**Honors Anatomy Syllabus & Pacing Guide**

1. **Overview of Anatomy & Physiology**
   1. Anatomy vs. Physiology
   2. Levels of Organization
   3. Homeostasis
   4. Body Directions, Regions, Cavities
   5. Feedback Mechanisms
   6. Microscope Use
2. **Medical Technology & Tissues**
   1. Medical Equipment Usage & Diagnosis
   2. Epithelial Tissue Structure & Function
   3. Endo/Exocrine Glands
   4. Connective Tissue Structure & Function
   5. Muscular Tissue Structure & Function
   6. Nervous Tissue Structure & Function
3. **Integumentary System**
   1. Layers of Epidermis
   2. Layers of Dermis
   3. Accessory Organs (Hair/Nails)
   4. Burns
4. **Skeletal System**
   1. Functions of Skeleton
   2. Bone Formation & Repair
   3. Categories of Bones
   4. Bone Structure & Markings
   5. Types of Joints
   6. Types of Fractures
   7. Cranial & Facial Bones
   8. Suture Names & Locations
   9. Axial Skeleton
   10. Appendicular Skeleton
5. **Muscles of Body**
   1. Cardiac Muscles
   2. Smooth Muscles
   3. Skeletal Muscles
   4. Muscle Contractions
   5. Sarcomere Structure/Function
   6. Muscular Diseases
   7. Muscle Identification & Function
6. **Nervous System**
   1. Central vs. Peripheral Nervous System
   2. Sensory vs. Motor Neuron
   3. Supporting Cells Types, Structure, Function
   4. Reflexes
   5. Resting vs. Action Potential
   6. Forebrain, Midbrain, Hindbrain
   7. Major Regions of Brain
   8. Spinal Cord Structure & Function
   9. Ascending vs. Descending Spinal Cord Tracts
   10. Gray Vs. White Matter
   11. Diseases & Disorders
   12. Receptors
   13. Sense of Taste
   14. Sense of Smell
   15. Eyes & Vision
   16. Eye Structure
   17. Ear Structure
   18. Conduction of Sound
7. **Endocrine System**
   1. Positive vs. Negative Feedback
   2. Pituitary Gland & Hormones
   3. Other Glands & Hormones

**Circulatory System (Heart)**

* 1. Atrium vs. Ventricle
  2. Blood Flow Pathway
  3. Valves
  4. Heartbeat

**Blood**

* 1. Composition & Characteristics of Blood
  2. Arteries, Veins, Capillaries Structure & Function
  3. Blood Pressure

1. **Immune System**
   1. Lymph Organs
   2. Role of White Blood Cells
   3. Specific vs. Nonspecific Response
   4. Immunodeficiences
   5. Autoimmune Diseases

**Respiratory System**

* 1. Respiratory Organs Structure & Function
  2. External vs. Internal Respiration
  3. Voice Production
  4. Pressure in Breathing
  5. Inspiration vs. Expiration
  6. Respiratory Volumes & Capacity

1. **Digestive System**
   1. Mechanical vs. Chemical Digestion
   2. Alimentary Canal Structure & Function
   3. Accessory Organ Structure & Function
   4. Enzyme
   5. Nutrition
2. **Excretory System**
   1. Kidney Structure & Function
   2. Filtration, Reabsorption, Secretion
   3. Bladder & Accessory Organs

**Reproductive System**

* 1. Male Organs Structure & Function
  2. Male Hormones
  3. Female Organs Structure & Function
  4. Female Hormon
  5. Menstrual Cycle
  6. Ovarian Cycle
  7. Embryonic Development
  8. Fetal Development
  9. Parturition/Birth