

Human Anatomy and Physiology I – Summer A, 2023

Course Information:

Course Number & Title: BSC 2085 (Human Anatomy and Physiology I)

Credit Hours: 03

Course Meeting Dates and Location:

BSC 2085-01 Mon/Tues/Wed/Thurs 8:00 - 9:50 am 2-119

Instructor: Bertha Freeman

Office Location: 2-217H

Telephone Number: 352-854-2322, x1354

Email: freemanb@cf.edu

Office Hours: Ocala campus (2-217H)

- Tuesday: 10:30 am - 12:30 pm
- Thursday: 10:30 am - 12:30 pm

Extended Emergency Closures:

For emergency campus closings (natural disasters, etc.) 352-291-4499 or 800-831-9244 or check our website www.CF.edu.

Course Description:

The sciences of anatomy and physiology are the foundation for understanding the structures and functions of the human body. We will look at how each structure of the body is designed to carry out a particular function and how the structure of a part often determines the functions it can perform. In this course you will examine: (a) the molecular, cellular, and tissue levels of organization, (b) how the body systems relate to one another, and (c) the physiological processes responsible for maintaining homeostasis.

Course Objectives:

- Consider the levels of organization that characterize living things and the properties all living things share.
- Examine how the body constantly regulates its internal environment (homeostasis).
- Discuss how the various systems that compose the human body cooperate with one another to maintain the health of the body as a whole.
- Establish a basic vocabulary that allows us to speak about the body in a way that is understood by scientists and health-care professionals.

Course Outline:

Introduction to Human Body

Chemical Level of Organization

Cellular Level of Organization

Tissue Level of Organization

Integumentary System

Skeletal System (and Articulations)

Muscular System

Nervous System (and Special Senses)

Required Text:

Title/Edition: Fundamentals of Anatomy & Physiology (11th ed) with Modified Mastering

Author: Frederic Martini, Judi Nath, and Edwin Bartholomew

ISBN No.: 9780134810423

Learning Outcomes:

COMMUNICATION: the student will read, write, speak, and listen effectively

1. Read materials and effectively understand essential facts and concepts.
2. Listen actively to comprehend main ideas and essential details.
3. Express clear, well-organized ideas through oral communication.

QUANTITATIVE AND ANALYTICAL REASONING: the student will understand and apply mathematical and scientific principles and methods

1. Interpret and communicate understanding of visual presentation of data.
2. Demonstrate mathematical number sense and unit sense.

COMPUTER AND INFORMATION SKILLS: the student will be able to evaluate the importance of technology and its applications.

1. Organize data or information using appropriate electronic skills.
2. Access, research, and retrieve information using the internet.
3. Communicate with others using electronic media.

Assessment:

Final course grade = 70% Tests; 30% Homework/Quizzes; **NO EXTRA CREDIT!**

Absences may adversely affect your performance and result in lost points due to missed homework deadlines and quizzes. Late assignments will be accepted with a penalty assessed (reduction in earned score on assignment).

The instructor does not give you a grade. He/she awards you the grade you earn. Tests, once graded and reviewed in class, will be returned to the instructor and filed. Homework assignments will be returned to the student. It is your responsibility to keep them. Should you feel that the grade assigned to you is in error, you will need to bring in these assignments so we can check to see if an error was made in recording the scores or adding up points. Without this documentation, the recorded grades will be assumed to be correct

Grades will be posted in Canvas, so you can check that grades are recorded correctly, if you are missing any scores, and about how you are progressing in the class. This not your final grade.

Your **final grade** will be calculated based on **1000 points**.

Grading Scale:

A	Excellent	900 - 1000 points
B+	Very good	870 - 899 points
B	Good	800 - 869 points
C+	High average	770 - 799 points
C	Average	700 - 769 points
D	Poor	600 - 699 points
F	Failure	0 - 599 points

Attendance:

Documentation of student absences will begin the first day of class. When a student has a legitimate reason for being absent, the instructor has the option of permitting the student to make up the work. While you do not need to disclose personal details, let your professor know as soon as possible if something is preventing you from participating or completing work.

Make up work must be submitted (or arrangements made) within one week of the original assignments due date unless an emergency prohibits it. Assignments (including tests) received more than 10 days from the due date will receive maximum credit of 70% of earned points.

Class Policies and Announcements:

- Put name (first and last) and course/section on back of the assignment (upper left corner).
- All assignments (except for tests) must be completed in ink (**blue or black** only). **Five points** subtracted from earned score for assignments done in pencil or other color ink.
- Do not abbreviate any answers (words) in homework assignments.
- Do not use arrows to switch answers. Mark through incorrect response and write correct one above it or attach additional pages to assignments.

- Makeup work (for excused absences) must be completed within one week of the date the assignments was due to receive full cr
- Late assignments will be accepted with a penalty assessed - 10 points; assignments received more than one week from due date will receive a maximum of 70% credit.
- Students who decide to drop the course must go to Enrollment Services to make arrangements. I am not responsible for doing this for you. Do not just stop participating in the class
- A student will not be given an I (incomplete) or W (withdrawal) to avoid receiving an "F" in the class
- Cell phones should be set on vibration during class. Please do not make calls or have friends/family call you (except in an emergency). All conversations should be conducted in the hallway.
- Cell phones may be used during class to access class material on Canvas
- Students must furnish their own scantron sheets and #2 pencil for tests.
- Students will need a set of colored pencils for diagrams used in class.

Important Dates:

- May 15 (Mon) Classes begin
- May 29 (Mon) Memorial Day Holiday (college closed)
- June 26 Mon Classes end

Tentative Class Schedule:

Due to unforeseen happenings, it may be necessary for the course assignment schedule to be altered. The instructor will always strive to be fair about any changes.

Chapter 1 - Introduction to Anatomy and Physiology

- Homeostasis (pp 18-25)
- Language of Anatomy (pp 7-18)
- Medical Imaging
- Test - Chapter 1 (Language of Anatomy)

Chapter 2 - Chemical Level of Organization

- Elements, Periodic Table, Reactions (pp 29-32)
- pH (pp 40-44)
- Organic Compounds (pp 46-60)
- Test - Chapter 2 (Chemistry)

Chapter 3 - Cellular Level of Organization

- Cell Structures (pp 66-84)/Mitosis (pp 102-107)
- Membrane Transport (pp 90-98)
- Protein Synthesis (pp 85-90)
- Test - Chapter 3 (Cell, Mitosis, Membrane Transport)

Chapter 4 - Tissue Level of Organization

- Epithelial, Connective, Muscular, Nervous Tissues (pp 115-144)

Chapter 5 - The Integumentary System

- Skin and its Derivatives (pp 153-173)
- Test - Chapter 4 & 5 (Tissues and Integumentary System)/take home

Chapter 6 - Bone and Bone Structure

- Bone structure, bone growth, fractures (pp 181-204)

Chapter 7 - The Axial Skeleton

- Cranial bones, facial bones, thoracic cage, vertebral column (pp 209-239)

Chapter 8 - The Appendicular Skeleton

- Pectoral girdle, upper limbs, pelvic girdle, lower limbs (pp 244-260)

Chapter 9 - Joints

- Joints (pp 266-286)

Test - Chapter 6, 7, 8 and 9 (Skeletal System)

Chapter 10 - Muscular Tissue (pp 292-314)

Chapter 11 - the Muscular System (pp 339-383)

- Muscle Tissue
- Muscular System

Test - Chapter 10 & 11 (Muscles)/take home test

Chapter 12 - Nervous Tissue

- Neuron and impulse conduction (pp 390-410)

Chapter 13 - Spinal cord, Spinal Nerves, and Spinal Reflexes

- Spinal cord (pp 443-444; pp 456-460)

Chapter 14 - Brain and Cranial Nerves

- Brain (pp 466-506)

Chapter 17 - Special Senses

- Eye (pp 572-591)
- Ear (pp 592-606)

Final Exam - Chapter 12-17

- BSC 2085 - 01 June 26 (Mon)