

Bio 4 Human Anatomy  
Chapter 10 Muscles

STUDY GUIDE

This guide is intended to help you direct your attention to material covered in class. If by error I have failed to include something on this guide that was covered in lecture, it does not mean it will not be on the test. All material on your Powerpoint handouts may be on your test. I have intended to make this guide comprehensive but it is NOT a *guide* to the questions on the test.

1. What are the functions of muscle?
2. Endomysium, perimysium and epimysium wrap around what parts of muscle?
3. How does a fixator differ from an antagonist, from a prime mover, from a synergist muscle? In a sit-up only, which would be the prime mover and the synergist?
4. How does an origin differ from an insertion?
5. Review the rules of muscle contraction.
5. Define sarcolemma and sarcoplasm.
6. What is a myofibril?
7. What is responsible for the banding of myofibrils seen on a microscope?
8. What is the contractile unit of muscle?
9. Compare thin filaments to thick filaments.
10. What is the function of troponin and tropomyosin?
11. What is meant by the bare zone in the sarcomere?
12. Describe a neuromuscular junction. Know the vocabulary of the region.
13. Know the steps of the sliding filament theory of contraction. Include the function of T-tubules. What is the function of Calcium?
14. How do fast twitch fibers differ from slow twitch fibers?
15. Where are these different kinds of twitch fibers found? Are they mixed in motor units?
16. Distinguish the three kinds of levers that bones form.
17. Know one example of where these different levers are found.
18. Where is calcium stored in muscle?
19. How are smooth and cardiac muscle different from skeletal muscle?