

Anatomy and Physiology Curriculum

1st Semester

Human Body Orientation (2.5 weeks)

- Language of Anatomy, body planes, regional/directional terms.

Skin, Body Membranes, Body Chemistry (3 weeks)

- Tissues, body membranes, integumentary system, chemistry of life (ATP, cellular respiration, molecular transport, osmosis, diffusion).

Skeletal System (3 weeks)

- Overview of bones, axial skeleton, appendicular skeleton, joints, bone creation, bone development, impacts of trauma and weightlifting.

Muscular System (4 weeks)

- Overview of muscle tissues, microscopic anatomy of muscle, muscle activity, muscle movements, gross anatomy of muscles.

Digestive System (4 weeks)

- Anatomy and function of digestion

2nd Semester

Nervous System

- Organization, structure and function, Central Nervous System, Peripheral Nervous System, MEMORY

Cardiovascular System

- Heart structure and function, blood vessels, heart disease.

Respiratory System

- Anatomy and mechanics of breathing

Endocrine System (3 weeks)

- Anatomy and function of glands and hormones, flow diagrams and discussion of impacts on other systems

Special Senses

- Vision, hearing and balance

Reproductive/Urinary System

- Anatomy, physiology, and reproductive functions/cycles