve, the letter grade assignments will be: A >92, A- 89<92, B+ 86<89, B 82<86, B- 79<82, C+ 76<79, C 70<76, C- 69<70, D 60<69, F<60. Individual test distributions will be corrected based on statistical analysis using Discrimination and Difficulty Indices (e.g. answers may be tossed at the instructor’s discretion). In the event that a curve is deemed necessary (for instance if the average is below a “C”), the letter grade distribution will be derived from Z-scoring (a normalization scheme), the details of which will be provided before the final exam. The change in letter grade cutoffs will only be made to benefit the student (the cutoffs can only move down). It is possible for all students in the class to get “A” grades.

## CLASS ATTENDANCE, ABSENCES, AND HONOR CODE

If a student must miss an exam due to sickness, the student must follow the policies defined by the University and inform the instructor, either directly or through the University Student Affairs office, of the situation prior to the exam being given. Documentation supporting the reasons for the absence will be required. In cases of COVID infections, follow current university guidelines. Do not come to class sick. **An unexcused absence from an exam will result in a zero for that exam.** Makeup exams *for excused absences only* will be rescheduled and may include any format of question, including possibly all essay format, at the discretion of the instructor(s) that are responsible for the content covered. When multiple students miss an examination, the same exam will be used for all absent students and it will be given at the same time, possibly utilizing Respondus Monitor.

The **UGA Honor Code must always be followed.** *Any student that uses outside assistance (unless specifically allowed) on quizzes, tests, assignments, or other activities will be in a violation of the University Honor Code.* Practice quiz questions are not to be discussed or maintained in any format that might be shared with other students that may take the quiz in the future. Quiz questions *can* be used for personal study. Students that have taken quizzes may discuss them with other students that have taken the same quizzes. As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at <https://honesty.uga.edu/>. Lack of knowledge of the academic honesty policy is not a reasonable explanation for any violation of the honor code. Any questions related to course assignments and the academic honesty policy should be directed to the instructor.

### **Mental Health and Wellness Resources:**

- If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <https://sco.uga.edu/>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.
- UGA has several resources for a student seeking mental health services (<https://www.uhs.uga.edu/bewelluga/bewelluga>) or crisis support (<https://www.uhs.uga.edu/info/emergencies>).
- If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (<https://www.uhs.uga.edu/bewelluga/bewelluga>) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.
- Additional resources can be accessed through the UGA App.

## LECTURE SCHEDULE

Updated 7/12/2022

Date	Topic	Instructor
Thursday, Aug 18 (75 min)	Course overview; Intro to Cells & Biological Membranes	Momany
Monday, Aug 22 (50 min)	Membrane Transport I	Huet
Tuesday, Aug 23 (75 min)	Membrane Transport -ion channels, Membrane potential	Huet
Thursday, Aug 25 (75 min)	Action Potential	Huet
Monday, Aug 29 (50 min)	Nervous System Overview & Excitable Cells	Huet
Tuesday, Aug 30 (75 min)	Synapses & Neuromuscular Junction	Huet
Thursday, Sep 1 (75 min)	Central Nervous System I	Huet
Monday Sep 5	Labor Day Holiday- no class	
Tuesday, Sep 6 (75 min)	Central Nervous System II	Huet
Thursday, Sep 8 (75 min)	Muscle I (power stroke/EC coupling)	Huet
Monday, Sep 12 (50 min)	Muscle II (mech/metab/smooth)	Huet
Tuesday, Sep 13 (75 min)	Motor Systems & Integration of Motor Function	Huet
Thurs Sep 15 (75 min)	Test 1 (mostly Dr. Huet lectures)	
Monday, Sep 19 (50 min)	Autonomic Nervous System I	Cai
Tuesday, Sep 20 (75 min)	Autonomic Nervous System II	Cai
Thursday, Sep 22 (75 min)	Sensory systems I (mechanos- & thermosensation, nociception)	Cai
Monday, Sep 26 (50 min)	Sensory Systems II (hearing/balance/taste)	Cai
Tuesday, Sep 27 (75 min)	Sensory systems III (vision & smell)	Cai
Thursday, Sep 29 (75 min)	Endocrine I (pancreatic/adrenal)	Cai
Monday, Oct 3 (50 min)	Endo II (pituitary/hypothalamus/thyroid)	Cai
Tuesday, Oct 4 (75 min)	Endo III (pituitary/hypothalamus/thyroid)	Cai
Thursday, Oct 6 (75 min)	Endo IV (male & female reproduction)	Cai
Monday, Oct 10 (50 min)	Endo V (female reproduction & pregnancy)	Cai
Tuesday, Oct 11 (75 min)	Blood	Huet
Thurs, Oct 13 (75 min)	TEST 2 (excludes Blood, all Dr. Cai lectures) -REMOTE	
Monday, Oct 17 (50 min)	Cardiac I (overview, anatomy, electrophysiology)	Huet
Tuesday, Oct 18 (75 min)	Cardiac II (electrophysiology & pump)	Huet
Thursday, Oct 20 (75 min)	Cardiac III (output), Circulation I (Periph/microcirc)	Huet
Monday, Oct 24 (50 min)	Circulation II (blood pressure/regulation)	Momany
Tuesday, Oct 25 (75 min)	Immune I (intro, innate, adaptive)	Momany
Thursday, Oct 27 (75 min)	Immune II (antibodies, antigen recognition)	Momany
Friday, Oct 28	Fall Break	
Monday, Oct 31 (50 min)	Immune III (lymphocyte development/thymus/T-cell response)	Momany
Tuesday, Nov 1 (75 min)	Immune IV (humoral response)	Momany
Thursday, Nov 3 (75 min)	Immune V (immune response to pathogens)	Momany
Monday, Nov 7 (50 min)	COVID-19, Vaccines, Review	Momany
Tues Nov 8 (75 min)	Test 3 (mix of Dr. Huet and Dr. Momany lectures) -REMOTE	
Thursday, Nov 10 (75 min)	Pulmonary I (overview-ventilation, mechanics & blood flow)	Cai
Monday, Nov 14 (50 min)	Pulmonary II (ventilation-perfusion & gas exchange)	Cai
Tuesday, Nov 15 (75 min)	Pulmonary III (O <sub>2</sub> & CO <sub>2</sub> transport, regulation)	Cai
Thursday, Nov 17 (75 min)	Renal I (overview/anatomy & filtration)	Cai
Monday, Nov 21 (50 min)	Renal II (tubular reabsorption & secretion)	Cai
Tuesday, Nov 22 (75 min)	Renal III (urine concentration)	Cai
Thurs, Nov 24	Thanksgiving holiday	
Monday, Nov 28 (50 min)	GI & Liver I (intro/anat/motility)	Cai
Tuesday, Nov 29 (75 min)	GI & Liver II (digestion/absorption)	Cai
Thursday, Dec 1 (75 min)	GI & Liver III (digestion & drug metabolism)	Cai
Monday, Dec 5 (50 min)	GI & Liver IV (drug metabolism)	Cai
December 12, 12-3:00PM	Test 4 (final exam, all Dr. Cai lectures)	