Biology 2010 - Human Anatomy and Physiology I
Fall 2019 Syllabus

Instructor:
Dr. Katrina Yamazaki
Office: LKH 215
Email Address: kyamaza@calstatela.edu
Phone: (323) 343-2086
Office Hours: Mondays and Wednesday 8:00 - 9:30, Tuesdays 1:00pm - 2:00 pm **by appointment only**.
Some Fridays (see canvas for dates)
Course Website: canvas.calstatela.edu

Lab Instructors:
Dr. Ashley Heers (**aheers@calstatela.edu**)
Dr. Edward Eivers (**edward.eivers@calstatela.edu**)
Mr. Kevin Chau (**kevin.Chau8@calstatela.edu**)
Dr. Ali Baroon (**mbaroon@calstatela.edu**)

Course Description and Meeting Times

This Course provides an introduction to human anatomy and physiology for non-science majors. The general objectives of the course are to gain a detailed understanding of the structure and function of the human body; to appreciate the relationship between structure and function; and to understand how various cells, tissues, organs and organ systems work together to maintain homeostasis. To achieve these general objectives, we will study the structure and function of the human body from a systems viewpoint.

The entire Biology 2000 course is presented in two semester. This semester we will cover anatomical terminology; homeostasis, cell and tissue structure and function, basic biochemistry and metabolic pathways, the integumentary system, the skeletal system, the muscular system, the digestive system and the urinary system

Meeting Times: Lecture - MW 1:40am - 2:55pm, Annenberg Science Complex Wing B (ASCB) 132

Laboratory – MW or TTh in ASCB 363

Course Websites

Canvas for Biology 2010 - will contain syllabus, lecture slides, your progress, list of the online homework assignments and anything else the teaching staff deems relevant to your successful completion of the course.

McGraw Hill Connect - (https://connect.mheducation.com/class/k-yamazaki-biol-2010ab-cc) You will find all online quizzes, as well as other activities to help you in this course in addition to pictures of tissues, models, dissection specimens, quizzes, practice lab exams, games, etc.

Required Materials

Lecture Textbook: Anatomy & Physiology: An Integrative Approach. McKinley 3rd Edition;. ISBN: 9781264030637. Can purchase textbook, lab manual and online access code from the Cal State LA Bookstore. The online access code is essential and will allow you to complete online homework assignments and to get extra practice.

Writing Materials: pen and pencil; colored pencils; lecture handouts (printed from class website before coming to lecture); scantron forms (for exams)

Laboratory: Human Anatomy & Physiology Laboratory Manual; McGraw-Hill. Can purchase separately in Cal State LA bookstore; ISBN: 9781260901788

Recommended Materials

Essential Anatomy app (https://itunes.apple.com/us/app/essential-anatomy-5/id596684220?mt=8) – this is an awesome resource! You can also look at Anatomy TV on the library website.

Any anatomy atlas (Netter's, Grant's, Gray's) – you can find used copies for < $20, or look at mine during office hours.

Quizlet app: great for making flashcards to study key terms

Course alignment with department of biological sciences undergraduate student learning outcomes:

Biology 2010 is designed to help students meet the following undergraduate degree learning outcomes:

1 The student will acquire the following attitudes:

- 1.1 Learning about both living micro and macro systems is relevant and essential for understanding life.

2 The student will be able to demonstrate that he/she is skilled at:

- 2.1 Applying the processes and methods of scientific inquiry, including the search and retrieval of scientific information, the formulation of scientific hypotheses, the design and conduct of experiments, and the analysis and interpretation of data;
- 2.2 Understanding and critically evaluating the scientific work of others;
- 2.3 Communicating scientific information effectively using oral presentations and written reports;
- 2.4 Performing laboratory techniques that are appropriate to the major, with an understanding of the principles of laboratory safety;
- 2.5 Working collaboratively on group projects.

3 The biology student will be able to demonstrate knowledge of the following:

- 3.1 Molecular and cellular structure and function;
- 3.3 Basic principles of anatomy, **physiology**, and development;

Student Learning Outcomes

1. Develop a vocabulary of appropriate anatomical and physiological terminology
2. Recognize and explain the interrelationships between anatomy (structure) and physiology (function)
3. Demonstrate a knowledge of cellular structure and function (transport, metabolism, and bonding)
4. Demonstrate an understanding of the anatomical structures and physiological processes of the integumentary, skeletal, muscular, digestive, and urinary systems

ATTENDANCE

Lecture attendance is very important to the overall progress you can achieve in this course. Any in-class extra credit assignments or in-class quizzes (that will be worth points) can only be taken advantage of by the students in attendance on that day. There is **no make-up** for assignments given in class, no matter what the excuse is. There may or may not be a prior announcement made.

Laboratory attendance is also very important to the level of success of this course. You must be enrolled in a lab session, where you will perform experiments, study and manipulate anatomical models and charts, study histological specimens, and view/study demonstrations relevant to the topics in the lecture material. **This laboratory section is NOT another lecture; it is designed for collaborative, exploratory, ad inquiry based learning. Therefore, come to lab prepared to work (this implies that there is some learning that should be done prior to arriving to lab). NO MAKE UP LABORATORY SESSIONS.**

MAKE-UPS

Make-up exams will be allowed on a case-by-case basis at my discretion and are given in the event of an emergency, or other excused absence, that conflicts with a scheduled exam. **You will need to inform me prior to the exam that you will need to miss**. In the event this is not possible, you must inform me within 24 hours of missing an exam. Written documentation (ie, physician's note) of the reason you missed the exam is absolutely mandatory for consideration. **NO MAKE UP LABS ARE AVAILABLE.**

LATE ASSIGNMENTS

Late lecture assignments will have 10% of total possible points deducted for each day late. **NO LATE LAB ASSIGNMENTS WILL BE ACCEPTED.**

INFORMATION LITERACY

Students are expected to take advantage about of the Library's Information Literacy program. Specialized librarians are available to help students access information effectively and efficiently, as well as critically evaluate the information to determine relevance to the concept of the lab report. This will help organize, synthesize, communicate and cite information appropriately in order to avoid plagiarism.

ACADEMIC HONESTY

Students are expected to read and abide by the University's Academic Honesty Policy, which can be found at http://www.calstatela.edu/academic/senate/handbook/ch5a.htm. Students who violate this policy will be subject to disciplinary action and may receive a failing grade in the course for a single violation. **I HIGHLY SUGGEST THAT YOU GO TO THIS SITE AND FIND OUT WHAT SORTS OF ACTIVITIES CAN GET YOU INTO HOT WATER AS FAR AS ACADEMIC HONESTY GOES.**

LECTURE AND LABORATORY EXAM PROCEDURE

All students are to wait outside on exam days. The teaching staff needs to come in and set up for the exam. When you are invited into the hall, you will leave ALL your personal items either in the back of the lecture hall, or on the floor in the front of the lecture hall. You may only sit in seats that contain an exam. The only items you can take to your seat are the materials needed and allowed to take the exams such as pencils, pens and erasers. **If you are seated next to someone with the same version of the exams, raise your hand and alert the instructors so that it may be exchanged prior to the start of the exam. Failure to do so will result in a zero on the exam. No electronic devices of any kind allowed to be on you on exam days. If caught, you will fail the class as this will be considered cheating and therefore violate the academic honesty statement.**

If you are LATE the day of the exam, you will NOT be allowed to take the test if ONE person already turned in their exam. For laboratory exams, you will NOT be allowed to make up any of the missed stations you rotate through. In other words, DO NOT BE LATE ON EXAM DAYS. ABSOLUTELY NO EXCUSES.

DISABILITY STATEMENT: Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.

SYLLABUS DISCLAIMER STATEMENT

Serious effort and consideration were used in formulating the course syllabus. While viewed as an educational contract between Dr. Yamazaki and student, unforeseen events may cause changes to the scheduling of lectures, exercises, examinations, etc. Every effort will be made NOT to change scheduled items. Nonetheless, Dr. Yamazaki reserves the right to make any changes deemed necessary to best fulfill the course objectives. Students registered for this course will be made aware of any changes in a timely fashion using reasonable means (i.e. through campus email or course website). This disclaimer does not abrogate any student rights as described by University rules and regulations.

GRADING

You will receive a single grade for the lecture and lab portions of the course. Letter grades will be determined based on the grading scale below. Within each grade range, the **top 3% and the bottom 3% will receive "+" and "-" grades**.

"A" = 90-100% of possible points "B" = 80-89% "C" = 70-79%
"D" = 60-69% "F" <60% of possible points

Component	Points in overall grade	Worth	Comments
Online Quizzes	65	5 points each	(14) **Online** quizzes, due each Saturday @ 11:59 PM. Lowest quiz score will be dropped. These quizzes will help you prepare for exams.
Homework Assignments	195	15-30 points each	(9) Homework assignments, **printed from online (CANVAS) and turned in during lecture**. Each assignment is due after the topic is completed in lecture – these assignments will help you study and learn the lecture material.
Exams I, II and III	270	90 points per exam	(3) Lecture exams worth 90 pts each will be administered in class and may be any or all of the following: multiple choice, short-answer, fill in the blanks, diagramming. Dates and times are specified in the course schedule.
Final Exam	135	135 points	(1) Cumulative Final Exam; similar format to midterm exams
Total Lecture Points	665		
Lab Exams (1-5)	300	60 points each	(5) Lab Exams. Graded answer sheets will be returned to you within one week of taking your exam.
Post-Lab Quizzes	80	5 points each	20 written post-lab quizzes given after ~1 hour of lab time has lapsed. Post-lab quizzes begin week 2. 16 assignments counted, 4 lowest scored quizzes will be dropped.
Lab Quizzes	125	25 points each	(5) online quizzes given the week before the practical exam. These quizzes will be timed and contain identification questions, multiple choice questions, etc.
Project	60	60 points	You will work in pairs to (1) create a model of an organ, (2) write a 3 page description on the anatomy and physiology of that organ, and (3) give a brief (3 min) presentation on your model. The paper must be submitted on the day of the presentation.
Total Lab Points	565		
Total Points	**1230 points**		

Lecture Schedule

Date	Week	Topic		Quizzes (due Sat)	Homework [due dates in ()]
21-Aug	1	Intro to Anatomy and Physiology	Cell Biology, Tissues, Integument		HW 1 (8/28) 15 pts
26-Aug	2	Atoms, Chemical Bonding and Biological Macromolecules		Quiz 1	HW 2 (9/4) 15 pts
28-Aug		Biology of the Cell			
2-Sep	3	**No Class - Labor Day**		Quiz 2	HW 3 (9/11) 15 pts
4-Sep		Biology of the Cell			
9-Sep	4	Tissue organization		Quiz 3	
11-Sep		Tissue organization			HW 4 (9/23) 25 pts
16-Sep	5	Integumentary System		Quiz 4	
18-Sep		Integumentary System			
23-Sep	6	Skeletal System (not on Exam 1)		Quiz 5	HW 5 (10/9) 25 pts
25-Sep		**EXAM 1**			
30-Sep	7	Skeletal System	Bone & Muscle	Quiz 6	
2-Oct		Joints			
7-Oct	8	Muscular System		Quiz 7	HW 6 (10/21) 25 pts
9-Oct		Muscular System			
14-Oct	9	Muscular System		Quiz 8	
16-Oct		Digestive System (not on Exam 2)			HW 7 (11/4) 25 pts
21-Oct	10	**EXAM 2**		Quiz 9	
23-Oct		Digestive System	Digestion		
28-Oct	11	Digestive System		Quiz 10	
30-Oct		Energy Enzymes, chemical reactions			HW 8 (11/13) 20 pts
4-Nov	12	Nutrition		Quiz 11	
6-Nov		Cellular Respiration			
11-Nov	13	**No Class - Veteran's Day**		Quiz 12	
13-Nov		Urinary System (not on Exam 3)			HW 9 (12/9) 30 pts
18-Nov	14	**EXAM 3**		Quiz 13	
20-Nov		Urinary System	Urinary System		
11/25/29		**No Class - Thanksgiving Break**			
2-Dec	15	Urinary System		Quiz 14	
4-Dec		Review Day			
		CUMULATIVE FINAL			

Lab Schedule: meeting twice per week (75 mins per meet)

Week of	Day	Topic
Aug 19	1	*No Lab*
	2	Introduction: Body organization
Aug 26	1	Rat Dissection
	2	Cell structure and function
Sep 2	1	*No lab (Labor Day)*
	2	Transport mechanisms **(Physiology lab)**
Sep 9	1	Cell cycle
	2	Introduction to the microscope & epithelial tissues (not on Exam I) **Lab Quiz 1 Online**
Sep 16	1	**Exam I**
	2	Connective, muscle, nervous tissues
Sep 23	1	Integumentary system
	2	Bone structure and organization (not on Exam 2) **Lab Quiz 2 Online**
Sep 30	1	**Exam II**
	2	Bones of the skull
Oct 7	1	Bones of the ribcage and vertebral column
	2	Bones of the upper limb and shoulder
Oct 14	1	Bones of the lower limb and pelvis
	2	Muscle structure and organization (not on Exam III) **Lab Quiz 3 Online**
Oct 21	1	**EXAM III**
	2	Muscles of head and neck
Oct 28	1	Muscles of the abdomen and upper limb
	2	Muscles of the lower limb **Lab Quiz 4 Online**
Nov 4	1	**Exam IV**
	2	Digestive system, tissues and organs
Nov 11	1	*No lab (Veteran's Day)*
	2	Digestive system – action of enzymes **(Physiology lab)**
Nov 18	1	Urinary system
	2	Urinalysis **(Physiology lab)** **Lab Quiz 5 Online**
Nov 25		*No lab (Thanksgiving break)*
Dec 2	1	**Presentations**
	2	**Exam V**
Dec 9		*No lab*