



EFFECTIVE: SEPTEMBER 2004
CURRICULUM GUIDELINES

A. Division: **Science and Technology**

M: Course Objectives / Learning Outcomes

5. BODY STRUCTURE AND ORGANIZATION - levels of structural organization
 - directional terms
 - body planes
 - body cavities
 - body systems

6. INTEGUMENTARY SYSTEM - epidermis-structure and function
 - dermis-structure and function
 - skin derivatives
 - disorders

7. SKELETAL SYSTEM - functions
 - classification
 - bone structure
 - bone formation
 - bone growth
 - homeostasis
 - bone disorders
 - axial skeleton
 - appendicular skeleton

8. ARTICULATIONS - classification
 - characteristics
 - structure and function of major joints
 - joint disorders
 - lever systems
 - biomechanical principles

9. MUSCULAR SYSTEM - muscle types
 - characteristics
 - muscle growth and development
 - skeletal muscle - types of fibers
 - gross anatomy
 - microscopic anatomy
 - mechanism of contraction
 - kinds of contractions
 - smooth muscle -structure and function
 - cardiac muscle -structure and function
 - muscle homeostasis
 - muscle disorders
 - principle skeletal muscles

10. NERVOUS SYSTEM - organization – CNS, PNS, ANS
 - growth and development
 - brain – structure and function
 - spinal cord-structure and function
 - physiology of impulse transmission
 - spinal and cranial nerves
 - neurotransmitters
 - reflex arc
 - sensory receptors
 - proprioception
 - sensory and motor pathways
 - motor unit
 - special senses- vision, hearing, smell, taste
 - nervous system disorders

