

<p style="text-align: center;">Goodheart–Willcox Publisher</p> <p style="text-align: center;">Correlation of <i>INTRODUCTION TO ANATOMY AND PHYSIOLOGY 2E</i> ©2021</p> <p style="text-align: center;">to the INDIANA 2013</p> <p style="text-align: center;">for ANATOMY AND PHYSIOLOGY (GRADES 11–12).</p>	
STANDARD	G–W CORRELATING PAGES
<b>Core Standard 1</b> <b>Students confirm the different forms of cellular transport within the cell and across the plasma membrane.</b>	55–57
AP-1.1 Verify anatomy and physiology and describe their subdivisions	4–5
AP-1.2 Analyze the functions of the organelles of the cell	55–62
AP-1.3 Evaluate the plasma membrane structure to active passive transport mechanisms	55–57
AP-1.4 Connect the difference between the transport processes relative to energy source, substances transported, direction, and mechanism	55–57
AP-1.5 Analyze the parts of a cell and their basic functions	55–62
<b>Core Standard 2</b> <b>Students synthesize stages and processes of somatic cell division and investigate cellular differentiation in the course of development and in the adult body.</b>	64–66, 591–594
AP-2.1 Analyze the functions of the parts of a microscope	87
AP-2.2 Analyze the phases of the cell cycle using models and a microscope	64–66, 70–78, 591–594
AP-2.3 Evaluate the key phases of the cell cycle and describe the key events in each phase, including cytokinesis	64–66
AP-2.4 Evaluate the process of cell division and why cells are considered living	59, 64–66
AP-2.5 Verify gene and explain their functions	50–51
AP-2.6 Connect transcription and translation	62, 63
<b>Core Standard 3</b> <b>Students apply and adapt the role of adhesion molecules and how these contribute to tissue formation.</b>	387

AP-3.1 Verify homeostasis and explain its significance	12–17, 38, 58, 100, 123, 218, 303–305, 306, 307, 312–313, 316, 378, 381, 529, 532, 552, 564–565, 578
AP-3.2 Recommend the 11 organ systems of the body and identify their components	12–14
AP-3.3 Analyze common body movements	151–154, 180–188
AP-3.4 Evaluate the anatomical position	5
AP-3.5 Choose the correct anatomical terms to describe body directions, regions, and body planes	5–9
AP-3.6 Evaluate the importance of water in the human body	17, 52–53
AP-3.7 Connect the relationship between homeostasis imbalance and disease	316, 578
AP-3.8 Verify anatomy and physiology and describe their subdivisions	4–5
AP-3.9 Choose the different levels of structural organization that make up the human body, and explain their relationship	12
AP-3.10 Choose and name the major body cavities and their subdivisions and list the major organs contained within them	8–9
<b>Core Standard 4      Students analyze the relationships between and the histology and physiological functions of tissues and their cellular and biochemical composition.</b>	69–79
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AP-4.2 Synthesize chemical element and list the elements that form the bulk of body matter	42–53
AP-4.3 Choose the different levels of structural organization that make up the human body, and explain their relationships	12
AP-4.4 Confirm how negative and positive feedback maintain body homeostasis	15–16
AP-4.5 Name the different levels of structural organization that make up the human body	12
AP-4.6 Evaluate and locate the four basic tissue types of the body and explain their functions	69–79
AP-4.7 Verify atomic number, atomic mass, atomic weight, isotope, and radioisotope	626

AP-4.8 Verify the three types of chemical reactions: synthesis, decomposition, and exchange	16–18
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<b>Core Standard 5      Students analyze the structure of the skin, including layers as well as accessory structures such as hair follicles, glands, and nails.</b>	94–99
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