# **Biology 2030 - Human Anatomy Spring 2021**

#### Instructor:

**Dr. Ali Baroon** Office: BIOS 262 (zoom online)

**Email Address:** 

mbaroon@calstatela.edu

Office Hours through Zoom Meeting: Tuesdays 3:00 - 5:00 (Due to the high demand, PLEASE make an appointment by

email in advance)

Course Website: canvas.calstatela.edu

#### **Lab Instructors:**

Ali Baroon (mbaroon@calstatela.edu)
Anahid Mirzatoni (anahid.mirzatoni@calstatela.edu)

Luis Rosa: (Irosa2@calstatela.edu)
Raul Diaz: (<u>rdiaz9@calstatela.edu</u>)

### **Course Description and Meeting Times**

This Course provides an introduction to human anatomy. The general objectives of the course are to gain a detailed understanding of the structure and basic 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.

Meeting Times: Lecture – M/W/F 8:00 am - 8:50 am through Zoom meeting

Laboratory – M/T/W Online Sessions

## **Course Websites**

Canvas for Biology 2030 - 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.

# **Required Materials**

#### **Lecture Textbook**:

Visual Anatomy & Physiology by Martini, Ober, Nath, Bartholomew, and Petti. This textbook has nice figures, is easy to read, and can be used for BIOL 2030 (this course) and BIOL 2040 (physiology).

#### **Laboratory:**

- 2a) Essential Anatomy app (\$15): <a href="https://3d4medical.com/apps">https://3d4medical.com/apps</a> (Links to an external site.). You will use this app extensively during lab. To download this app,
- 2B) Biodigital Human account (free): <a href="https://www.biodigital.com/">https://www.biodigital.com/</a> (Links to an external site.). You will use this website extensively during lab. To register,

### **Student Learning Outcomes:**

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

- Identify and describe key structures and functions of the human body, from microscopic through macroscopic levels of organization
- Discuss how organ systems work together to carry out life functions
- Recognize and apply basic anatomical and scientific terminology

### **ATTENDANCE**

<u>Lecture attendance</u> 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 <u>no make-up</u> for assignments given in class, no matter what the excuse is. There may or may not be a prior announcement made.

<u>Laboratory attendance</u> 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 <u>NOT</u> 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.

### **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 <a href="http://www.calstatela.edu/academic/senate/handbook/ch5a.htm">http://www.calstatela.edu/academic/senate/handbook/ch5a.htm</a>. 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.

**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**

Dates represent the approximate day when a topic will be started. **Please note:** I may modify this syllabus during the semester to enhance the quality of instruction. Announcements of changes will be posted on Canvas.

# **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

<sup>&</sup>quot;F" <60% of possible points

Component	Points	Explanation					
LECTURE							
Preparation	10	You will receive points for answering multiple choice questions after watching introductory videos (~ 1 per lecture). These videos will provide a brief overview of the lecture topic. If you get a question wrong the first time, you can watch the movie again and try a second time.					
Homework Assignments	171	14 online homework assignments, composed of multiple choice, matching, and esquestions, due ~ 1 week after the topic is covered in lecture (see course SCHEDU for due dates). These assignments will help you study and learn the lecture and la material. 8-25 pts per assignment.					
Writing	40	Short essay questions are embedded within homework assignments (2-4 points per essay). In these essays, you will explore how things like diet or exercise influence different organ systems.					
Quizzes	<b>70</b>	15 timed, online quizzes, due ~ 1 week after the topic is covered in lecture (see course SCHEDULE for due dates). These quizzes will help you assess your learning and practice for exams. 5 pts per quiz, lowest quiz score dropped.					
Exams		Five timed, online exams; formats may be any or all of the following: multiple choice, short answer, fill in the blanks, diagramming. <b>70 pts per exam.</b>					
LAB	LAB						
Introduction		You will receive 1 point for introducing yourself to your lab mates on a discussion board the first week of class.					
Attendance		You will receive points for logging into Zoom and showing your lab instructor that you have completed the lab handout.					
Simulators	100	16 online exam "simulations", due the same day as the exam (see course SCHEDULE for due dates). These may be taken as many times as you'd like, up un they are due, to help you learn and practice anatomical structures. <b>~6 pts per simulation.</b>					
Exams	/ 311	5 timed, online lab exams (first one is practice). 30 pts for practice exam, 60 pts for rest of exams.					
Extra Credit		You may earn extra credit for going to tutoring; tutors can help you with lecture or lab material. <i>Up to 3 points per lecture exam</i> .					
TOTAL	1000						

<sup>&</sup>quot;B" = 80-89%

<sup>&</sup>quot;C" = 70-79% "D" = 60-69%

# **Lecture & Lab Schedule**

Date	Week	Lecture Topic	Homework (pts)	Lecture Quiz	Lecture Exams	Laboratory Topic & Simulators (due day of exam)
Jan. 25	1	Course Intro/syllabus				
Jan. 27		Intro to Human Anatomy	#1 (8), due: Jan. 31	#1, due: Jan. 31		Intro to Human Anatomy Simulator #1 (intro)
Jan. 29		Cell Structure & Organization	#2 (8), due: Feb. 7	#2, due: Feb. 7		Cimalator # 1 (inti 5)
Feb. 1	2	Cell Structure & Organization	#3 (12), due: Feb. 12	#3, due: Feb. 12		Cells & Tissues
Feb. 3		Tissues				Simulator #2 (cells, tissues)
Feb. 5		Tissues	#4* (0) due:		-	
Feb. 8	3	Integumentary System	#4* (8), due: Feb. 17	#4, due: Feb. 17	1: intro-integ Due Feb. 19	Skeletal system (axial) Simulator #3 (axial)
Feb. 10			#5* (18), due: Feb. 24	#5, due: Feb. 24		
Feb. 12		Skeletal System	reb. 24			
Feb. 15	4		#6* (18), due:	#6* (18), due: Feb.		Skeletal system (appendicular)
Fep.17	·	Comico	Feb. 28	28		Simulator #4 (appendicular)
Feb. 22	_	Joints Museular System	#7* (12), due:	#7 due Mes 7		Joints & Movements (1/2 lab) Simulator #5 (joints)
Feb. 24 Feb. 26	5	Muscular System  Muscular System	Mar. 7	#7, due: Mar. 7		
Mar. 1		Blood				
Mar. 3	6	Cardiovascular System:			2: skel-musc Due Mar. 12	
Mar. 5		heart				
Mar. 8		heart	#8* (18), due:	#8, due: Mar. 21		Muscular System (appendicular) Simulator #7 (appendicular)
Mar. 10	7		Mar. 21	#0, uue. Wai. 21		
Mar. 12	- '	Blood vessels				
Mar. 15		Blood vessels	#9* (9), due: Mar. 28	#9, due: Mar. 28 #10, due: Apr. 4		Cardiovascular System (heart)
Mar. 17	8	Lymphatic System				(1/2 lab) Simulator #8 (heart)
Mar. 19		Respiratory System	#10* (12), due: Apr. 4			
Mar. 22		Respiratory System				Cardiovascular System (blood
Mar. 24	9			#11, due: Apr. 11	3: cardio- resp	vessels) Simulator #9 (blood vessels)
Mar. 26		Digestive System	#11 (12), due:			
Apr. 5		Digodiiro Oyoloiii	Apr. 11			Dooring to Diversity On the
Apr. 7	10				Due Apr.9	Respiratory & Digestive Systems Simulator #10 (respiratory) and
Apr. 9		Urinary System	#12 (12), due:	#12, due: Apr. 18		#11 (digestive)
Apr. 12	11	Officery System	Apr. 18	#12, ude. Apr. 10		Urinary System (1/2 lab) Simulator #12 (urinary)
Apr. 14			#13 (25), due: Apr. 25	#13, due: Apr. 25		
Apr. 16		Reproductive System				
Apr. 19		spreadoure of otolil				Reproductive System, Nervous
	12			#14, due: May. 14	4: dig-rep Due Apr. 30	System (brain & nerves)
Apr. 21	14	Nervous System: neural tissue				Simulator #13 (reproductive) and
Apr. 23	13		#14 (8), due: May. 14			#14 (brain)  Nervous System (spinal cord & nerves; neural tissue)  Simulator #15 (spinal cord)
Apr. 26		CNS				
Apr. 28		CNS				
Apr. 30		0.40				
May. 3		PNS				
May. 5	14	PNS				Nervous System (special senses)
May. 7		Special Senses				Simulator #16 (special senses)

May 10		Special Senses			
May 12	15	Endessine Cystem			
May 14		Endocrine System			
May 17-22		Final exam v	veek	5: neural- end Due day of final	х