Syllabus Anatomy and Physiology 1 - - Summer 2014



Course Title: Human Anatomy & Physiology I BIOL 200 Credits: 4

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Office Hours:

There are no office hours during Summer Session. However, ff for some reason you need to see me, please call or stop by, or email me to arrange a meeting. I have an open door policy and my office is always open, so feel free to stop by anytime. I am sure that most of your questions can be addressed during lab.

Class days, Time, Room:

CRN: 30032 (Monday, Tuesday, Wednesday, and Thursday)

9:00 am - 3:25 (with a lunch break somewhere in there)

Class Description

This is an <u>intensive</u> lecture and lab course designed to study the fundamental principles of human anatomy and physiology at the cellular, tissue, organ and systems level of organization. The course may includes pig and organ dissection, study of the human skeleton, structural and functional relationships, and an appreciation of related human diseases and aging. Additionally, this course may include human cadaver dissection. Prerequisites include Math 091 or MATH 090, and CHEM 100 and BIOL 100 or BIOL 122 or BIOL 180 or BIOL 182 with grades of "C" or better, <u>or</u> MATH 191 or MATH 090 with a grade of "C" or better and a current California LVN/RN license.

Required Text Books

1) Saladin, Kenneth. 2012. <u>Anatomy and Physiology: The unity of form and function</u> (7th edition). McGraw Hill Publisher

ISBN-13: 978-0073403717 or ISBN-10: 0073403717

2) Marieb, E., and S. Mitchell. <u>Human Anatomy and Physiology Laboratory</u> <u>Manual</u> (Fetal Pig Version). 11th Edition. Pearson Publishing

ISBN13: 9780321831569

Attendance Policy

Attendance is required. You are responsible for all material presented during lecture and lab sessions. If for some reason you can't attend a lecture, quiz or an exam, it is your responsibility to approach me as soon as possible to determine if you have missed something important, and whether you can make it up. In order to make up missed opportunities you must provide a signed medical or legal excuse to document your absence. Students must realize that some labs, "in-class lab assignments," and particularly lab practical exams CANNOT be made up (regardless of the activity that resulted in the absence, or whether its an excused absence). Some labs and lab practical exams require numerous hours to prepare and/or require cooperative student participation. Thus, attendance is mandatory at all labs. All research indicates that there is a strong positive correlation between class attendance and good grades (i.e., those who attend class get better grades than those who skip class).

Class attendance and tardy policy follows regulations set forth in the IVC catalog. Additionally, the IVC catalog states "disruption of a class can result in disciplinary action." I consider coming into class tardy - a disruption. Thus, if I have started my lecture - you can not enter the class. Wait for the class to take the next break and then enter with others as they return from the break. This includes being tardy following any announced breaks during class or lab. Again, do not enter the class if lecture has already started. Wait outside of class until the class takes a break. Please note that personal issues, such as family obligations, family situations, border slowdowns, babysitters, railroad crossings, job interviews, car problems, taking family members to appointments, and work schedules are not acceptable excuses for an absence or a tardy. Additionally, leaving class or lab before it has been officially dismissed will be regarded as as an unexcused absence. Should you miss both components of a given lecture you will be recorded as absent (even if you attend the lab). If you acquire 4 unexcused absences you will be dropped from the class.

In order to participate in lab you must read and submit the lab safety form. To access this form click on "Lab Safety Form" in the left column. Safety glasses are required for some labs. If you do not bring your safety glasses to lab you will not be able to participate in lab.

Cell Phones

If I see you checking your cell phone for ANY reason, or if your cell phone rings, vibrates, buzzes, flashes or blinks during lecture or during lab (even if it is in your backpack, pocket, or purse!) I will ask you to leave the class for that day and you will be recorded as absent. Additionally, you cannot use it as a calculator or camera during any part of the class. Rest assured, I will provide you plenty of breaks that enable you to address all of your cell phone and social networking needs. You can provide your children's day care, and/or family health care providers the number of the IVC front office, and the front office can contact you in class in the event of an emergency.

Recording my lecture is okay if you use a recorder. You cannot use your cell phone or an I pod (or similar device) to record my lectures.

Honor Policy

- **Plagiarism** is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment ;(c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

Course requirements and Instructional Methods

Your course grade will be based on 5 lecture exams, 5 lab practical exams, out of class assignments, lab and lecture quizzes (some unannounced)

- 5 lab practical exams (80 points each approximately)

- 5 lecture exams to cover lectures, textbook, CD-roms, videos, and other lecture/lab materials (80 points each approximately - the final will be partially comprehensive and be worth approximately 160 points.

- 3 10 Quizzes (5 20 points ea. approximately)
- 3 10 Homework and lab assignments (10 50 points ea. approximately)

Total = 900-1000points (approximate)

Course Grading Based on Objectives

Grades will be assigned according to the following scale:

>90% = A 80 - 89.9% = B 70 - 79.9% = C 60 - 69.9% = D <59.9% = F

I do not accept late homework without a signed legal or medical excuse.

It is the responsibility of the student to fill out the necessary paperwork if he/she no longer attends the class. In order for a student to "officially" drop the course he/she must fill out the proper paperwork. If this is not done a semester grade of "F" will be assigned.

Learning Disabilities and Special Accommodations

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Program and Services (DSP&S) office as soon as possible (DSP&S, Room 2177, Health Sciences Building (760 355-6312).

If you have emergency medical information to share with me, or if you need special arrangements in the event the building must be evacuated, please let me know during the first week of class.

Course Objectives

1. The student will list the characteristics of the human organism and describe the body's organization, regions, and cavities.

2. The student will describe the structure and explain the function of the cell membrane, cytoplasm, nucleus and associated organelles. The student will describe genetic regulation and protein synthesis.

3. The student will list and describe the types, function, and locations of the different tissues in the body.

4. The student will describe the structure of the integumentary system and derivatives and will explain their functions.

5. The student will explain bone formation and functions. The student will also recall the names and location of selected skeletal parts and describe the various types of articulations.

6. The student will explain the molecular theories of muscle contraction and will recall the names, location and actions of selected muscles.

7. The student will explain transmission and regulation of nerve impulses. The student will describe the structure and function of the human brain, spinal cord, and sensory organs.

Student Learning Outcomes (SLOs are not performed during Summer Sessions)

1. Display critical thought related to topics in Human Anatomy using examination.

2. Identify the anatomy and/or display comprehension of the physiology related to cells, tissues, or organs.

3. Display critical thought associated with the functioning of the skeletal muscle system during an exercise in personal responsibility.

4. Conduct and interpret an electroencephalogram or electromyogram on another individual.

<u>Rules of Professional Conduct in This Class</u>: Health care professionals are expected to conduct themselves professionally. If health care professionals engage in unethical or unprofessional conduct, they can receive discipline ranging from being fired to losing their license. The following rules of professional conduct are not exclusive. Think about the policy that drives these rules and what other behavior not explicitly mentioned falls within the rules. Unprofessional behavior that is disruptive to the learning environment may result in removal from the class.

1. No rudeness.

Think about what you say before you say it. Treat everyone the way you would like to be treated. Do not behave as though you are entitled to anything. Be respectful of other peoples sex, cultures, and beliefs. Do not swear.

2. Be deferential to those in authority.

Think before you speak.

- **3.** Walk into class aware that you make an impression, as you will when you are a health care professional, the moment you walk into the room.
- 4. Unless otherwise instructed, put your cell phone away before class begins.

Why? Several reasons. Successful health care professionals have exemplary social skills, including the ability to establish rapport with patients and co-workers. If you are focused on your phone instead of the person to whom you are speaking, you cannot establish rapport. Further, good manners require that when a patient, coworker, boss, or professor speaks to you, you devote your full attention to the speaker.

5. Everyone present in class deserves your respect and consideration.

You will distract others if you enter the room after class has begun or leave the room after class has begun. It is rude to rustle belongings while another student or the professor is speaking. Be prepared for class when its starts.

6. Others can hear you when you talk to your neighbor.

It distracts them. It distracts me. Do not ask your neighbor about something you did not hear during lecture. Raise your hand and ask me. Passing notes is also distracting. Don't do it.

7. Do not eat.

You may drink water or chew gum discretely. Do not blow bubbles or pop your gum. You can not eat in the classroom during breaks.

8. You impress others at all times.

Appear engaged, even if you are not. No slouching, open yawning, eye rolling, resting your head on the table, or display any other behavior that is disrespectful to your classmates or to the professor.

9. Take responsibility for your work.

Do not blame others. Welcome criticism, try not to be defensive, and understand that if you do not correct your errors now, you will have to correct them when the stakes are much higher, like when you are working.

10. If you realize you've been rude, apologize.

Avoid the conditional apology, which is "I am sorry *if* I offended you." A conditional apology is arguably worse than no apology.

WK	DAY	DATE	LECTURE	LABORATORY/COMMENTS
1	Mon.	6-16	Orientation; Cha. 1 Intro. To	Small human models & lg. torso
			A&P 12	models
	Tues.	6-17	Cha. 2 Chemical Basis of	
			Life 1 2 1	Same as 6-17
	Wed.	6-18		Microscopes, clean slides and cover
				slips. 100 ml of physiologic solution
				in 3 different beakers. Thistle tube
				Osmosis Experiment: 5% sodium
				chloride in 4 different dispensers, 8
				500 mi beakers, dialysis tubing and
			Cha. 2 Callular Form and	Langets All provious labs.
			Function 2 1 2	Posters
	Thurs	6-19	Exam and Lab Practical 1	All previous lab models and posters
	Fri	6-20		All previous lab models and posters
	111.	0 20		
2	Mon	6-23	Cha. 4 Genetics and Cellular	
-	1011.	0 25	Function 1 2 1	Computers
	Tues.	6-24		Computers & Prepared slides:
	14001	0 = 1		Connective tissue (Areolar, Adipose,
				Reticular, Dense Regular, Dense
				Irregular, Elastic, Hyaline Cartilage,
				Fibrocartilage, Elastic Cartilage, Bone
				tissue, Blood, Lymph; Epithelial
				Tissue: Simple epithelium (squamous,
				cuboidal, columnar), Stratified
				epithelium (squamous, cuboidal,
				columnar), Glandular epithelium,
				Mucus epithelium; Nervous Tissue:
				Neuron Smears; Muscle Tissue:
			Cha. 5 Histology 2 1 2	Cardiac, Smooth, Skeletal. Posters of

Tentative Schedule

				Animal cells and Tissues
	Wed.	6-25	Cha. 5 Histology 1 2 2	Same as 6-24
	Thurs.	6-26	Cha. 6 Integumentary	Skin models and everything from 6-
			System 122	24
	Fri.	6-27		
3	Mon.	6-30	Exam and Lab Practical 2	Everything from 6-25
	Tues.	7-1		Skin models, Bone tissue models,
				skulls, bone boxes, skeletons (big and
			Cha. 7 Bone Tissue & Cha 8	small), joint models, bone tissue
			Axial Skeleton 121	slides & and all skin models and slides
	Wed.	7-2	Cha. 8 Appendicular	Same as 7-1
			Skeleton 212	
	Thurs.	/-3	Cha. 9 Joints 122	Same as 7-2
	Fri.	7-4		
4	Mon.	7-7	Exam and Lab Practical 3	Same as 7-3
	Tues.	7-8	Cha. 11 Muscle Tissue & Cha	
1				
			10 Muscle Systems 121	All muscle models, and slides
	Wed.	7-9	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt.	All muscle models, and slides
	Wed.	7-9	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212	All muscle models, and slides Same as 7-8 Come as 7-0 AND All several and
	Wed. Thurs.	7-9 7-10	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and
	Wed. Thurs.	7-9 7-10 7 11	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides
	Wed. Thurs. Fri.	7-9 7-10 7-11	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides
5	Wed. Thurs. Fri. Mon.	7-9 7-10 7-11 7-14	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10
5	Wed. Thurs. Fri. Mon. Tues.	7-9 7-10 7-11 7-14 7-15	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-14
5	Wed. Thurs. Fri. Mon. Tues. Wed.	7-9 7-10 7-11 7-14 7-15 7-16	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4 Cha. 14 Brain 121	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-14 All brain and spinal cord models
5	Wed. Thurs. Fri. Mon. Tues. Wed. Thurs.	7-9 7-10 7-11 7-14 7-15 7-16 7-17	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4 Cha. 14 Brain 121 Cha 15 ANS 212	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-14 All brain and spinal cord models Same as 7-16
5	Wed. Thurs. Fri. Mon. Tues. Wed. Thurs. Fri.	7-9 7-10 7-11 7-14 7-15 7-16 7-17 7-18	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4 Cha. 14 Brain 121 Cha 15 ANS 212	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-10 Same as 7-14 All brain and spinal cord models Same as 7-16
5	Wed. Thurs. Fri. Mon. Tues. Wed. Thurs. Fri.	7-9 7-10 7-11 7-14 7-15 7-16 7-17 7-18	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4 Cha. 14 Brain 121 Cha 15 ANS 212	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-10 Same as 7-14 All brain and spinal cord models Same as 7-16
5	Wed. Thurs. Fri. Mon. Tues. Wed. Thurs. Fri. Mon.	7-9 7-10 7-11 7-14 7-15 7-16 7-17 7-18 7-21	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4 Cha. 14 Brain 121 Cha 15 ANS 212 Cha. 16 Sensory Organs 1	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-10 Same as 7-14 All brain and spinal cord models Same as 7-16 Same as 7-16 AND all sensory models
5	Wed. Thurs. Fri. Mon. Tues. Wed. Thurs. Fri. Mon.	7-9 7-10 7-11 7-14 7-15 7-16 7-17 7-18 7-21	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4 Cha. 14 Brain 121 Cha 15 ANS 212 Cha. 16 Sensory Organs 1 2 1	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-10 Same as 7-14 All brain and spinal cord models Same as 7-16 Same as 7-16 AND all sensory models
5	Wed. Thurs. Fri. Mon. Tues. Wed. Thurs. Fri. Mon. Tues.	7-9 7-10 7-11 7-14 7-15 7-16 7-17 7-18 7-21 7-21	10 Muscle Systems 121 Cha. 11 Muscle Tissue (Pt. 2) 212 Cha. 12 Nervous Tissue 121 Cha 13 Spinal Cord 212 Exam and Lab Practical 4 Cha. 14 Brain 121 Cha 15 ANS 212 Cha. 16 Sensory Organs 1 2 1 Review	All muscle models, and slides Same as 7-8 Same as 7-9 AND All neuron and nervous system models & slides Same as 7-10 Same as 7-10 Same as 7-14 All brain and spinal cord models Same as 7-16 Same as 7-16 AND all sensory models Same as 7-21