East Carter Co. R-II School District
Course Scope and Sequence

Course: Anatomy/Physiology (Grades 11-12)

# OF DAYS	TOPICS
15	Chapter 1: Overview of the Body Essential Questions What are the body orientation terms that explain or describe the major body regions, cavities, and structures within them? Concepts: Directional orientation; directional planes; positions; movement; body regions; body cavities.
15	Chapter 2: The Body's Chemical Makeup Essential Questions: What is the terminology associated with the body's chemical makeup, atomic structure and bonding? Concepts: atoms and molecules; acids and bases; human molecules; molecules and nutrition
10	Chapter 3: Organization of the body Essential questions: What is the terminology associated with cell structure/function, body hierarchy, cell organization and physiology, tissue organization, form and function. Concepts: hierarchy of human structure; the human physiological environment; cell structure, cell function, Tissues, organs and systems.
10	Chapter 4: The skin and its parts Essential Questions: What is the terminology associated with the integumentary system, skin structure, function, appendages, and glands? Concepts: Integumentary system, skin structure, skin appendages, functions of the integumentary system, pathology of the integumentary system.

15	Chapter 5: The skeletal System Essential question: What is the terminology associated with the skeleton structure, function, development and growth, physiology, and articulations? Concepts: Axial skeleton; appendicular skeleton; bone types; bone structure; joints; bone development and healing; pathology of the skeletal system; aging of the skeletal system
15	Chapter 6: The muscular system Essential Question: What is the terminology associated with the different types of muscle cells, tissue development, gross and fine muscle structure, muscle function, cell physiology, types, actions, development and growth? Concepts: Musculature; pathology of the musculature; aging of the muscular system.
10	Chapter 7: The endocrine glands and hormones Essential question: What is the terminology associated with the endocrine system, hormones, glands and their functions? Concepts : Hormone function; endocrine secretions, types of hormones; endocrine glands
10	Chapter 8: Functions of the Nervous system Essential question: What is the terminology associated with the nervous system, types of nervous system cells, nervous system development, structure and components of a nerve cell, function of nerve cells, and the sequence of events involved in nerve cell excitation. Concepts: types of nervous system cells; neuron physiology; types of neuron communication; reflexes; pathology of the nervous system; and aging of the nervous system.
10	Chapter 9: Structure of the Nervous System Essential Question: What is the terminology associated with the nervous system, nerve structure, types of nerve pathways, nervous system components, central nervous system structure and function, and peripheral nervous system structure and function? Concepts: Nerve structure; nervous system components; human senses
15	Chapter 10: The Respiratory System Essential Question: What is the terminology associated with the respiratory system components, development and histology of the respiratory system, respiratory system function, and the breathing process? Concepts: Components of the Human Respiratory System; Breathing; aging of the respiratory system.

15	Chapter 11: The Cardiovascular System Essential Question: What is the terminology associated with the cardiovascular system, blood vessel function and structure, system pathways,heart function and structure, and electrocardiography principles? Concepts: Circulatory System Vessels; Structure of the Human Heart; Human Heart Function; Electrocardiography Basics, pathology of the cardiovascular system.
10	Chapter 12: The lymphatic System and the blood Essential question: What is the terminology associated with the blood and lymphatic system components, immune system components, immune system function, and mechanisms of immunization and vaccination? Concepts: blood cells, blood cell function, blood cell formation, lymphatic system, immunization and vaccination.
10	Chapter 13: The digestive System Essential question: What is the terminology associated with the organization, structure, function of the digestive system, the digestive process and waste production? Concepts: The digestive process, digestive organs, pathology and aging of the digestive system.

Course Description

In this course, students will be taught basic structures and functions of the systems of the Human Body. This will be accomplished through a variety of activities including lecture, laboratory exercises, cooperative learning with peers, research activities, and projects. Everyday students will be exposed to grade level appropriate concepts related to the structure and function of the Human body.