

Human Anatomy and Physiology 2A

Riverside Community College

Spring 2009

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Lecture: Portable 1; 3 pm -4:05 pm
Lab: RXHS 1010: 4:35 - 7:55pm

Course Description:

Human Anatomy and Physiology 2A is the first of a two course series that introduces students to the basic concepts and principles of human anatomy and physiology. This course will provide a foundation for advanced study of the human body. The course covers body orientation and organization, cells and tissues, the skeletal and muscular systems, and the eye and ear. It is designed to meet the prerequisites for professional programs in medical and biomedical fields, e.g. nursing, dental hygiene, and physical therapy. The course will consist of 36 hours of lecture and 108 hours of laboratory.

Student Learning Objectives :

Upon successful completion of this course, the student should be able to demonstrate a working knowledge of:

1. Appropriate anatomical and physiological terminology; principles and relationships of human anatomy and physiology.
2. Proper operation of a compound light microscope.
3. Mathematical tasks including metric conversions.
4. Basic chemical principles related to anatomy and physiology, including atomic structure, ions and solutions, organic and inorganic compounds, and basic biomolecular structures.
5. Cellular structures and cellular transport processes.
6. The structure and function of the four basic adult tissue types.
7. The structure of the integument, including important accessory structures.
8. The structure and function of bone at a chemical, microscopic, and macroscopic level.

9. Bone formation, growth, and repair.
10. All of the bones of the body and their major markings.
11. The structure and function of skeletal, cardiac, and smooth muscle.
12. The physiology of skeletal muscle contraction.
13. The major muscles of the body, their actions, and their points of attachment.
14. The structure and function of the eye and the ear.
15. Basic clinical disorders, diseases, and applications, associated with each topic.
16. Integration of principles from different systems and critical evaluation of clinical problems where appropriate.

Course Materials:

Required:

Text: Marieb, Elaine H., Human Anatomy and Physiology, 7th Edition and Atlas

Lab Manual: Rosario J and Loomis R., Anatomy 2A Laboratory Manual, 2nd Edition

Sketching pencils

Dissection Kit

Recommended :

Di Fiore, Mariano. Atlas of Normal Histology (8th edition, Lee and Febiger)

Rust, Thomas. A Guide to Anatomy and Physiology Lab (2nd edition, Southwest Educational Enterprises)

You should read over the material in the textbook before lecture, take careful notes during lecture, review your notes and text, and do all the assigned worksheets and problems.

Grading

A single grade will be issued for lecture and lab. Lecture is worth 60% of the grade and lab is worth 40%. Grades will be determined by the percentage you earn of the total possible class points. Points will be based on your performance on lab write-ups, lab practicals and exams. Class participation counts too! Course grades will be assigned according to the following grade scale:

$$\text{Your Final Grade} = \frac{\text{The Points You Earn}}{\text{The Total Points Available}}$$

- A \geq 90% of the possible points**
- B \geq 80 -89% of the possible points**
- C \geq 65 – 79% of the possible points**
- D $>$ 55- 64% of the possible points**
- F 54% and below of possible points**

note: due to the time required to set up laboratory practical exams and the limited availability of classroom time to set them up, there will be **no make ups possible on missed laboratory exams.**

- UNDER NO CIRCUMSTANCES CAN A LABORATORY PRACTICAL BE MADE UP! EVEN WITH A DOCTOR'S NOTE OR FAMILY EMERGENCY , THE INSTRUCTOR AND LAB TECH CAN ONLY PREPARE EACH PRACTICUM ONCE! YOU WILL HAVE TO TAKE A ZERO. Make ups for lecture exams require a doctor's note AND you must inform me first. Very RARELY do students make up exams in 2A AND it is not done during class OR lab time regardless of your situation!!

What successful students should expect to do in this course:

Planning Time

Successful students, those who get A's, and B's, use their time wisely. The standard formula for college coursework is that every one hour of class time will result in two to three hours of homework and/ or studying. Successful students plan their time wisely so that they keep up with assignments. This course contains an abundance of information and is somewhat detailed. You cannot "cram" the night before an exam and expect to do well in any A &P course.

Attendance

ATTENDANCE IS EXPECTED, and you must be present and ON TIME for all class Sessions. It is also essential to be present for the ENTIRE lecture and lab. Leaving early is considered ½ cut. Also, please respect scheduled class breaks. Please turn off all beepers, cell phones, and watch alarms that make noise before coming into class; they are a serious distraction in college classes. Please instruct relatives or friends to call campus security in case of an emergency. Security will look up the class in the system and then send someone to the class.

Drop Procedures

If you are unable to complete the course for any reason, you must complete the drop procedure by phone or on **Webadvisor** to be officially removed from the course. Drops are not automatic and if a student leaves the course without completing the official 'drop procedures' their name will appear on the final grade roster and they will receive a grade of "F" in the course.

Special Needs

If you have a **physical, psychiatric/emotional, medical, or learning disability** that may impact your ability to carry out assigned course work, I urge you to contact the staff in Disabled Student Services Office. They will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation is confidential

Office Hours

These are by appointment and take place in Room RXHS 1010 (prep room) from 2-3 p.m on Mondays and Wednesdays. Please take advantage of this time if you need extra help, have specific questions not addressed during lecture or lab and/or need advice concerning your progress in this course.

Lab Practicum

Starting on Fridays in April from 2:30 -5 :00 p.m in portable 1: This is an optional review time which is highly recommended for skeletal and muscle laboratory study 😊.

Incomplete Grades

An incomplete grade can be given only if the student has completed more than 70% of the course and there has been some documentable unforeseen emergency that prevents the student from finishing the class. If a grade of "incomplete" is given, it must be accompanied by an agreement between the student and instructor that specifically outlines the requirements to complete the course and the time limit for this completion.

Cheating

Cheating on exams, of course, will not be tolerated. Copying from other students test papers, asking other students for help, using notes of any kind, books, dictionaries, or any electronic devices during exams are some examples of cheating. During exams, turn off cell phones and do not use headphones of any kind. The first instant of cheating by a student will result in a grade of "zero" on that exam. The second incident will result in suspension from the class.

Week	Date	Lecture Topic	Chapter (Text)	Lab/ Topic	Lab
1	18-Feb	Chemistry	1,2	Body Orient/Lang	1/HO
2	23-Feb	Biomolecules	2	Microscopy/Metric	2/3
	25-Feb	Cytology	3	Cells /Enzymes (Mod)	4(HO)
3	2 Mar	Pro Syn	3	Osmo/Diffusion	9/HO
	4 Mar	Cytology	3	Pro. Syn. /Mitosis	6/7
4	9- Mar	Midterm Exam I		Lab Practical I	
	11 Mar	Histology	4	Epithelial Tissue	10/ HO
5	16-Mar	Histology	4	Histology	11/HO
	18- Mar	Integument	4	Connective	12./13
6.	23-Mar	Integument	5	Integument	Review
	25-Mar	Midterm Exam II			
7	30-March	Reveiw		Lab Practicum II	
	1 April	Midterm Exam II	7	Skeletal System	14/15
8	6-Apr	Bone Physiology	7	- Skeletal System	Vert
	8 Apr	Bone Physiology	8	Skeletal System	Skull

COLLECT SKETCH BOOKS HERE!

April 13-17

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SPRING

BREAK >>>>>>>>>>

9	20 Apr-	Joints	9	Skeletal System	H0/15
10	22- Apr	Skeletal System	8	Skeletal System	15
11	27-Apr	Lecture Midterm III		Cat Dissection	
	29-Apr	Muscle Physiology	10	Cat Dissection	16
12	4-May	Muscle Physiology	10	Lab Practical III	16
	6-May	Muscles Physiology	11	Cat Dissection	16
13	11-May	Muscular System	11	Cat Dissection	16
	13-May	Ear	15	Cat Dissection	16
14	18-May	Ear Physiology		Ear Models / Ear Slides	
	20-May	Midterm Exam IV	15	Lab Practicum IV	
15	25-May	SCHOOL CLOSED	NO CLASS OR LAB	CLASSES *****	
	29-May	Eye Physiology	15	Sheep Eye Dissection	
16	3-June	Finish Senses	15	Final LAB PRACTICAL	

Final Lecture Exam will take place during FINALS WEEK ; Date TBA.

HO-HAND-OUT/ Many labs are very time consuming; plan to **stay the entire lab session**.
Lecture and/or lab order is subject to change at the discretion of lab instructor.

