

Human Anatomy and Physiology Laboratory Syllabus
Biology 131 Lab
Summer 2018

Meeting Times: TWR 1:00 – 3:00 pm

Contact Information/emails: rostern.tembo@wku.edu

Emails will be answered 8:00-5:00 on weekdays. **You must include the section number of your lab in the subject line or message of your email to receive a response.** There are many sections of the lab and without the section number we have to look through them all to find you.

Building and Room: Snell Hall Room 3103

Required Materials:

For lecture in Biol 131 and Biol 231: Saladin, Kenneth S. 2015. Anatomy & Physiology: The unity of form and function. 8 th edition. McGraw-Hill. ISBN 9780073403717

For lab: Martin, Terry, Laboratory Manual for Human Anatomy and Physiology, 3rd edition. McGraw Hill ISBN: 978-259-29885-3.

Ability to use technology: The ability to use technology is required. As a future professional, you will need to be able to use technology in a variety of ways in your job. Many workplaces are becoming paperless and depend on the use of technology. This lab will be mainly paperless. Hand-outs, lab exercises, homework, quizzes and exams will be administered via Blackboard using electronic devices such as ipads. You **MUST** be able to use this type of technology to access materials in this course. If you choose to print materials and bring them to lab, you may, but paper copies will **NOT** be provided. The use of ipads and iPhones to photograph models created in lab is permitted, but photographing or capturing exams or quizzes in any way is considered cheating and will result in an “F” for the course and a letter stating your attempt at cheating sent to your Department Chair.

READ BEFORE PURCHASING TEXT/MATERIALS:

This course participates in The WKU Store’s Day One Access program. This program is designed to provide immediate access to required materials for all students at prices cheaper than any other option.

Required materials will be delivered to you automatically by enrolling in this course unless you choose to opt-out. By participating in this program, The WKU Store will bill Student Billing account, and you will see a charge appear under this Term along with Tuition and Fees (“Account Summary by Term” under the Student Services tab) labelled as “The WKU Store Purchases” after the Add/Drop period. For more information on this program or to opt-out of participation, go to our information page, <http://www.wkustore.com/t-day-one-access.aspx>.

The Biology Department at WKU has worked over the past year to develop a new model for textbook adoption. In order to save you some money, maximize your effective use of your textbook, increase learning and evaluate the best ways of teaching you difficult topics, we’ve entered into a partnership with McGraw-Hill publishers. By enrolling in this course, you agree to purchase the digital materials associated with this course. In order to make these savings available to you, WKU must institutionalize the purchasing process. As a result, about two weeks into the

semester, you will be billed the cost of the materials for the course. The nice thing about this is that you will have access to all the course materials from day one, without doing a thing! If you choose to drop the course during the regular add-drop period, you won't be charged for the book. You should note that for this course, you WILL be charged for the digital materials. Do NOT buy a copy of the book from online or local vendors. ONLY the digital format will be used in this course.

We anticipate that this approach to teaching will result in better learning and a more interesting classroom experience for you, and less stress on your spine!

General Education Statement: This course fulfills the Natural Science Explorations Category of Colonnade. Students will gain the ability to:

1. Demonstrate and understand the methods of scientific inquiry in biology
2. Explain basic concepts and principals in biology
3. Apply scientific principles to interpret and make predictions in biology
4. Explain how scientific principles relate to issues of personal and/or public importance

Goals: The general goals of this course are:

Students will have an understanding of:

1. the relationship between form and function in the human body
2. the mechanisms for maintenance of homeostasis in the human body
3. the hierarchy of organization of the human body
4. the use of models to demonstrate anatomy and physiology
5. how anatomy and physiology is used in real-life settings

Objectives:

Students will be able to:

1. Describe the form and function of basic histology in the human body
2. Identify specific bones, bone markings, muscles, and origins/insertions/actions in the human body
3. Demonstrate the functional relationship between bones and muscles
4. Explain the anatomy and functions of major parts of the cardiovascular system.
5. Compare the structures of the respiratory system with the functions of the cells of which they are composed
6. Analyze the components of the nervous system
7. Differentiate between the structures/organs involved in the special senses

About Biology 131 Lab: Biology 131 lab is not a typical 100 level course. It is a fast-paced course that covers a lot of material in a short amount of time. It involves hands-on activities to help you learn Human Anatomy and Physiology and requires a great amount of discipline and dedication on your part. You can expect to spend an additional 4-6 hours/week of time outside of class reading, doing homework and studying for this course. If you are not serious about this course and are not willing to put in the effort, please drop the course to make room for another student who is willing to make this lab a priority.

Grading: Your laboratory average will be calculated and then forwarded to your lecture instructor, who will use it along with your lecture average to determine your **overall** grade for the course. The laboratory average will represent 40% of your overall course grade (your lecture average will constitute the remaining 60%). This means you will **not** receive a separate grade for the lab at the end of the semester; your lab grade will be included as part of your **overall grade** shown on the lecture side of the course.

You can calculate your overall grade by:

- Taking your lab average and multiplying it by .4
- Taking you lecture average and multiplying it by .6
- Adding these 2 numbers together

Grading Scale for Lecture/Lab Combination:

A= 90-100%

B=80-89%

C=70-79%

D=60-69%

F= Below 60%

Tentative Assessment Table

The due dates for all homework assignments, quizzes and exams are clearly provided under “Course Schedule” tab in Blackboard. There will be NO EXTENSIONS or MAKEUPS for Homework or quizzes.

Type of Assignment	Number of Assignments	Points/assignment	Total points
Homework: Completed BEFORE Lab	11	5	55
*Attendance and Participation		5	50
Quizzes: Given during class over Homework	5	20	100
Exams: Completed during lab	2	80	160
Final Exam: completed during lab	1	100	100
Total points			465

****Remember: Grades are not given. The Instructors simply record the grade that you have earned.**

Explanation of Assignments/Quizzes/Exams

- **Homework:** Homework assignments are designed to help you learn and practice material that you will need for lab. It is imperative that you know the information BEFORE lab. You can attempt the homework as many times as you wish to practice the material and to improve your grade. However, the homework assignment will go away forever at midnight the evening BEFORE your lab meets! There will be NO MAKEUPS or EXTENSIONS for these assignments! You will have 1 week to complete them which is more than enough time!
 - Most of the Homework assignments are designed to help you practice material that is more “skill and drill” rather than critical thinking. Answers to the homework can be found in the e-lab manual and the e-textbook. Homework assignments will require you to read your lab manual and textbook and use the labeled figures to help you label the unlabeled figures in the homework. The chapters for these assignments are provided in the Course Schedule. Since the process of looking up the material in the text and matching it to the figures in the homework is a process that helps you learn the material, most of the assignments will NOT provide you with the right answer if you miss it when you do the assignment. This will keep you from simply guessing at the answer, getting the right answer and filling it in without completing the process of actually looking up the answers. If you miss a question, go back to your e-textbook and/or e-lab manual and look up the figure or answer.
 - Sometimes it may take up until 2 hours for a pre-lab homework grade to be posted in Blackboard. So if you do a homework assignment multiple times and earn a better grade, it may

not post to Blackboard immediately. You do not need to email your TA or Instructor unless it does not post after 24 hours.

- **Participation and Attendance:** Attendance is mandatory for the labs. You cannot complete lab activities unless you are present. Four points per lab will be awarded to students who:
 - attend lab for the entire period,
 - participate in all lab exercises, and
 - clean up their lab area before leaving.

Leaving lab early will forfeit attendance points for the day as will failure to clean up your Maniken or lab space. Lack of participation will also result in loss of attendance points. Please schedule all doctor's appointments, work, advising appointments etc. at a time other than during your lab.

Making this lab a priority is key to succeeding in the lab.

- **Quizzes:** Quizzes will be given during class on an electronic device such as an ipad. These quizzes will cover material that you are supposed to know BEFORE lab! Quizzes may include a practical component that requires you to look at actual lab material (such as bones) and answer questions about them. Usually the material on the quizzes and homework will overlap. Quizzes typically will take 15-20 minutes at the beginning of lab, and then a lab exercise will follow. If you are late to lab, you risk missing the quiz! You will not be given extra time because you are late! There are NO MAKEUPS for quizzes EXCEPT in instances of university excused absences where you **get permission and attend another lab section** during the same week. In these **RARE** instances when makeup quizzes are permitted, **written documentation of the university excused absence will be required**. Examples of university excused absences where permission is granted to makeup an exam include:
 - Documented hospitalization
 - Attending a university sporting event where you are a player
 - Attending a university academic event such as a conference/debate etc. where you are a presenter or performer.

A snuffle is not an excused illness. Work is not an excused event. Oversleeping is not an excused absence. Procrastination or other tests on the same day are not excused absences.

Leaving lab after a quiz without participating in the lab activities for the day will result in a 50% penalty on the quiz grade PLUS the loss of attendance/participation points. **Make lab a priority.**

- **Exams:** These are longer quizzes that cover material over several lab periods. They may have a practical element that will involve looking at models, pictures or actual specimen and answering questions. All answers will be recorded using iPad or other electronic devices. These exams will usually take 1 hour to complete. Makeup Exams are only given in **EXTREME circumstances for documented university excused absences when permission is given to attend and make up the exam with another lab section** during the same week! They are not permitted for students who just want more time during the week to get ready for the exam or student who oversleep or have to work. These are not university excused absences.
 - Documentation must cover the date missed in lab. For example, if your lab meets on Tuesday and you obtained a doctor's note for Monday because of illness, you still need to take the quiz/test on Tuesday.
 - See the list of excusable and non- excusable absences under Quizzes above.

General Policies: General policies are simple and based on respect. This involves:

- **ASOLUTELY NO CELL PHONES IN LAB!!!!** Unfortunately past lab sections have revoked this privilege in lab. The use of cell phones for ANY reason will be perceived and treated like cheating.
- Attending class on time: Roll will be taken each lab period

- Remaining in the class the entire period until dismissed

- Paying attention in class and taking notes
- No excessive talking or inappropriate behavior (reading newspapers, making rude remarks etc.)
- No excuses. You are in preparation to become a professional and need to take responsibility for your learning and actions.
- Don't cheat. It is not worth it. It could result in dismissal from your program or from the university.

***Rubric Guide for 131 Lab Participation Points**

While there is some subjectivity to the participation points, I have created a rubric to help standardize the way points are awarded.

There are 10 labs each worth 5 points for a total of 50.

The break down for the points should be:

1.0 point = attendance

2.5 points= participation

2.0 points = cleaning up

	0 points	0.5 points	1 point	2-2.5 points
Attendance (1)	Not present	Present but late	Present	NA
Participation (2.5)	Came to lab but did not participate	Came to lab but participated minimally -spent time off-task on phone or computer	Came to lab and somewhat participated but did not fully engage. -spent a little time off-task on phone or computer	Came to lab, participated completely and was engaged the entire time
Clean up (2)	Did not clean up -This would include students who leave early	Attempted to clean up but did a really bad job of it	Somewhat cleaned up	Cleaned up completely -Removed clay from Manikens -Put bones, papers back in their place

Academic Integrity and Misconduct: Don't cheat. Cheating is not only disrespectful (violating general policies) but it is also dishonest. Cheating on quizzes, exams or assignments will result in a failing grade for the course and could result in expulsion from the university. It is not worth it. Do your own work.

Attendance: Attendance will be taken in lab. Experience has shown that poor attendance in class results in poor grades. You must come to class to maximize all of the resources available to you to learn course material, to take the quizzes and the exams and to earn your attendance/participation points. If you are not interested enough in the material to come to class, please drop the course; there is a high demand for this class and many people who wanted to take it this semester could not get in. If you do not want to be here, make room for someone who does want to be here.

Deadlines: The University designated deadlines for withdrawal from a class or the university are firm. Credit for the course will not be changed to an audit after the university-designated time due to a poor grade in the class. Please make note of these dates. Dropping the class after the university deadline requires a written explanation by you and signatures from the Instructor, the department head and the dean of Ogden College. These exceptions are only granted in extreme circumstances. So ABIDE by the deadlines!

These deadlines can be found at the following location:

http://www.wku.edu/registrar/documents/regguide_fall.pdf

End of Semester Policies:

- There is no “extra credit” for the course. Do not ask. Study hard, do well on the tests and quizzes.
- Grades are not completed until final grades are posted in TOPNET, so please do not email and ask if grades are finished.
- The grading scale is posted on this syllabus. If you have an 89.45876, then you are guaranteed at least a B in the course. If grades are not posted in TOPNET, then they are not complete (see above bullet), so please do not email and ask if there is “rounding up”. You will know if any adjustments were made when grades are posted on TOPNET. Emails asking about “rounding up” or about what final grades will be until after they are posted in TOPNET will be ignored.
- There is absolutely no “making up” missed homework assignments. Get it done when it is due.

Blackboard Entry

www.wku.edu (choose "Blackboard" from the pull down menu)

Family Educational Rights and Privacy Act:

Due to the Family Educational Rights and Privacy Act (FERPA), if you are 18 years old or older, I cannot discuss your grades, etc. with your parents.

Student Disability Services

In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in DUC A-200 of the Student Success Center in Downing University Center. Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

Week # and Date of Monday	Topics	Pre-lab Homework Assigned Due BEFORE next lab (Pre-Labs)	e-Text Chapt. For Pre-lab Homework	Assessment for lab (Done during lab- must be present)
Week 1 May 15	Introduction: <ul style="list-style-type: none"> · Body Regions · Directional Terms · Cavities · Planes 	<ul style="list-style-type: none"> · (Pre-lab) Homework 1: Directional Terms (5 pt) · (Pre-lab) Homework 2: Epithelium, Nervous and Muscle Tissue (5 pt) 	Chapt. 2 Chapt. 5	
Week 1 May 16	Histology I <ul style="list-style-type: none"> · Epithelium · Muscle · Nervous Tissue 	<ul style="list-style-type: none"> · (Pre-lab) Homework 3: Connective Tissue (5 pt) 	Chapt. 5	Quiz 1: Introduction (20 pt) <ul style="list-style-type: none"> · Body Regions · Directional Terms · Cavities · Planes
Week 1 May 17	Histology II <ul style="list-style-type: none"> · Connective Tissue <ul style="list-style-type: none"> ➤ Cartilage ➤ Adipose ➤ Blood ➤ Asseus 			
Week 2 May 22	Test 1 Histology	<ul style="list-style-type: none"> · (Pre-lab) Homework 4: Intro to Bones and Muscles (5 pt) 	In part (See Lab Instructions for Figures) Chapters 7, 8, 9, 10, 11	<u>Test 1 Histology (80 pt)</u>
Week 6 May 23	Introduction to Muscles and Bone	<ul style="list-style-type: none"> · (Pre-lab) Homework 5: Bone Markings Upper Body (5 pt) 	Chapter 9	
Week 2 May 24	Upper Body Bones and Muscles	(Pre-lab) Homework 6 Bone markings of the lower body (5 pts)		Quiz 2: Bone Markings of Upper Body (20 points)- Must be present
Week 3 May 29	Lower Body Bones and Muscles	<ul style="list-style-type: none"> · (Pre-lab) Homework 7: Bones of the Axial Skeleton 	Chapter 8	Quiz 3: Bone Markings of Lower Body (20 points) Must be present.
Week 3 May 30	Bones and Muscles of the Head and Neck	<ul style="list-style-type: none"> · (Pre-lab) Homework 8: Overview of Muscles 	Chapter 11 (Review 12 and 13)	Quiz 4: Bones and Markings of the Head and Neck (20 points)
Week 4 June 5	TEST 2: Bones and Muscles (80 pts)	<ul style="list-style-type: none"> · (Pre-lab) Homework 9: The Cardiovascular System (5 pt) 	Chapters 20, 21 and 22	<u>Test 2: Bones and Muscles (80 pts)</u>
Week 4	Cardiovascular System	<ul style="list-style-type: none"> · (Pre-lab) Homework 	Chapters 15,	

May 31	<ul style="list-style-type: none">· Heart· Blood Vessels	10: The Nervous System and the Reflex Arc (5 pt)	16, 17 (See lab instructions)	
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Week 4 June 4	Nervous System: Reflex Arc	· Homework 11: Special Senses (5 pt)	Chapter 24 And Chapter 18	Quiz 5: Heart, Arteries and Veins (20 pts)
Week 5 June 5	Special Senses			
Week 5 June 6	Final Exam (100 pt) <ul style="list-style-type: none"> · Cardiovascular System · Nervous System · Special Senses 			Final Exam (100 pt) <ul style="list-style-type: none"> · Cardiovascular System · Nervous System · Special Senses