

26a A&P: Muscular System – Fiber Types, Actions, and Contractions

Lesson Plan

<u>Minutes</u>	<u>Activity</u>
	Reminders 10 minutes before class begins display the reminders slide.
5	Attendance and Breath of Arrival
15	AOIs: pectoralis minor.
40	Lecture Muscular System – Fiber Types, Actions, and Contractions <ul style="list-style-type: none">• Energy sources for contraction.• Slow, intermediate, and fast twitch.• Belly, origin, and insertion.• Prime mover/agonist, antagonist, synergist, and fixator.• Isotonic and isometric.• Concentric and eccentric.• Muscle spindle and Golgi tendon organ.• Muscle tone, flaccid, and spastic.• Effects of massage therapy on the muscular system
60m	Total Class Time

Learning Outcomes

- **Program Level:** realize how the of understanding the workings of the muscular system is key to their credibility and effectiveness as therapists.
- **Course Level:** recognize how the muscular system follows the general nomenclature of a generic system, notice the particular terms that apply to it specifically, notice that it has special relationships with the nervous system, the “facial system” and the circulatory system.
- **Class Level:** understand the different types of contraction and fiber types, and roles that muscles play in movement and posture.

Class Schedule – Student Preparation

- Trail Guide: pectoralis minor.
- Salvo: Pages 438-446.
- Packet E: 45-48.
- RQ - Packet A-148.

Topic Focus

- Introduce the energy sources for contraction
- Introduce the 3 fiber types: slow, intermediate, and fast twitch.
- Introduce prime mover/agonist, antagonist, synergist, and fixator.
- Introduce isotonic, isometric, concentric, and eccentric.
- Introduce 2 stretch receptors: muscle spindle and Golgi tendon organ.
- Introduce muscle tone and 2 extreme versions of it: flaccid and spastic.
- Introduce the effects of massage therapy on the muscular system.

Thoughts, Advice, or Warnings

- Keep students responding by asking questions of them
- Get students to palpate selves and/or partner during the lesson