

BIOL 346-100; BIOL 346-101; BIOL 346-102  
HUMAN ANATOMY & PHYSIOLOGY LAB II  
SPRING 2011

Your Instructor:

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<http://www.msubillings.edu/ScienceFaculty/Castles/default.html>  
Office Hours: See lecture syllabus (BIOL 345)

Your Texts:

*Human Anatomy & Physiology Laboratory Manual* by Marieb (9th edition).  
*Human Anatomy & Physiology* by Marieb (9th edition).

Your Grade/Outcomes Assessment:

*Tests:*

Your primary learning objective for this course is to obtain a thorough working knowledge of the anatomy of the various organ systems of the body, including an emphasis on microscopic anatomy. To assess this, you will be given two examinations: a midterm and a final. These will range anywhere from 130-200 questions in length. These exams will include written and practical components (mostly practical), and except under unusual circumstances will encompass material assigned in the laboratory only.

Also, there will be a short quiz covering the previous week's material given at the start of most laboratory sessions. There will also be some lab exercises that will require a report to be turned in for proper credit. Mastering A&P assignments (online) may be done for extra 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 8.0 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 5: Cardiovascular Dynamics (pp. PEx-87 thru PEx-92) (Review sheet 33B questions 1-13)  
Activity 1                      Activity 2                      Activity 3                      Activity 4

Exercise 6: Frog Cardiovascular Physiology (pp. PEx-101 thru PEx-107) (Review sheet 34B)  
All Activities (1-9)

Exercise 8: Chemical and Physiological Processes of Digestion (PEx-129 thru PEx-139)  
(Review sheet 39B questions 1-4 and 9-20)  
Activity 1                      Activity 3                      Activity 4

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%		

## Lab Schedule

Week	Topic(s)	Chapter(s)*	Noteworthy Events
1	Taste/Ear	<u>25 (1-7; 12-18),</u> <u>26 (1-7)</u> (L); 15 (M)	
2	Eye	<u>24 (1-26)</u> (L); 15 (M)	Quiz 1
3	Endocrine System	<u>27 (1-13)</u> (L); 16 (M)	Quiz 2
4	Blood	<u>29 (1-8; 12-20)</u> (L); 17 (M)	Quiz 3
5	Heart	<u>30, 31</u> (L); 18 (M)	Quiz 4
6	Midterm Exam		2/16 or 2/17
7	Circulatory System	<u>32</u> (L); 19 (M)	
8	Spring Break		2/28-3/4
9	Lymphatic System	<u>35 (1-12),</u> 20, 21 (M)	Quiz 5
10	Respiratory System	<u>36 (1-12),</u> 37 (L); 22 (M)	Quiz 6
11	Urinary System	<u>40, 41</u> (L); 25 (M)	Quiz 6
12	Digestive System	<u>38</u> (L); 23 (M)	Quiz 7
13	Reproductive System	42, 44 (L); 27, 28 (M)	Quiz 8
14	Final Exam		4/13 or 4/14
15	Mini Break		No Lab
16	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 for your reference.

Underlined lab book chapters indicate those for which the review section 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.

I will make every effort to accommodate students with a disability documented through DSS.