

BSC 105 - HUMAN BIOLOGY
Fall 2018

Instructor: Dr. Habiba Chirchir
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Office: Science Building Rm. 279B

Lectures: Tuesday & Thursday 9:30-10:45 am, Science Building 374

Labs: Science Building 273

Section 105: Monday 2:00-3:50 pm

Section 106: Tuesday 2:00-3:50 pm

Section 107: Wednesday 8:00-9:50 am

Office hours: Tuesday & Thursday 3:15-5:00pm (or other by appointment)

Required texts, additional reading, and other materials: Human Biology, 14th or 15th editions, S.S. Mader & M. Windelspecht. Lab manual (available only at Marshall Bookstore)

13th Edition 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 focuses on the fundamentals of biological human structure, function, and interactions with the environment. The course is divided into lecture presentation and laboratory instruction. Lectures will introduce students to how humans are related to other living organisms, cell function, basic human anatomy, and fundamental functions of the human body, basic human genetics and evolution. In the laboratory, students will interact with specimens as a way 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 scientific terminology and explain basic biological concepts clearly and accurately (communication, critical thinking)
- Students will be able to describe the human body systems and their functions (communication, critical thinking)
- Students will be able to accurately conduct and describe laboratory experiments and their importance in the broader perspective of understanding science (communication, critical thinking, technology)

Learning outcomes will be assessed as follows:

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

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

Technology: Students will be required to know how to utilize microscopy.

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.

Laboratory attendance and lab grades: Your lab grade will be calculated from 13 graded data sheets @ 10 points/data sheet. The student must hand in each data sheet by the end of each lab period – no late data sheets are to be accepted. One data sheet grade may be dropped, for a lab point total of 120 points. You should attend all labs in order to have the maximum number of graded data sheets from which to select one lowest grade for dropping. Both excused and unexcused absences do count toward the one drop.

The only make-up labs available are other sections of the same course during the same lab week. If a student attends a make-up lab section, s/he must write his/her name and his/her regular TA's name on the data sheet, then turn in the data sheet to the TA in the lab attended.

Exams: There are **3 exams** scheduled during this course; look at your course schedule. All three are worth 100 points each, and all are **non-cumulative** and of the same length. Tests may include multiple-choice, figure labeling, true-false, or other types of questions.

Make-up exams: Make-up exams are NOT ordinarily given. If you miss an exam you must provide an acceptable excuse within 24 hours of the scheduled time for the exam. If you do not, you will not be permitted to take a make-up and a "0" will be scored for this exam. Make-up exams will be given ONLY in the event of (1) an officially approved university absence, (2) a death in the immediate family, or (3) an illness that prevents you from attending class on the scheduled exam day. 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

Athletes: members of sports teams that must travel on exam days may take the exam early. We should meet and arrange this as early in the semester as possible.

Grading: Final letter grades for the course are determined on the percent of total possible points achieved by the following scale:

A=90-100%, B=80-89%, C=70-79%, D=60-69%

Your final average will include lecture exam grades, lab sheet grades, and case study discussions in class.

Assessment	Points
Lecture exam 1	100
Lecture exam 2	100
Lecture exam (final exam) 3	100
Class discussions (case studies)	20
Lab grades	120

Academic dishonesty in any form will not be tolerated. All written assignments, laboratory reports, 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	8/21 8/23 LAB:	Introduction; what's biology/science? Chemicals of life & cells Laboratory Safety	Chapter 1 & 2 Chapter 2 & 3
II	8/28 8/30 LAB:	Cells Organization of body systems Scientific measurement	Chapter 3 Chapter 4
III	9/4 9/6 LAB:	Cardiovascular system Cardiovascular system No lab	Chapter 5 Chapter 6
IV	9/11 9/13 LAB:	Lymphatic & Immune systems Infectious disease Column Chromatography	Chapter 7 Chapter 8
V	9/18 9/20 LAB:	Digestive system Respiratory system Microscope and Cells	Chapter 9 Chapter 10
VI	9/25 9/27 LAB:	Urinary system Urinary system and review Circulation	Chapter 11 Chapter 11
VII	10/2 10/4 LAB:	Exam 1 Skeletal system Immunology	Chapter 12
VIII	10/9 10/11 LAB:	Skeletal system Muscular system Digestion	Chapter 12 Chapter 13

IX	10/16	Nervous system	Chapter 14
	10/18	Nervous system	Chapter 14
	LAB:	Skeleton	
X	10/23	Endocrine system & review	Chapter 16
	10/25	Exam 2	
	LAB:	Nervous system	
XI	10/30	Reproductive system	Chapter 17
	11/1	Development & aging	Chapter 18
	LAB:	Embryology	
XII	11/6	Human genetics	Chapter 19
	11/8	Human Genetics	Chapter 21
	LAB:	Genetics	
XIII	11/13	Human Evolution	Chapter 23
	11/15	Human Evolution	Chapter 23
	LAB:	Protein Synthesis	
XIV	11/20	No class: thanksgiving break	
	11/22	No class: thanksgiving break	
	LAB:	No lab: thanksgiving break	
XV	11/27	Ecology & Ecosystems	Chapter 24
	11/29	Human Interactions & Biosphere	Chapter 25
	LAB	Population Growth and Human Impact	
XVI	12/4	Review	
	12/6	No class: study for final exam	

Final exam (Exam 3): Tuesday December, 11 at 8:00-10:00 am in class

Help: If you are having trouble or not doing as well as you want to (or need to) come talk to the TAs or me! It is our job to try to help you.

Marshall also has organizations helping students that are having problems:

1. 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 Smith Communications Building Room 211. You can view the drop in tutoring schedule on line and even request a tutor on line at: <https://www.marshall.edu/uc/tutoring-services/>