

# BIOL G219: HUMAN ANATOMY DISCUSSION

Item	Value
Curriculum Committee Approval Date	10/20/2020
Top Code	041000 - Anatomy and Physiology
Units	1 Total Units
Hours	18 Total Hours (Lecture Hours 18)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Pass/No Pass (B)

## Course Description

This discussion course affords students enrolled in BIOL G220, Human Anatomy, the opportunity to develop background information, problem solving, extend discussion and exchange ideas concerning human structure. Discussion focuses on anatomical components and other key topics covered in BIOL G220 as well as background information not generally covered in lecture. Designed to help students succeed in their study of human anatomy. COREQUISITE: BIOL G220. Transfer Credit: CSU; UC.

## Course Level Student Learning Outcome(s)

1. Course Outcomes
2. Improve learning skills, student involvement, and overall success in BIOL G220 Human Anatomy.
3. Explain major anatomical concepts.
4. Identify the basic structures of the human body.
5. Place a structure in proper orientation for proper function.
6. Describe major anatomical structures involved in organ system integrational homeostasis.

## Course Objectives

- 1. Define and use the basic terminology used in descriptive human anatomy.
- 2. Identify each student's learning style(s).
- 3. Identify and create learning and study techniques/skills for students.
- 4. Review anatomical structures and concepts as they relate to physiological processes.
- 5. Identify cellular, tissue, organ, and organ system structures of the human body.
- 6. Describe cellular, tissue, organ, and organ system structures of the human body and place them in the appropriate locations.
- 7. Describe structural or anatomical changes that occur in disease, injury, or aging of the human body.
- 8. Use appropriate anatomical terminology when describing anatomical concepts, physiological concepts, describing anatomical structures, and identifying anatomical structures.

## Lecture Content

Basic concepts necessary for Bio 220. Finding your learning style. Expectations of study time and preparedness for course. Introduction to body organization. Levels of organismal organization. Methods for study of body organization. Cell structure and function. Structural features of cells. Cell membrane and transportation. Histology. Use of microscopes. Organization of tissues. Methods for the study of tissues. Skin as an organ. Hierarchy of organization and emergent properties of skin cells, tissue, organ, and organ system. Function of skin. Joints. Understanding basic lever classification. Structure of joints. The muscular system. Structure and organization of muscle fibers. Structure and function of muscles. The peripheral and central nervous systems. Structure and function of nerve cells. Action potentials. Synapses. Anatomy of the nervous system. Functional divisions of the nervous system. Circulatory System. Formed elements of blood. Heart. Blood pressure. Blood flow. Vessels. Lungs and gas transportation. Structure and function of airways. Structure and function of alveoli. Digestive System. Structure and function of the alimentary canal. Accessory digestive organs. Kidneys, ureters, bladder, and urethra. Structure and function of a nephron. Urinary reflex. Male and female reproductive system. Structure and function of the male reproductive tract. Structure and function of the female reproductive tract. Endocrine System. Hypothalamus anatomy. Applying anatomical understanding to positive and negative feedback loops.

## Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)

## Instructional Techniques

This course will be used in two different ways: 1. It will give instructors the opportunity to dive further into more complicated material with students and 2. It will be used as an opportunity to help students gain important study skills to utilize inside and outside of the classroom based on each student's learning style. The content covered in Bio G 200 and Bio G 219 will serve as material students can use develop and practice these methods.

## Reading Assignments

Typical Reading Assignments: Reading from the course textbook is required for every lecture period. Typical Oral Assignments: Informal or formal presentations and participation in discussions

## Writing Assignments

Typical Writing Assignments: Essay preparations for lecture (Bio G 220) and creative writing assignments involving a red blood cell's journey through the heart and food's journey through the digestive system.

## Out-of-class Assignments

Small projects involving the creation and completion of study material. Typical Writing Assignments: Essay preparations and creative writing assignments.

## Demonstration of Critical Thinking

Students may be required to: 1. Identify ways in which structure relates to function 2. Identify problems that may result from structural abnormalities 3. Compare and contrast the ways in which different systems function to maintain homeostasis

## **Required Writing, Problem Solving, Skills Demonstration**

1. Writing Assignments: Short answers, written assignments, Other: Students will be evaluated for their ability to demonstrate knowledge of human anatomy concepts and applications with written assignments, term papers, or reports. 2. Problem Solving Demonstrations: Quizzes, homework problems, other: Students will be evaluated on their ability to relate physiological function with anatomical form. 3. Skills Demonstration: Class Performance, other: Students will be evaluated on their ability to analyze human anatomy concepts and applications with in-class quizzes and in-class discussion.

## **Eligible Disciplines**

Biological sciences: Master's degree in any biological science OR bachelor's degree in any biological science AND master's degree in biochemistry, biophysics, or marine science OR the equivalent. Master's degree required.

## **Textbooks Resources**

1. Required Mckinley, M. O'Loughlin, V.. Human Anatomy , 6th ed. McGraw Hill, 2020