

Human Anatomy and Physiology

Updated May 2020

Course Description: Human Anatomy and Physiology provides students with information about systems of the human body. A variety of assessments are used throughout the course including laboratory work, special activities and projects.

Big Ideas:

1. Cells, tissues, organs, and organ systems maintain relatively stable internal environments through a mechanism called homeostasis, even in the face of changing external environments.
2. Food is required for energy and building cellular materials. Organisms in an ecosystem have different ways of obtaining food, and some organisms obtain their food directly from other organisms. That food is then used in a process called cellular respiration to make energy.
3. There are 7 levels of organization that make up the human body, and each is involved in maintaining homeostasis.
4. Human organ systems are interrelated. Organ systems are essential for homeostatic maintenance. Organ systems' anatomies directly relate to physiology.

Essential Learner Outcomes:

ELO #	Essential Learner Outcome Description	Standards
1	Students will identify the need for homeostasis in the body and mechanisms used to maintain it.	LO1.A.Bio1; LO1.C.Bio1; LO2.A.Bio1; LO2.D.Bio1; LO2.E.Bio1; LO2.F.Bio1; LO2.G.Bio1
2	Students will be able to give examples and describe how structure complements function in the human body.	LO2.D.Bio1
3	Students will distinguish between the structure and function of the skeletal system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
4	Students will distinguish between the structure and function of the muscular system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
5	Students will distinguish between the structure and function of the nervous system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
6	Students will distinguish between the structure and function of the cardiovascular system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1

7	Students will distinguish between the structure and function of the respiratory system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
8	Students will distinguish between the structure and function of the digestive system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
9	Students will distinguish between the structure and function of the endocrine system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
10	Students will distinguish between the structure and function of the reproductive system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
11	Students will distinguish between the structure and function of the urinary system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
12	Students will be able to use anatomical vocabulary correctly to name and describe parts and functions of the human body.	LO2.C.Bio1