

## Honors Human Anatomy and Physiology Scope & Sequence

Days	Unit	Standard(s)/Outcome(s)	Essential/Guiding Questions
7	<b>Introduction, orientation, tissues</b>	Describe anatomical relationships using basic terminology  Define homeostasis and explain its importance	Why is it important to develop knowledge of anatomical terms?  Why must the body maintain homeostasis?
7	<b>Skeletal</b>	Analyze the structure and function of the human skeleton	How do bones provide the ability for movement?  How does the skeleton support your body?
10	<b>Muscular</b>	Identify the form and function of skeletal, smooth, and cardiac muscles	How do muscles provide movement?  How do muscles contract?
10	<b>Nervous</b>	Describe the structure and function of the peripheral and central nervous systems.	How do neurons control the human body?
10	<b>Circulatory</b>	Describe the form and function of cardiovascular components of the body.	How does blood keep us alive?  How does the heart and arteries, veins, and capillaries function as a closed circulatory system?

5	<b>Endocrine, Lymphatic</b>	Define glands and hormones	What are endocrine glands and what do they produce?
5	<b>Immune</b>	Describe how the body develops immunity.	How does your body develop immunity?
5	<b>Respiratory</b>	Describe the function of the lungs.	How does the respiratory system exchange oxygen and carbon dioxide?
5	<b>Urinary</b>	Identify and explain functions of kidneys and related structures	How do kidneys function as filters?
10	<b>Reproduction</b>	Describe male and female reproductive anatomy	How do hormones influence reproduction?
5	<b>Developmental biology, embryology</b>	<p>Describe the steps in the process of fertilization</p> <p>Identify the names of developmental phases from fertilization to fetus</p> <p>Explain what is occurring at each stage of human development</p> <p>Explain when and how differentiation occurs in a developing embryo</p> <p>Define morphogenesis</p>	What is occurring at each stage of embryological development?

		Evaluate diagrams of developing embryos to determine developmental stages	
--	--	---	--