

# UNIT 5 - MUSCULAR SYSTEM

## STANDARDS AND OBJECTIVES

### STANDARD

**05 Students will describe the structures and functions of the muscular system and its components.**

### OBJECTIVES

- 05.01 Identify the general functions of the muscular system.
- 05.02 Describe the four characteristics of muscle tissue.  
(elasticity, excitability [irritability], extensibility, flexibility)
- 05.03 Contrast the general location, microscopic appearance, control, and functions of the three specific types of muscle tissue. (skeletal, smooth, cardiac)
- 05.04 Contrast thick and thin myofilaments.
- 05.05 Describe the sliding-filament theory of muscle contraction.
- 05.06 Describe what occurs at the neuromuscular junction.
- 05.07 Define the terms “origin” and “insertion.”
- 05.08 Explain the role of prime movers (agonists), antagonists, synergists, and fixators.
- 05.09 Describe the locations and functions of the following skeletal muscles:  
(biceps brachii, triceps brachii, sternocleidomastoid, trapezius, deltoid, diaphragm, pectoralis major, latissimus dorsi, gastrocnemius, hamstrings, quadriceps, gluteus maximus)
- 05.10 Identify the following diseases and disorders of the muscular system.  
(fibromyalgia, muscular dystrophy, shin splints)