

Human Anatomy & Physiology 2 - Lec/Lab Hybrid

Biology 2114.03 4 credits Spring Semester 2012

Prerequisite: Completing BIOL 2113 with a grade of C or better

Anoka-Ramsey Community College - Coon Rapids Campus

January 12 & 26, February 9 & 23, March 8 & 29, April 12 & 26; 8:00-10:50 am; \$ 150

**THIS SYLLABUS IS TO BE USED FOR TRANSFER PURPOSES ONLY
AND IS THE INTELLECTUAL PROPERTY OF THE INSTRUCTOR**

Instructor: Melissa Mills

Office: Science 106

Office Hours: 12-12:50 pm MWF, 11-12:50 pm H

Office Phone: 763-433-1332

Email Address: melissa.mills@anokaramsey.edu

D2L Discussion: **This is how I want you to contact me at ALL times during the term!**

Required Materials:

1. Anatomy and Physiology: The Unity of Form and Function, 6th ed., by Kenneth S. Saladin (Connect Plus A&P/ A&P Revealed 3.0 Online)
2. PhysioEx 9.0 For A&P: Laboratory Simulations in Physiology, by Peter Zao and Timothy Stabler

Course Description:

The structure and function of the human body are both fascinating and relevant topics. Every time you read or hear about the latest medical breakthrough, you are learning about anatomy and physiology. I hope that as this course progresses, you will grow to appreciate the intricacies of how your body functions. This knowledge will also enable you to be a better decision-maker regarding your own health care.

We will be focusing on the relationship between structure and function as we study each body system. We will also be working on critical thinking tasks to be able to see how all of the systems that we will study work together to maintain the body's homeostasis.

Graded Exercises

Lecture Points = 745

1. The **seven** lecture exams given on campus will cover material from the lecture study guides. The questions may include multiple choice, true-false, matching, tables, fill-in-the-blank, and short answer. Questions will vary from straight recall and recognition to problem solving and analysis. Physiology will be the emphasis on the lecture exams. Each exam will be worth 60-100 points, totaling 520 points. The final exam is not comprehensive.
2. You will complete **seven** critical thinking group assignments online worth 10 points each. The lowest group assignment will be dropped. The total for all the group assignments will be 60 points.
3. You will complete **seven** short-answer quizzes on D2L worth 20 points each. The lowest quiz score will be dropped. The total for all the quizzes will be 120 points.
4. You will complete **fifteen** 3-point assignments on the Connect site (plus syllabus quiz) worth a total of 45 points. You will need to get 70% or higher on the Connect quiz to receive 3 points and complete 70% of the LearnSmart questions to receive 3 points. You will receive 2 points for 60-69% and 1 point for 50-59% as well.

Lab Points = 365

1. The **nine** lab practical exams given on campus or online will cover laboratory material presented in class and online. Questions will vary from practical anatomy identification to short answer analysis. Anatomy will be the main emphasis on the lab practical exams, but physiology will be covered as well. Each exam will be worth 25 points. The lowest lab practical exam score will be dropped. The total for all the practical exams will be 200 points.
2. You will complete **ten** in-lab activity group assignments worth 15 points each. The lowest group assignment score will be dropped. The total for all the group assignments will be 135 points.
3. You will complete **ten** 3-point lab assignments worth a total of 30 points.

Total course points = 1110

You will also be required to take the comprehensive HAPS exam at the end of the semester during the final class. If you answer 50 or more of the 100 questions correctly, you will receive 10 extra credit points. If you answer 40-49 of the questions correctly, you will receive 5 extra credit points.

Keep all of your graded papers from both lecture and lab until the final grade for the course is given. It is your responsibility to be able to verify a grade if you believe there is an error in my grade sheet.

Grading Policy

If you wish to take the course on a "Pass/Fail" basis, you must inform me by the end of the first week of class. I will not consider giving an "Incomplete" to a student unless at least 75% of the total course work has been completed. Do not ask for an "Incomplete" due to low points. A course grade will be determined on a "percentage of total points" basis.

Grading Scale

90-100%	999-1110	A
80-89%	888-998	B
70-79%	777-887	C
60-69%	666-776	D
less than 60%	<665	F

Classroom Behavior

By enrolling in this course, you have become a welcome member of a *community of learners*, an honor and a privilege for each one of us. Your membership in this community and your success in this course are dependent upon your ability to do the following:

Be Respectful. Respect your instructor as an expert in his or her subject area and as the person responsible for facilitating a productive course for everyone. Respect each of your classmate's right to a valuable class experience, free of offensive language, intolerance, or harassment of any kind. Respect these facilities and our time together by eliminating all distractions, especially cell phones, iPods, and other gadgets, and by refraining from disruptions of any kind, including eating food that makes noise or has a strong odor, sleeping in class, packing up before class is over, or talking when no formal class discussion is taking place. Laptops are acceptable ONLY if being used for coursework. Finally, respect yourself by participating fully in each class session and making the most of this learning opportunity.

Be Responsible. As a student in this college course, you are entirely responsible for your own success. You are responsible for reading and following the syllabus. It's expected that you arrive to each class session on-time, with assigned work completed, ready to participate fully. If you are late, you need to sit in the back to minimize disruption. If you miss class, you are responsible for the consequences. You are also responsible for obtaining notes, assignments, and syllabus adjustments. Finally, you are responsible for being an active participant in this class rather than a passive observer.

Rise to the Challenge. College-level courses are demanding. They require deeper thinking, more effective writing, and greater personal involvement than many students realize. In order to succeed at this level, you must be willing to accept the challenges presented by the course material, your instructors, and a rigorous schedule. One of the rewards of this challenge can be the discovery that you are capable of much more than you imagined. Therefore, expect great things from yourself, work hard to achieve them, and seek help when you need it. The other members of this community of learners are here to support you, but it's up to you to *rise to the challenge*.

Plagiarism and Copying Policy

To plagiarize is "to take ideas, writings, etc. from another and pass them off as one's own." (Webster) This is unacceptable behavior. Also unacceptable is the use of any unauthorized notes or help during exams. **Any work found to be plagiarized, copied, or using unauthorized help will receive no credit. This violation will be reported to the Dean, and the student will be subject to sanctions outlined in the Student Code of Conduct. Two violations will result in a grade of F for the semester. See the Practical Lab Exam Guidelines for details regarding incidents of cheating in the lab.**

Attendance Policy

You are expected to attend all on campus class meetings. You are responsible for all information given in class and online. If you miss a class, you are responsible for getting the missed material from someone other than me.

Make-up Policy

Everyone is expected to complete all exams and assignments on the dates and times scheduled.

For lecture, no make-up exams will be given if you do not contact me before the exam is given. Contact me on the D2L site. In some cases, I will need verification of the reason for your absence. It will be up to my discretion whether or not you may take a make-up exam. No more than one make-up exam may be taken by a student per term.

Make-up exams approved by me must be taken within three days of the original exam date. The make-up exam may be an essay exam.

For lab, no make-up exams will be given. A missed lab exam will be dropped as the low score. Any subsequent missed lab exams will be given no credit.

Special Needs

If you need any special accommodations for testing, please contact Access Services at 763-433-1334. No special testing arrangements will be made without documentation from the Access Services office.

IF YOU KEEP ORGANIZED AND KEEP MOTIVATED, YOU ARE GOING TO LEARN A GREAT DEAL OF VALUABLE INFORMATION ABOUT YOURSELF AND HOW YOUR BODY WORKS. KEEP AN OPEN MIND AND ENJOY! YOU ARE HERE TO BETTER YOURSELF BY LEARNING! THIS SHOULD BE YOUR ULTIMATE MOTIVATOR - NOT JUST THE PURSUIT OF A GRADE ON A PIECE OF PAPER.

Learner Outcomes

At the conclusion of the course, the student should be able to:

1. Demonstrate the ability to synthesize, analyze, compare and contrast, and integrate information regarding the human body.
2. Demonstrate the ability to solve problems in anatomy and physiology based on an accumulation of past and present learning including concepts in chemistry and cell biology.
3. Demonstrate an understanding of physiological processes occurring in the body and their relationship to homeostasis.
4. Demonstrate an understanding of the interrelationships between body structures and functions and identify how they fit together.
5. Demonstrate an understanding of the major areas of course content.

Biology 2114 Tentative Lecture/Laboratory Schedule

This schedule may be modified by your instructor at any point in the term as is needed.

Week	Class & Due Dates	Lecture Topic	Textbook Chapters and Points	Laboratory Topic	Points	Textbook Pages
1-2	Jan 12 Class	*Unit 1: Cardiovascular System - Blood	Ch 18	*Lab guidelines & safety instructions *Lab Unit 1: Hematology *Hematology Data: Hemoglobin, Hematocrit, Blood Typing – Group *Blood Pathology Worksheet – Group *Genetic Blood Group Problems	15 pts 15 pts	680-681, 689-699, 701-702, 708
	Online Due 1/19 1/25 1/25 1/25 Ind 1/21 Gp 1/25	*D2L News *Complete Syllabus Quiz *Complete Unit 1 Lec Guide/Videos *Complete Connect Unit 1 Practice Quiz *Complete Unit 1 LearnSmart *Complete Lecture Quiz 1 on Unit 1 *Complete Critical Thinking 1- Ind & Grp	3 pts 3 pts 3 pts 20 pts 10 pts	*D2L News *Complete Lab Safety Quiz Dropbox *Complete Lab Unit 1 Hematology *Complete Formed Elements Identification Dropbox *Complete Blood Typing Study Sheet Dropbox Complete all above assignments by midnight on 1/25	3 pts 3 pts 3 pts	

3-4	Jan 26 Class	*Exam 1: Blood *Unit 2: Cardiovascular System - Heart	70 pts Ch 19	*Exam1: Hematology *Lab Unit 2: Heart Anatomy & Physiology *Electrocardiography – Group * Sheep Heart Dissection	25 pts 15 pts	715-725, 731-733
	Online Due 2/8 2/8 2/8 Ind 2/4 Gp 2/8	*D2L News *Complete Unit 2 Lec Guide/Videos *Complete Connect Unit 2 Practice Quiz *Complete Unit 2 LearnSmart *Complete Lecture Quiz 2 on Unit 2 *Complete Critical Thinking 2 - Ind & Grp	 3 pts 3 pts 20 pts 10 pts	*D2L News *Complete Lab Unit 2 Heart Anatomy & Physiology *Complete Blood Flow Through the Heart Dropbox *Complete Electrocardiography Background Dropbox * Complete all above assignments by midnight on 2/8	 3 pts 3 pts	

5-6	Feb 9 Class	<p>*Exam 2: Heart *Unit 3: Cardiovascular System – Blood Vessels *Unit 4: Lymphatic System Unit 5: Non-specific & Specific Defense</p>	70 pts Ch 20 Ch 21 Ch 21	<p>*Exam 2: Heart Anatomy & Physiology *Lab Unit 3 - Artery Anatomy *Lab Unit 4 - Vein and Lymphatic Anatomy</p>	25 pts	774, 776-78, 781, 785-87, 793-94, 796-97, 750-52 775, 779-80, 783-84, 789-91, 794-95, 798-99 810-14
	Online Due 2/22 2/22 2/22 Ind 2/18 Gp 2/22	<p>*D2L News *Complete Units 3-5 Lec Guides/Videos *Complete Connect Units 3-5 Practice Quizzes *Complete Units 3-5 LearnSmart *Complete Lecture Quiz 3 on Units 3-5 *Complete Critical Thinking 3 - Ind & Grp</p>	3 pts 3 pts 20 pts 10 pts	<p>*D2L News *Complete Lab Unit 3 Artery Anatomy *Complete Artery and Vein Histology Dropbox *Complete Lab Unit 4 Vein and Lymphatic Anatomy *Complete Lymphatic Anatomy Dropbox Complete all above assignment by midnight on 2/22</p>	3 pts 3 pts	

7-8	Feb 23 Class	<p>*Exam 3: Blood Vessels, Lymphatic, and Non-specific & Specific Defense</p> <p>*Unit 6: Respiratory System</p>	<p>100 pts</p> <p>Ch 22</p>	<p>*Exam 3: Artery Anatomy ONLINE Due 2/23</p> <p>*Lab Unit 5: Respiratory Anatomy & Physiology</p> <p>*Spirometry - Group</p> <p>*Respiratory Physio-Ex - Group</p> <p>*Exam 4: Vein and Lymphatic Anatomy ONLINE Due 3/1</p>	<p>25 pts</p> <p>15 pts</p> <p>15 pts</p> <p>25 pts</p>	<p>856-863, 874-877, 886-887</p>
	<p>Online Due</p> <p>3/7</p> <p>3/7</p> <p>3/7</p> <p>Ind 3/3 Gp 3/7</p>	<p>*D2L News</p> <p>*Complete Unit 6 Lec Guide/Videos</p> <p>*Complete Connect Unit 6 Practice Quiz</p> <p>*Complete Unit 6 LearnSmart</p> <p>*Complete Lecture Quiz 4 on Unit 6</p> <p>*Complete Critical Thinking 4 - Ind & Grp</p>	<p>3 pts</p> <p>3 pts</p> <p>20 pts</p> <p>10 pts</p>	<p>*D2L News</p> <p>*Complete Lab Unit 5 Respiratory Anatomy & Physiology</p> <p>*Complete Respiratory Volumes & Capacities Dropbox</p> <p>Complete all above assignments by midnight on 3/7</p>	<p>3 pts</p>	

9-11	Mar 8 Class	*Exam 4: Respiratory *Unit 7: Urinary System *Unit 8: Water-Electrolyte, Acid-Base Balance	60 pts Ch 23 Ch 24	*Exam 5: Respiratory Anatomy & Physiology *Lab Unit 6: Urinary Anatomy & Physiology – Acid-Base Balance *Renal Physio-Ex – Group *Urinalysis Case Histories – Group *Complete Acid-Base Balance Worksheet - Group	25 pts 15 pts 15 pts 15 pts	897-899, 901, 907-908, 918, 921-922
	Online Due 3/28 3/28 3/28 Ind 3/24 Gp 3/28	*D2L News *Complete Units 7-8 Lec Guides/Videos *Complete Connect Units 7-8 Practice Quizzes *Complete Units 7-8 LearnSmart *Complete Lecture Quiz 5 on Units 7-8 *Complete Critical Thinking 5 - Ind & Grp	3 pts 3 pts 20 pts 10 pts	*D2L News *Complete Lab Unit 6 Urinary Anatomy & Physiology – Acid-Base Balance *Complete Nephron Anatomy Dropbox *Complete Urinalysis Dropbox Complete all above assignments by midnight on 3/28	3 pts 3 pts	

12-13	Mar 29 Class	Exam 5: Urinary, Water-Electrolyte, Acid-Base Balance *Unit 9: Digestive System	80 pts Ch 25	Exam 6: Urinary Anatomy & Physiology – Acid-Base Balance *Lab Unit 7 - Digestive Anatomy *Digestive Physio-Ex - Group	25 pts 15 pts	955-962, 966, 975-977, 980-982, 991
	Online Due 4/11 4/11 4/11 Ind 4/7 Gp 4/11	*D2L News *Complete Unit 9 Lec Guide/Videos *Complete Connect Unit 9 Practice Quiz *Complete Unit 9 LearnSmart *Complete Lecture Quiz 6 on Unit 9 *Complete Critical Thinking 6 - Ind & Grp	3 pts 3 pts 20 pts 10 pts	*D2L News *Complete Lab Unit 7 Digestive Anatomy Complete all above assignments by midnight on 4/11		

14-15	April 12 Class	*Exam 6: Digestive *Unit 10: Reproductive System	70 pts Ch 27 Ch 28	*Exam 7: Digestive Anatomy *Lab Unit 8: Male Reproductive Anatomy/Ovarian Anatomy *Lab Unit 9: Female Reproductive Anatomy & Physiology *Female Reproductive Cycle - Group	25 pts 15 pts	1041-1047 1053, 1067 1066-1074, 1077-1084
	Online Due 4/25 4/25 4/25 Ind 4/21 Gp 4/25	*D2L News *Complete Unit 10 Lec Guide/Videos *Complete Connect Unit 10 Practice Quiz *Complete Unit 10 LearnSmart *Complete Lecture Quiz 7 on Unit 10 *Complete Critical Thinking 7 - Ind & Grp	3 pts 3 pts 20 pts 10 pts	*D2L News *Complete Lab Unit 8 Male Reproductive Anatomy/Ovarian Anatomy *Complete Lab Unit 9 Female Reproductive Anatomy & Physiology Complete all above assignments by midnight on 4/25		
16	April 26 Class 8:00 am	*Exam 7: Reproductive System	70 pts	*Exam 8: Male Reproductive & Ovarian Anatomy *Exam 9: Female Reproductive Anatomy & Physiology *HAPS EXAM – Possible 10 pts extra credit	25 pts 25 pts	

Enjoy your summer!!