

INSTRUCTOR

Dr. Nicholas Pollock (nicholas.pollock@uta.edu)

Phone: 817-272-5732, Life Sciences Building Room 466

Office Hours: T 1-2pm, W 11-12pm, TH 2-3pm, or by appointment

COURSE MATERIALS

Text: Human Physiology, by Brian Derrickson, 1st Ed. (2016). Wiley. E-Text ISBN: 978-1-119-25517-8; Paperback ISBN: 978-1-119-27274-8; Hardcover ISBN: 978-0-470-38140-3

COURSE DESCRIPTION

Physiology, at its simplest definition, is the study of how an organism functions. The general principles of physiological mechanisms on the cellular, tissue, organ, and organismal levels will be discussed. This course will focus on the human species, but comparisons may be made to other vertebrate species to emphasize similarities and differences across vertebrate taxa. Laboratory activities will complement lecture material and will focus on a broad array of topics, including hypothesis testing, data analysis, clinical techniques, and the understanding of research in physiology.

COURSE OBJECTIVES

- Describe the levels of organization that comprise the human body.
- Understand and explain the functions of the 12 major body systems.
- Understand and appreciate the importance and relevance of physiology to everyday life.

TENTATIVE SCHEDULE

WEEK 1: LECTURES		
Jan 17	Intro & Overview	
Jan 19	Nervous System & Signaling I (Chap 7)	
WEEK 2: LECTURES		LAB WEEK 1
Jan 24	Nervous System & Signaling II (Chap 7)	Lab Safety, iWorx Basics, Basic Statistics and Figures
Jan 26	Central Nervous System (Chap 8)	
WEEK 3: LECTURES		LAB WEEK 2
Jan 31	Sensory System I (Chap 9)	Autonomic Nervous System, Somatic Reflexes, Quiz 1
Feb 2	Sensory System II (Chap 9)	
WEEK 4: LECTURES		LAB WEEK 3
Feb 7	Autonomic Nervous System (Chap 10)	Central Nervous System, EEG, Quiz 2
Feb 9	Muscular System (Chap 11)	
WEEK 5: LECTURES		LAB WEEK 4
Feb 14	Exam 1	Sensory System, Quiz 3
Feb 16	TBD	
WEEK 6: LECTURES		LAB WEEK 5
Feb 21	Cardiovascular System: Heart I (Chap 14)	Muscular System, Skeletal Muscle Contraction, EMG, Quiz 4
Feb 23	Cardiovascular System: Heart II (Chap 14)	

	WEEK 7: LECTURES	LAB WEEK 6
Feb 28	Cardiovascular System: Blood Vessels (Chap 15)	Cardiovascular System,
Mar 2	Cardiovascular System: Blood (Chap 16)	Cardiovascular Physiology, Quiz 5
	WEEK 8: LECTURES	LAB WEEK 7
Mar 7	Immune System I (Chap 17)	Respiratory System,
Mar 9	Immune System II (Chap 17)	Pulmonary Ventilation, Quiz 6
	WEEK 9: LECTURES	LAB WEEK 8
Mar 21	Respiratory System I (Chap 18)	Urinary System, Urine Formation,
Mar 23	Respiratory System II (Chap 18)	Urinalysis, Quiz 7
	WEEK 10: LECTURES	LAB WEEK 9
Mar 28	Exam 2	Digestive System,
Mar 30	TBD	Digestive Enzymes, Quiz 8
	WEEK 11: LECTURES	LAB WEEK 10
Apr 4	Urinary System I (Chap 19)	Reproductive Systems,
Apr 6	Urinary System II (Chap 19)	Ovulation & Pregnancy Tests, Quiz 9
	WEEK 12: LECTURES	LAB WEEK 11
Apr 11	Digestive System I (Chap 21)	Review Topics,
Apr 13	Digestive System II (Chap 21)	Quiz 10
	WEEK 13: LECTURES	LAB WEEK 12
Apr 18	Endocrine System I (Chap 13)	Lab Final
Apr 20	Endocrine System II (Chap 13)	
	WEEK 14: LECTURES	
Apr 25	Reproductive System I (Chap 23)	
Apr 27	Reproductive System II (Chap 23)	
	WEEK 15: LECTURES	
May 2	Exam 3	
May 4	TBD	

Final Exam Period (TBD): **Final Exam (Cumulative)**

GRADES

3 Lecture Exams (100 points each)

Final Exam (150 points)

Lecture Total (70% of overall): 450 points

Quizzes (8 @ 10 points each

& 1 review quiz @ 20 points) 100

Lab Reports (10 @ 10 points each) 100

Lab checkout 20

Lab Final 100

Laboratory Total (30% of overall): 320

I do not curve grades, but I do round grades up from the 0.5% level (for example, if your final grade is 86.5%, you will be rounded up to 87%). Also, if you have regularly attended class, participated, and are within 1-2 points of the next letter grade, I am willing to bump you up. Grade cut-offs are as follows:

A 90 to 100%; **B+** 87 to 89; **B** 80 to 86; **C+** 77 to 79; **C** 70 TO 76; **D** 60 to 69; **F** Below 60

ASSIGNMENTS

Reading: Please always read the Chapter Review boxes in each assigned chapter BEFORE coming to class. The rest, you can either read before or after class, depending on your personal preference.

Laboratory Reports: There will be a lab report at the end of each lab in which students are required to submit by the end of that day's lab. These will require the student to collect information from their lab experiment, synthesize this information using critical thinking in order to communicate what was learned, and answer related questions.

INSTRUCTOR ACCESSIBILITY

I will be available for walk-in meetings or instant e-mail replies during the hours listed at the top of this document. For students who are unavailable during the hours listed, please email me for an appointment. If you come by my office and my door is open, please knock and I am likely to meet with you if I am not currently busy. In addition, I will respond to e-mails outside of those hours within reason. You can expect a response within 24 hours, usually less, for emails received during the week.

COURSE EXPECTATIONS AND POLICIES

Lectures: I expect you to attend lecture. Students who regularly attend lecture score significantly higher on tests than students who do not (e.g., C vs. B+), plus I am more likely to bump up your final grade. Regardless of whether you are in class or not, however, you are responsible for everything which is discussed in lecture, everything which is assigned as class reading, and any handouts which are given in class. You are expected to make your own arrangements for access to class notes or handouts that you missed. If you choose to use a laptop for taking notes during class, please refrain from checking email or browsing the internet – if you are caught doing so, I will ask you to put your computer away immediately.

Also:

- Laboratory attendance is mandatory.
- If you must miss an exam, you must clear it in advance directly with me. In many cases, I will require official documentation of your excuse (e.g., doctor's or dean's note).
- Missed exams without permission from the instructor will result in a grade of 0.
- **I expect you to check your email for class announcements.**
- **Academic dishonesty of any kind will not be tolerated (see below)!**

ACADEMIC HONOR CODE

Each student has the responsibility to uphold the highest standards of academic integrity in their own work, to refuse to tolerate violations of academic integrity in the university community, and to foster a high sense of integrity and social responsibility on the part of the university community.

Cheating and Plagiarism: Plagiarism is defined as the use of any information, published, or unpublished without acknowledgement. Cheating occurs when you use the work of another student in place of your own. Neither will be tolerated. It is extremely important that you distinguish your own ideas from those of others. You must always acknowledge sources. If you have any questions, see me.

AMERICANS WITH DISABILITIES ACT

Students with disabilities needing academic accommodation should contact the Office for Students with Disabilities (University Hall, Room 102, 817-272-3364).

SYLLABUS CHANGE POLICY

This syllabus is a guide for the course and is subject to change. Notice will be given. If you find an error, please contact me.