

## **BSC 227 - HUMAN ANATOMY**

**Spring 2017**

**INSTRUCTOR:** Dr. Habiba Chirchir  
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Office: Science Building Rm. 279B

**LECTURES:** Monday, Wednesday, Friday 11:00-11:50 pm, Science Building 376

**LABS:** Science Building 269

Section 201: Tuesday 10:00 pm - 11:50 pm

Section 202: Tuesday 12:00 pm - 1:50 pm

Section 203: Tuesday 2:00 am - 3:50 am

**OFFICE HOURS:** Monday & Wednesday 3:00-5:00pm (other by appointment)

### **REQUIRED TEXTS, ADDITIONAL READING, AND OTHER MATERIALS**

Human Anatomy 5<sup>th</sup>, or 4<sup>th</sup> K. S. Saladin;

Lab Manual (available only at Marshall Bookstore)

4th Edition of Human Anatomy by Saladin is available through the Textbook Loan Program:

<http://www.marshall.edu/uc/textbook-loan-program/>

**TECHNOLOGY REQUIREMENTS:** A computer that runs Microsoft Office or an equivalent.

**COURSE DESCRIPTION:** This course will focus on the principles of gross and microscopic anatomy of human body systems and their development. The course is divided into lecture presentation and laboratory instruction. Lectures will introduce students to anatomical terminology, provide an overview of cellular anatomy and tissue classification. Students will learn anatomical systems broken down into: integumentary, skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary and reproductive systems. In the laboratory, students will interact with specimens as a means of reinforcing what was learned in the classroom.

**UNIVERSITY POLICIES:** By enrolling in this course, you agree to the University Policies. Please read the full text of each policy by going to <http://www.marshall.edu/academic-affairs/policies/>.

### **STUDENT LEARNING OUTCOMES/OBJECTIVES**

- Students will be able to correctly use anatomical terminology and explain anatomical concepts clearly and accurately (communication, critical thinking)
- Students will describe, correctly spell and identify the gross anatomy of the organs and structures of the human body. (communication, critical thinking, technology)
- Students will be able to describe how medical imaging techniques are applied in the healthcare professions. (communication, technology)

**LEARNING OUTCOMES WILL BE ASSESSED AS FOLLOWS:**

**Critical Thinking:** Critical thinking outcomes will be assessed via laboratory assignments, quizzes and exams.

**Communication:** Students will be required to correctly spell anatomical structures on practical lab exams.

**Technology:** Students will be required to know utilize microscopy and review photographs of 3D models in the laboratory.

**ATTENDANCE POLICY:** You are expected to attend all scheduled lectures and laboratory sessions. Lectures are designed to explain difficult material, indicate relative importance of specific topics, answer questions, and give guidance and direction in your study. If you are not present it will be much more difficult for you. If you miss a class session, it is your responsibility to obtain all assignments and materials. Laboratories allow you to interact with 3D models of the structures you are required to know. This can give you a much more thorough and precise understanding of each structure's morphology as well as its location in relation to other structures. Each unexcused absence from LAB will result in a 1point deduction from your final grade unless an acceptable excuse is presented to your TA or Office of Student Affairs (OSA) or to myself within 72 hours of the lab you missed. Note that it is your responsibility to make sure your attendance is properly recorded each week. Tardiness may result in you not getting credit for lab attendance.

**GRADING POLICY:** Final letter grades for the course are determined on the percent of total possible points (700) achieved by the following scale:

**A=89-100%; B=76-88%; C=63-75%; D=55-62%**

Your final average will be determined as follows:

1. Your total points are summed. These are the points from your three lecture exams, two lab exams, and lecture final exam. Also added into this total are the lab quiz bonus points.
2. Your percentage of points out of 700 (total points possible) is calculated.
3. For every unexcused absence from lab, 1 point may be subtracted from your final average.

**EXAMS:** There are 3 unit exams scheduled during lecture periods. These will consist of multiple-choice questions. These exams are worth 100 points each. The final lecture exam is worth 200 points and is comprehensive in nature. Laboratory: Ability to identify specific anatomical structures will be assessed by midterm and final laboratory practical exams. These are also worth 100 points each. The laboratory final is NOT cumulative.

Assessment	Points
Lecture Exam 1	100
Exam 1a (50 points), 1b (50 points)	
Lecture Exam 2	100
Lecture Exam 3	100
Lecture Final Exam (cumulative)	200

Laboratory Mid-Term Exam (Practical)	100
Laboratory Final Exam (Practical)	100

**MAKE-UP EXAMS:** Make-up exams will be given **ONLY** in the event of an officially approved university absence such as a death in the immediate family or an illness that prevents you from attending class on the scheduled exam day. If you miss an exam you must notify me **AND** provide an acceptable excuse within 48 hours of the exam's scheduled time. If you do not, you will not be permitted to take a make-up and a '0' will be scored for this exam. In the case of illness, you must provide a note signed by a physician stating that you could not be present during the exam period for medical reasons. All excuses should be brought to the Office of Student Affairs (OSA) where they will be evaluated. The OSA will then inform the instructor as to whether you are allowed to make up the exam. Make-up exams do not have to follow the same format as the original exam.

**LAB QUIZZES:** Ten minute "surprise" quizzes on the previous week's lab may be given at the *beginning* of any laboratory session. These quizzes will count as bonus points. It will be possible to accumulate  $\geq 15$  bonus points during the semester. There are no make-up quizzes.

**ACADEMIC DISHONESTY IN ANY FORM WILL NOT BE TOLERATED.** All written assignments, laboratory reports, quizzes, and exams are to be independent efforts of each student. (see University Policies above). You are responsible for knowing the University's policies, which can be found in the student handbook or at these web addresses: <http://www.marshall.edu/academic-affairs/policies/#AcademicDishonesty>. Ignorance of the policies is not an excuse. No electronic devices, EVER, will be allowed during tests.

In the lab, most experiments will be done in groups, but we expect that all assignments will be written up independently. Exceptions to independent work will only be allowed in cases where you are expressly instructed to write up your assignment in groups.

**STUDENTS WITH DISABILITIES:** Students are entitled to receive accommodations for documented physical, learning and psychological disabilities (see University Policies above). No accommodation can be allowed until documentation is received, and it must be received several days in advance of the exams to allow me time to arrange the conditions required. For more information, please visit <http://www.marshall.edu/disability/> or contact Office of Disability Services Prichard Hall 119, phone 304-696-2271.

## TENTATIVE COURSE SCHEDULE

	<u>Date</u>	<u>Lecture Topics</u>	<u>Readings</u>
I	1/9	Introduction; Body Organization	Chapter 1
	1/11	Body organization	Chapter 1 & Atlas pg. 329-346
	1/13	Body organization; Anatomical Terminology	Chapter 1
	LAB:	Anatomical Terms	
II	1/16	MLK day no class	Chapter 2
	1/18	Cellular Anatomy	Chapter 2
	1/20	Cellular Anatomy	Chapter 2

	LAB:	Microscopic Anatomy	
III	1/23 1/25 1/27 LAB:	Histology Histology Integumentary system Integument	Chapter 3 Chapter 3 Chapter 5
III	1/30 2/1 2/3 LAB:	Integumentary system Skeletal system: bone tissue <b>Exam 1a</b> Post cranial	Chapter 5 Chapter 6 Chapter 6
IV	2/6 2/8 2/10 LAB:	Skeletal system: axial Skeletal system: axial Skeletal system: appendicular Muscles	Chapter 7 Chapter 7 Chapter 8
V	2/13 2/15 2/17 LAB:	Skeletal system: joints Muscular system: tissue & axial Muscular system: axial Lab review	Chapter 9 Chapter 10 & 11 Chapter 11
VI	2/20 2/22 2/24 LAB:	Muscular system: appendicular Muscular system: appendicular <b>Exam 1b</b> Lab review	Chapter 12 Chapter 12
VII	2/27 3/1 3/3 LAB:	Nervous system: tissue Nervous system: tissue & spinal cord Nervous system: spinal cord <b>Midterm lab practical</b>	Chapter 13 Chapter 13 & 14 Chapter 14
VIII	3/6 3/8 3/10 LAB :	Nervous system: brain Nervous system: brain Nervous system: cranial nerves Brain/Spinal cord, PNS & ANS	Chapter 15 Chapter 15 Chapter 16
IX	3/13 3/15 3/17 LAB:	Nervous system : ANS Endocrine system Endocrine system & catch up Endocrine & Circulatory	Chapter 17 Chapter 18
X	3/20 3/22 3/24 LAB:	Spring break Spring break Spring break Spring break	

XII	3/27 3/29 3/31 LAB:	<b>Exam 2</b> Circulatory system: blood & heart Circulatory system: heart Circulatory, Paths	Chapter 19 &20 Chapter 20
XIII	4/3 4/5 4/7 LAB:	Circulatory system: blood vessels Circulatory & lymphatic systems Lymphatic & respiratory Respiratory & Digestion	Chapter 21,22 Chapter 21 &22 Chapter 22& 23
XIV	4/10 4/12 4/14 LAB:	Digestive system Digestive system <b>Exam 3</b> Urinary & Reproduction	Chapter 24 Chapter 24
XV	4/17 4/19 4/21 LAB:	Urinary system Urinary system Reproductive system Lab review	Chapter 25 Chapter 25 Chapter 26
XVI	4/24 4/26 4/28 LAB:	Reproductive system No class: at conference Review <b>LAB PRACTICAL FINAL EXAM</b>	Chapter 26

**Cumulative final exam: Tuesday, May 2, 10:15-12:15 pm in class**

### **SUGGESTIONS FOR SUCCESS**

1. Schedule a minimum of 2 hours study time for each hour in the classroom or lab.
2. Read before lecture and labs. Listen and take notes as necessary.
3. **Review after EVERY session** (this class covers a lot of material - you cannot memorize and understand it all in 1-2 days of studying just before the test). Read for understanding. Condense and organize notes from lectures and reading. Determine key words and concepts often highlighted in your PowerPoint slides.
4. Practice recalling from memory. There is A LOT of new vocabulary in this class. Practice writing down and saying terms.
5. If you LEARN the new material day by day (not just the night before the exam) and practice recall then you will find it substantially easier to listen, take notes, read, and do well on exams.
6. Study smart. It is not just the amount of time, but how you spend your study time!

7. Make sure to review the study materials and test questions that are available at the end of each chapter in the text. Your classroom exams will focus on what is covered in lecture with elaborations/examples from the textbook.

## **HELP**

If you are having trouble or not doing as well as you want to (or need to), please come talk to me or the TAs! It is our job to try to help you. Marshall also has organizations helping students that are having problems:

1. College of Science free tutoring in Science 209. You can get free extra help from your own TA or from another TA that is involved with this class. It can even be a TA from one of the other professors' classes. The TAs' office hours will be posted on the door of 209 by the end of the first week of classes. Simply pick a TA or time that works for you.
2. University College Tutoring Center (in the basement of the Community College building between the Henderson Center and Prichard Hall) You can view the drop in tutoring schedule on line and even request a tutor on line at:

<http://www.marshall.edu/uc/ts.shtm>