

	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
Textbook Chapters	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 1	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 2 - 3	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 4 - 6	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 4 - 6	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 7 - 9	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 7 - 9	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 10 - 15	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 10 - 15	Marieb, Essentials of Human Anatomy & Physiology 10e Ch 16	Body Systems Wrap Up
Other Major Readings	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 1	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 2-3	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 4 - 6	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 4 - 6	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 7 - 9	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 7 - 9	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 10 - 15	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 10 - 15	Applied Anatomy and Physiology: A Case Study Approach [Book] Ch 16	
Essential Questions	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?	How is scientific knowledge created and communicated? How do science and technology affect the quality of our lives? How are organisms structured to ensure efficiency and survival?
Standards	Students will analyze anatomical structures in relationship to their physiological functions.	Students will describe the different forms of cellular transport within the cell and across the plasma membrane and discuss the stages and processes of somatic cell division and investigate cellular differentiation in the course of development and in the adult body.	Students will analyze the interdependence of the integumentary, skeletal, and muscular systems as these relate to the protection, support and movement of the human body.	Students will analyze the interdependence of the integumentary, skeletal, and muscular systems as these relate to the protection, support and movement of the human body.	Students will assess the integration and coordination of body functions and their dependence on the endocrine and nervous systems to regulate physiological activities.	Students will assess the integration and coordination of body functions and their dependence on the endocrine and nervous systems to regulate physiological activities.	Students will analyze the physical, chemical, and biological properties of process systems as these relate to transportation, absorption and excretion, including the cardiovascular, respiratory, digestive, excretory and immune systems.	Students will analyze the physical, chemical, and biological properties of process systems as these relate to transportation, absorption and excretion, including the cardiovascular, respiratory, digestive, excretory and immune systems.	Students will analyze the role of the reproductive system as it pertains to the growth and development of humans.	

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<p>Major Skills</p>	<p>a. Apply correct terminology when explaining the orientation of body parts and regions. b. Investigate the interdependence of the various body systems to each other and to the body as a whole. c. Explain the role of homeostasis and its mechanisms as these relate to the body as a whole and predict the consequences of the failure to maintain homeostasis. d. Relate cellular metabolism and transport to homeostasis and cellular reproduction. e. Describe how structure and function are related in terms of cell and tissue types.</p>	<p>a. Compare and contrast diffusion and osmosis, facilitated diffusion, active transport, endocytosis, and exocytosis. b. Define homeostasis, its principal mechanisms at the cellular level, and the consequences of failure to maintain homeostasis. c. Describe the importance of proteins in cell function and structure. Give specific examples of proteins and their functions and describe how proteins are synthesized. d. Review the stages of mitosis and discuss differences in lifespan among various types of terminally differentiated cells.</p>	<p>a. Relate the structure of the integumentary system to its functional role in protecting the body and maintaining homeostasis. b. Explain how the skeletal structures provide support and protection for tissues, and function together with the muscular system to make movements possible.</p>	<p>a. Relate the structure of the integumentary system to its functional role in protecting the body and maintaining homeostasis. b. Explain how the skeletal structures provide support and protection for tissues, and function together with the muscular system to make movements possible.</p>	<p>a. Interpret interactions among hormones, senses, and nerves which make possible the coordination of functions of the body. b. Investigate the physiology of electrochemical impulses and neural integration and trace the pathway of an impulse, relating biochemical changes involved in the conduction of the impulse. c. Describe how the body perceives internal and external stimuli and responds to maintain a stable internal environment, as it relates to biofeedback.</p>	<p>a. Interpret interactions among hormones, senses, and nerves which make possible the coordination of functions of the body. b. Investigate the physiology of electrochemical impulses and neural integration and trace the pathway of an impulse, relating biochemical changes involved in the conduction of the impulse. c. Describe how the body perceives internal and external stimuli and responds to maintain a stable internal environment, as it relates to biofeedback.</p>	<p>a. Describe the chemical and physical mechanisms of digestion, elimination, transportation, and absorption within the body to change food and derive energy. b. Analyze, and explain the relationships between the respiratory and cardiovascular systems as they obtain oxygen needed for the oxidation of nutrients and removal of carbon dioxide. c. Relate the role of the urinary system to regulation of body wastes (i.e. water/electrolyte balance, volume of body fluids). d. Examine various conditions that change normal body functions (e.g. tissue rejection, allergies, injury, diseases and disorders) and how the body responds. e. Describe the effects of aging on body systems.</p>	<p>a. Describe the chemical and physical mechanisms of digestion, elimination, transportation, and absorption within the body to change food and derive energy. b. Analyze, and explain the relationships between the respiratory and cardiovascular systems as they obtain oxygen needed for the oxidation of nutrients and removal of carbon dioxide. c. Relate the role of the urinary system to regulation of body wastes (i.e. water/electrolyte balance, volume of body fluids). d. Examine various conditions that change normal body functions (e.g. tissue rejection, allergies, injury, diseases and disorders) and how the body responds. e. Describe the effects of aging on body systems.</p>	<p>a. Explain how the functions of the reproductive organs are regulated by hormonal interactions. b. Describe the stages of human embryology and gestation including investigation of gestational and congenital disorders (e.g. ectopic pregnancy, miscarriage, cleft palate, hydrocephaly, fetal alcohol syndrome). c. Describe the stages of development from birth to adulthood (i.e. neonatal period, infancy, childhood, adolescence and puberty, and maturity).</p>	
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