BIOL 2457 – Human Anatomy & Physiology I Spring Lecture: TTH 8-9:20am, Location TBD

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 Anatomy & Physiology, by Elaine Marieb & Katja Hoehn, 10th Ed. (2016). Paperback ISBN: 978-129096971; Hardcover ISBN: 978-0133968224
Lab Manual: Human Anatomy & Physiology Laboratory Manual by Elaine Marieb & Lori Smith (Package for University of Texas – Arlington, 2nd Ed. 2016). ISBN: 978-1323571927

COURSE DESCRIPTION

Anatomy is defined as the study of structure of body parts and their relationships to each other. Physiology is the study of how an organism functions. When all is said and done, physiology can only be explained in terms of the underlying anatomy. In this course, the general principles of physiological mechanisms on the cellular, tissue, organ, and organismal levels will be discussed with a focus on the human species. However, comparisons may be made to other vertebrate species to emphasize similarities and differences across vertebrate taxa. Topics will include the organization of the human body and anatomy and basic physiology of the integumentary, musculoskeletal, nervous, sensory, and endocrine systems. Laboratory activities will complement lecture material and will explore both anatomical and experimental aspects of principles introduced in the lecture.

COURSE OBJECTIVES

- Describe the levels of organization that comprise the human body.
- Understand and explain the functional morphologies of the integumentary, musculoskeletal, nervous, and sensory systems.
- Understand and appreciate the importance and relevance of physiology to everyday life.

TENTATIVE SCHEDULE

	WEEK 1: LECTURES		
Jan 17	Intro & Overview		
Jan 19	Orientation of the Human Body	(Chap 1)	
	WEEK 2: LECTURES		
Jan 24	Biochemistry	(Chap 2)	
Jan 26	Cells: The Basic Living Unit I	(Chap 3)	
	WEEK 3: LECTURES		**LAB WEEK 1**
Jan 31	Cells: The Basic Living Unit II	(Chap 3)	Anatomical Language, Organ Systems, Cells
Feb 2	Tissue: The Living Fabric I	(Chap 4)	
	WEEK 4: LECTURES		**LAB WEEK 2**
Feb 7	Tissue: The Living Fabric II	(Chap 4)	Microscopy, Tissues, Integumentary System
Feb 9	The Integumentary System	(Chap 5)	**Quiz 1**

	WEEK 5: LECTURES		**LAB WEEK 3**
Feb 14	**Exam 1**		Bones, Axial Skeleton
Feb 16	Bones & Skeletal Tissues	(Chap 6)	**Quiz2**
	WEEK 6: LECTURES		**LAB WEEK 4**
Feb 21	The Human Skeleton	(Chap 7)	Appendicular Skeleton, Joints
Feb 23	Joints	(Chap 8)	**Quiz 3**
	WEEK 7: LECTURES		**LAB WEEK 5**
Feb 28	Muscles & Muscle Tissue I	(Chap 9)	**Practical I**
Mar 2	Muscles & Muscle Tissue II	(Chap 9)	
	WEEK 8: LECTURES		**LAB WEEK 6**
Mar 7	The Muscular System	(Chap 10)	Skeletal Muscle Structure & Function
Mar 9	**Exam 2**		
	WEEK 9: LECTURES		**LAB WEEK 7**
Mar 21	The Nervous System I	(Chap 11)	Nervous Tissue, Central Nervous System
Mar 23	The Nervous System II	(Chap 11)	**Quiz 4**
	WEEK 10: LECTURES		**LAB WEEK 8**
Mar 28	The Central Nervous System I	(Chap 12)	Autonomic Nervous System, Sensory System
Mar 30	The Central Nervous System II	(Chap 12)	**Quiz 5**
	WEEK 11: LECTURES		**LAB WEEK 9**
Apr 4	The Central Nervous System III	(Chap 12)	Group Presentations
Apr 6	The Peripheral Nervous System I	(Chap 13)	
	WEEK 12: LECTURES		**LAB WEEK 10**
Apr 11	The Peripheral Nervous System II	(Chap 13)	**Practical II**
Apr 13	The Peripheral Nervous System III	(Chap 13)	
	WEEK 13: LECTURES		
Apr 18	The Autonomic Nervous System I	(Chap 14)	
Apr 20	The Autonomic Nervous System II	(Chap 14)	
	WEEK 14: LECTURES		
Apr 25	The Sensory System I	(Chap 15)	
Apr 27	The Sensory Nervous System II	(Chap 15)	
	WEEK 15: LECTURES		
May 2	**Exam 3**		
May 4	Review		

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

GRADES

10 Quizzes (@ 20 points each)	200
3 Lecture Exams (@ 100 points each)	300
Final Exam	150
Lecture Total:	650 points

Quizzes (5 @ 12 points each)	60
Practical I	125
Practical II	125
Research Paper	20
Group Presentation	20
Laboratory Total:	350 points

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** 80 to 89; **C** 70 TO 79; **D** 60 to 69; **F** Below 60

ASSIGNMENTS & QUIZZES

Reading: Please always read the flow chart (beginning of each chapter) and Chapter Summary (end of each chapter) for each assigned chapter BEFORE coming to class. The rest, you can either read before or after class, depending on your personal preference.

Quizzes: Quizzes will be administered through Blackboard under the Course Materials tab. Quizzes will cover any material since the last exam (i.e., quizzes 4-6 will cover material after exam 1, but before exam 3). Each quiz will consist of approximately 10 multiple choice questions, will have a 10-minute time limit, and must be completed within 24 hours that it goes online. You are NOT permitted to use your text book or other sources to answer the questions and you are NOT allowed to work together on the 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
Lecture instructors are required by law to provide "reasonable accommodation" to students with disabilities, so as not to discriminate on the basis of disability. It is the student's responsibility to inform me that they require accommodation by the end of the second week of labs and prior to any assignments, quizzes, activities, or exams that require accommodation. Only students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities (University Hall, Room 102, 817-272-3364.

TITLE IX
The University of Texas at Arlington is committed to upholding U.S. Federal Law "Title IX" such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

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.