

BIOL 343-103  
HUMAN ANATOMY & PHYSIOLOGY LAB I  
Fall 2009

Your Instructor:

Brian Buehler  
Science office 657-2031  
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Office Hours: by appointment

Your Texts:

*Human Anatomy & Physiology Laboratory Manual* by Marieb (8th edition).  
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Your Grade/Outcomes Assessment:

*Tests:*

Your primary learning objective for this course is to obtain a good working knowledge of the anatomy of the muscular, skeletal, and nervous systems. To assess this, you will be given two examinations: a midterm and a final. These exams will include written and practical components (mostly practical), and except under unusual circumstances will encompass material assigned in the laboratory only.

In addition, there will be a short quiz covering the previous week's material given at the beginning of each laboratory session. There will also be some lab exercises that will require a lab review sheet to be turned in for proper credit.

*PhysioEx Labs:*

Due to both time and budgetary constraints, you will perform two "virtual labs" on your own time. These labs are computer simulations of physiology experiments contained on the PhysioEx 7.0 CD-ROM, which was included in your lab-manual. While performing the lab procedures, you will complete the appropriate review sheets from your lab manual and turn them in for credit. These should be turned in sometime before the Final Exam. This is a very easy assignment, and it is purely for your benefit. These labs are extremely helpful in illustrating many of the difficult concepts covered in the lecture portion of the class. It is to your advantage to do them thoroughly and correctly.

*Assigned labs:*

Exercise 16B: Skeletal Muscle Physiology  
(Review sheet 16B questions 1-9; pp. PEx33-PEx 34)  
Activities 1-5 (pp. PEx-23 thru PEx-28)

Exercise 18B: Neurophysiology and Nerve Impulses  
(Review sheet 18B questions 1-12; pp. PEx 47-PEx 48)  
Activities 1-7 (PEx-37 thru PEx-43)

The outcome assessment of this course can be summarized as:

Midterm Exam	25%	Final letter grades will be assigned as follows:	
Final Exam	25%	A = 90-100	D = 60-69
Quizzes	20%	B = 80-89	F ≤ 59
Lab Reports	15%	C = 70-79	
PhysioEx Lab Reports	<u>15%</u>		
	100%		

In addition, I reserve the right to assign "minus grades" for so-called "borderline" grades. For example, a grade of 79 may be assigned as a B- instead of a C based on your overall contributions to the class, which may include such things as attendance and participation.

**Lab Schedule**

Week	Topic(s)	Chapter(s)*	Noteworthy Events
1	Language of Anatomy/ Organization/Microscopes	<u>1</u> , 2, 3 (L); 1 (M)	
2	Skeleton: Overview/ Upper Extremity	<u>9 (1-9), 11</u> (L); 6, 7 (M)	Quiz 1
3	Skull	<u>10</u> , 12 (L); 7 (M)	Quiz 2
4	Skeleton: Lower Extremity/ Axial	<u>10, 11</u> , (L); 7 (M)	Quiz 3
5	Articulations/ Primary Tissues I	<u>13 (1-9)</u> , 6 (L); 4, 8 (M)	Quiz 4
6	Primary Tissues II/ Skin	6, <u>7</u> (L); 4, <u>5</u> (M)	Quiz 5
7	Midterm Exam		
8	Muscles: Intro/Upper Extremity/ Trunk	<u>13 (10-14)</u> , 14, <u>15</u> ; 9, 10 (M)	
9	Muscles: Lower Extremity/ Trunk	<u>15</u> (L); 10 (M)	Quiz 6
10	No Lab		Veteran's Day
11	Nervous System: Brain and Cranial Nerves	17, <u>19 (1-7, 13-16)</u> (L); 11, <u>12</u> (M)	Quiz 7
12	No Lab		Thanksgiving
13	Spinal Cord and Nerves	20, <u>21 (1-18)</u> (L); 12, 13 (M)	Quiz 8
14	Final Exam		<b>12/9 or 12/10</b>
15	Pick up final exam and grades		

\* L denotes Lab Manual

M denotes Marieb text

Students will be expected to have read the assigned section in the lab manual before coming to the lab. The chapters in the Marieb text are listed simply for your reference.

Underlined lab book chapters indicate those for which the review sheets for the appropriate chapter will be completed and turned in for credit by the end of the next lab meeting. You may turn in photocopies so as not to have to tear pages out of your book.

\*\*While all lab sections will cover the same material, lab-hopping is not an option. If for good reason you need to attend a section other than the one for which you are registered (a rare occurrence which *will not* be abused), you need to obtain prior clearance from me.

The Material Safety Data Sheets (MSDS) for any chemical used in this laboratory can be obtained from Science Technical Services in Sci 241. These sheets contain information on the hazards associated with the chemical, as well as information on its proper handling and storage.