

# Anatomy / Physiology Curriculum Guide 2017 (11th and 12th Grade)

Content Expectations	Pacing Guide	Student Friendly Language (Clarification)	Instructional Strategies/ Materials	Assessment
Unit 1: Introduction to Anatomy and Physiology History, Basic Terminology, Names of the 11 Body Systems, Homeostasis, Anatomical Terminology	3 weeks	This unit lays the foundation for understanding the relevance of anatomy / physiology and gives students the basic tools they will need to be successful throughout the year.	Guided notes, Reading guide for chapter 1 in Hole's Essentials of Human Anatomy and Physiology	Unit 1 test, Anatomical Terminology Pinata Project, Reading Guide
Unit 2: Cellular Biology Parts of Cells, Protein Synthesis, Regulation of Cellular Functions, Basic Biochemistry, Tissue Types	3 weeks	This unit covers the fundamental building block of all body systems: the cell. A basic understanding of the cell will be helpful in understanding how each body system functions at its most fundamental level.	Guided notes, Reading guide for chapters 2, 3, and 4 in Hole's Essentials of Human Anatomy and Physiology	Unit 2 test, Reading Guide, Transcription and Translation Lab
Unit 3: Integumentary System	2 weeks	This unit deals with the skin, hair, and nails. It is the body's first line of defense against pathogens and plays an important role in homeostasis.	Guided notes, Reading guide for chapter 6 in Hole's Essentials of Human Anatomy and Physiology	Integumentary Quiz
Unit 4: Skeletal System	2 weeks	This unit describes the human skeletal system and its role in movement, blood cell production, repair, and protection of organs.	Guided notes, Reading guide for chapter 7 in Hole's Essentials of Human Anatomy and Physiology	Skeletal System Test
Unit 5: Muscular System	3 weeks	This unit describes the human muscular system including skeletal, smooth, and cardiac muscle. These muscles move our bones, internal organs and heart respectively.	Guided notes, Reading guide for chapter 8 in Hole's Essentials of Human Anatomy and Physiology	Muscular System Test, Cellular Respiration and Muscle Use Lab

Unit 6: Blood	2 weeks	This unit describes the fluid responsible for transporting nutrients and waste to and from all body systems. Without blood, multi-cell animals could not exist	Guided notes, Reading guide for chapter 12 in Hole's Essentials of Human Anatomy and Physiology	Blood quiz, Blood Typing Lab
Unit 7: Circulatory System	3 weeks	This unit describes the system of pipes(blood vessels) and the pump (heart) that moves the blood to all parts of the body	Guided notes, Reading guide for chapter 13 in Hole's Essentials of Human Anatomy and Physiology	Circulatory Test, Sheep Heart Dissection Participation and Questions, Blood Pressure Lab
Unit 8: Respiratory System	1 week	The blood interacts with the respiratory system in order to pick up oxygen and carry away waste gasses. It is responsible for half of cellular respiration. Structures and functions will be discussed.	Guided notes, Reading guide for chapter 16 in Hole's Essentials of Human Anatomy and Physiology	Respiratory System Quiz, Lung Capacity Lab
Unit 9: Digestive System	3 weeks	The blood interacts with the digestive system to pick up essential nutrients including basic molecules required for cell production and the other half of cellular respiration.	Guided notes, Reading guide for chapter 15 in Hole's Essentials of Human Anatomy and Physiology	Digestive System Test. Liver Enzyme Lab.
Unit 10: Nervous System	3 weeks	Most other systems are responsible for keeping this system healthy. It is responsible for the control of most body activities. Sense Organs that bring information into this system will be discussed in this unit.	Guided notes, Reading guide for chapter 9 in Hole's Essentials of Human Anatomy and Physiology	Nervous System Test, Touch Sensitivity Lab

Unit 11: Endocrine System	2 weeks	While the Nervous System transmits messages to the specific body parts via fast electrical signals, the endocrine communicates more slowly but can send messages to many tissue types at once. The glands of the human body will be discussed in this unit.	Guided notes, Reading guide for chapter 11 in Hole's Essentials of Human Anatomy and Physiology	Endocrine System Quiz
Unit 12: Renal System	1 week	Cell wastes need and foreign materials need to be removed from the blood. The filtered out waste is urine. The Renal System cleans the blood and makes urine.	Guided notes, Reading guide for chapter 17 in Hole's Essentials of Human Anatomy and Physiology	Renal Quiz
Unit 13: Lymphatic System	2 weeks	Your immune system depends on white blood cells. Despite the name, white blood cells do most of their work outside the circulatory system in a different set of vessels called lymphatic vessels. This system helps your body fight off pathogens.	Guided notes, Reading guide for chapter 14 in Hole's Essentials of Human Anatomy and Physiology	Lymphatic Quiz
Unit 14: Reproductive System and Embryonic / Fetal Development	2 weeks	The reproductive system allows animals to create sex cells which allow reproduction to take place. This system also supports developing young.	Guided notes, Reading guide for chapter 19 and 20 in Hole's Essentials of Human Anatomy and Physiology	Reproductive System Test
Unit 15: Large Mammal Dissection and Review of All Body Systems	4 weeks	The culminating weeks of this class will be a dissection of a large mammal. During this dissection, all systems will be reviewed. We will explore tissue types, dissection techniques, and basic histology.	One large mammal (preferably feline) per group of two students. A notebook will be produced by each student.	Oral quizzes throughout the dissection and a grade on the dissection notebook produced.