# BIOLOGY 2403 HUMAN ANATOMY AND PHYSIOLOGY I 4 CREDIT HOURS

FALL 2017

Section: 01 Lecture Time: 2:00pm Bldg: LDB Room: 214

### **Course Coordinator and Instructor:**

Dr. Jordan Clark, Coordinator and Instructor Office in LDB 148, phone (936) 294-2656 Email jmc124@shsu.edu Office hours: TBA

**Course Description:** This course is the first of a two-semester sequence of courses addressing the structure and function of the human body and mechanisms for maintaining homeostasis. Emphasis will be given to aspects relevant to medical science. The first semester will focus on the anatomy and physiology of human cells, tissues and systems including the integumentary, skeletal, muscular and nervous systems. In the laboratory, students will examine human anatomy through histological and skeletal preparations, as well as through dissection of mammals. Physiological lab experiments and/or computer simulation exercises will also be conducted.

Prerequisites: Demonstrated college-level readiness in reading, writing, and math.

NOTE: <u>A minimum GPA of 3.0 (B average) in science courses is required to</u> <u>even apply to Nursing School.</u> Students admitted to Nursing School have an average GPA of 3.4. So, if you want to get into Nursing School, obtain no less than a B in all of your pre-nursing courses. In addition, nursing schools tend to look more favorably on applicants who do not retake any single course more than once, or have more than two different courses retaken.

**Lecture:** This lecture course will help students identify and understand the function and form of several important human organ systems. Students will learn anatomical vocabulary and understand how organs and organ systems function and interact with an appreciation for the complexity and integration of the human organism.

My approach to science education is concept based learning. Anatomy and physiology requires continual exposure to master learning of the large volume of structures. This course is not solely based on memorization of shape and location. You will be required to learn the function and scientific relevance of the studied anatomy. I encourage a strict self-disciplined style of learning where the student takes the initiative for preparation. To better help you make lasting connections, class time will be spent both with lecture and active learning exercises.

**Laboratory:** Laboratory sessions are an important part of your educational experience and will therefore account for a fourth of your grade in this course. Laboratory sessions will help you gain a hands-on application and examination of the material taught in lecture. Laboratory sessions may require critical aspects of experimentation and how to collect, analyze, and evaluate data. Laboratory regulations, procedures, and requirements will be outlined in detail by your laboratory instructor during your first laboratory meeting.

## **Required Course Texts:**

## Lecture Text Book:

- Connect Plus Anatomy and Physiology with LearnSmart; McKinley, O'Loughlin,Bidle. Publisher: McGraw-Hill Sciences
- Optional Hard Text: McKinley, Michael: *Anatomy and Physiology : An Integrative Approach* Publisher: McGraw-Hill Sciences

Scantron forms: Scantron 882-E

## Lab Manual:

- Martin, Terry: Laboratory Manual for Human Anatomy and Physiology Publisher: McGraw-Hill Sciences
- Connect online access for lab manual for Human A&P Publisher: McGraw-Hill Sciences

**In-Class Applications:** 

Squarecap

## **COURSE POLICIES**

Attendance and Expectations: As University students, I expect you to behave professionally (cell phones off in class, prompt attendance, respect to other students, etc). Exam material is primarily from lectures and in-class discussions. Lecture attendance is required for this semester.

You may not leave during the lecture without advance notice. Leaving during the lecture will result in a zero on the next exam.

You will be allowed 1 make-up exams pending review of absence. You must notify me before the exam or **no later than 8hrs** after the missed exam. You must also provide verification by means of official University activity or medical excuse. Failure to abide by any one of these attendance policies will result in a zero for the missed exam without the opportunity to take a make-up. The date, time and form of the make-up exam will be decided by the instructor.

All assignments must be turned in on time or points will be deducted. Assignments that are more than one day late will not be accepted.

Registration to Squarecap and McGraw Hill Connect is mandatory. Connect offers a two-week free trial to account for any financial issues that need to be settled early in the semester. Once this two-week free trial end you must subscribe to the Connect account. Failure to registered for these products by the determined due date will result in a zero for all missed assignments with no possibility of a make-up assignment.

**Course evaluation:** This course has two components, lecture and lab, combined into one overall four-hour course grade.

Assessment	Points	Weighted (%)
Lecture Exams	100	30
Class Quizzes	10	15
Connect Assignments	20	25
Laboratory	100	30
Total		100%

Should an error be made in scoring exams, I must be informed within a week of the time exam grades are posted. Corrections will not\_be considered after that period.

**Exams** will be scantron and consist of multiple choice, matching, and true/false questions. Students are allowed the entire class time to complete the exam. The Final Exam must be taken on the scheduled date. There will be no early or late final exams allowed.

Assignments and Quizzes are completed on-line at the McGraw Hill Connect website or in class using Squarecap. Registration for these sites is required. If you do not take the quiz during the assigned time, there will be no make-up quiz, nor will I provide an alternate assignment. Connect assignments are time sensitive. You can start and stop the assignment at your leisure. However, you must complete the assignment <u>before the due date</u> in order to receive full credit. Post lecture homework will consist of approximately 20 items from LearnSmart or question banks that assess detail and understanding of material. These questions will be available on the Connect website. You are responsible for checking all assignment due dates.

I *do not* offer any exam study guide, however, there will be a review on study techniques and strategies. These strategies are discussed periodically leading up to each exam.

The grade for this portion (Quizzes and Assignments) is calculated by averaging all the grades in this category, along with the on-line quizzes.

Course grade is the typical breakdown of the following:

Grade	Percentage
А	100-90%
В	89-80%
С	79-70%
D	69-60%
F	59% and below

#### Laboratory

Your Teaching Assistant will give you a complete description of lab policies on the first day of lab. Be aware that you must attend the lab for which you are registered and may NOT switch sections. You should come prepared for lab on time and bring your new lab manual. Any homework assignments that are collected must be submitted in person and not turned in by proxy (a classmate). In addition, homework is due at the beginning of lab; thus if you are late to lab and do not submit it in time it will not be graded.

# **UNIVERSITY POLICIES**

### ACADEMIC DISHONESTY:

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Cell phones must be put on vibrate and put away during class, and absolutely during exams. If

your cell phone is out during testing days, then your exam will be taken up and you will receive a "0" for the test, and face possible additional disciplinary action. I will give one warning during an exam if I see a cell phone out. With this warning check to make sure your phone is put away. Failure to do so will result in a zero.

### STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and

instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. For a complete listing of the university policy, see:

http://www.shsu.edu/~vaf\_www/aps/documents/861001.pdf

### STUDENTS WITH DISABILITIES POLICY:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail <u>disability@shsu.edu</u>). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf

### VISITORS IN THE CLASSROOM:

Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.

**Classroom Rules of Conduct:** Cell telephones must be turned off and put away before class begins. Students are prohibited from reading, sleeping, texting, talking at inappropriate times, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive may be reported to the Dean of Students for disciplinary action in accordance with university policy. No audio or visual recording of the lecture may take place without the express written consent form signed by both instructor and student.

# **Tentative Schedule**

The following is tentative schedule for 90 minute lecture meeting twice per week. Weeks for the exams will be followed as closely as possible, but they are *subject to change*. It is YOUR responsibility to attend class, check Blackboard often, and be aware of schedule changes.

Week	Lecture	Notes
1	Class introduction &	
8-24	Ch 1: Science of A&P	
2	Ch 2: Chemistry	
8-29		
3	Ch 3. Energy and metabolism cont.	
9-5		
4	Ch 4: Biology of the cell cont.	
9-12		
5	Lecture Exam 1	
5 9-19	Lecture Exam 1	
9-19	Ch 5: Tissues	
	CIT J. TISSUES	
6	Ch 5: Tissues cont.	
9-26		
	Ch 6: Integumentary system	
7	Ch 7: Skeletal system: structure and function	
10-3		
8	Ch 8: Skeletal system: Axial and appendicular	
10-10		
	Ch 9: Joints	
9	Lecture Exam 2	
9 10-17	Lecture Exam 2	
10-17	Ch 11: Skeletal muscle	
	en 11. Skeletar masek	
10	Ch 10: Muscle Tissue	
10-24		
11	Ch 10: Muscle Tissue cont	
10-31		
	Ch 12: Nervous system: Tissue	
10		
12	Ch 12: Nervous system: Tissue	
11-7		
13	Lesture Exem 2	
13 11-14	Lecture Exam 3	
11-14	Ch 13 Nervous system: Brain and nerves	
	Ch 15 rervous system. Drain and herves	
14	Ch 13 Nervous system: Brain and nerves	
14	Ch 15 INCLIVOUS SYSTEM. DIAILI ANU HELVES	

11-21		
15	Ch 14: Nervous system: Spinal cord and nerves	
11-28		
	Ch 15: ANS	
	Final	