

integrating structure with function.	Brief Research Paper	
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LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
6. Describe selected pathologies in terms of causes and/or treatment.	Lecture Reading Assignments Quizzes	

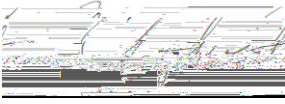
- VI. Skeletal System
 - A. Histology of Osseous Tissue
 - B. Osteogenesis: Intramembranous & Endochondral Ossification
 - C. Growth at Epiphyseal Plate
 - D. Names & Markings of Individual Bones
 - E. Osteoporosis
 - F. Vertebral Curvatures & Curvature Disorders
 - G. Structure & Function of Synovial Joints
 - H. Definition & Examples of Types of Movements: Flexion, Extension, Hyperextension, Supination, Pronation, Inversion, Eversion, Abduction, Adduction, Circumduction & Rotation
 - I. Structure of Joints
 - J. Classification of Articulations Based on Structure & on Amount of Movement
 - K. Arthritis
- VII. Muscle System
 - A. Histology of Skeletal Muscle Tissue
 - B. Physiology of Contraction (Sliding Filament Theory)
 - C. Energy Sources for Contraction
 - 1. Aerobic Respiration
 - 2. Anaerobic Respiration
 - D. Comparison of Slow & Fast Twitch Fibers
 - E. Myograms: Simple Twitch, Treppe, Summation & Tetany
 - F. Types of Contractions: Isotonic, Isometric, Concentric, Eccentric
 - G. Identification of Major Muscles & Their Actions, Origins & Insertions: Trapezius, Pectoralis Major, Latissimus Dorsi, Biceps, Triceps, Rectus Abdominus, Internal & External Obliques, Erector Spinae, Gluteus Maximus, Quadriceps, Hamstrings, Adductors, Abductos, Gastrocnemius, & Sternocleidomastoid
 - H. Definitions of Agonist, Antagonist, Synergist, & Stabilizer
- VIII. Nervous System
 - A. Functions & Divisions
 - B. Types of Neurons: Sensory, Motor, Association; & Unipolar, Bipolar, & Multipolar
 - C. Role of Myelin
 - D. Resting Membrane Potential & Action Potential
 - E. Nerve Plexuses and Muscles Innervated
 - F. Overview of Stroke & Multiple Sclerosis
 - G. Autonomic Nervous System: Compare Sympathetic & Parasympathetic Divisions in Terms of Function, Neurotransmitters, & Receptors
- IX. Endocrine System
 - A. Hormone-Target Cell Specificity
 - B. Major Hormones: Targets & Effects

- X. Cardiovascular System
 - A. Major Components of Blood & Their Functions, including role of hemoglobin in oxygen transport.
 - B. Structure of the Heart in Terms of Wall, Chambers, Valves, & Great Vessels. Include Path of Blood Flow, Systemic & Pulmonary Circulation.
 - C. Cardiac Conduction System
 - D. Cardiac Cycle
 - E. Definition & Comparison Arteries, Veins, & Capillaries in Terms of Vessel Wall & Blood Pressure
 - F. Location of Anatomic Landmarks for Palpation of Peripheral Pulse
 - G. Blood Pressure: Typical Value, Factors that Determine BP, Factors Regulating BP
 - H. Definitions of Ischemia, Angina Pectoris, Tachycardia, Bradycardia, Arrhythmia, Myocardial Infarction, Cardiac Output, Stroke Volume
 - I. Role of ANS in Regulation of Heart Rate
- XI. Lymphatic System
 - A. Structure
 - B. Functions
 - C. Lymphedema
- XII.

LABORATORY TOPICS:

(May be covered on one or on multiple days)

1. Microscopy
- 2.



*This course is consistent
was developed, approved and will be delivered in full compliance with the policies and
procedures established by the College.*