**Review for Exam Three, BSC 181**

Please note that this review does not cover ALL of the material discussed in the lecture notes. *It is meant as a guide only*. Exam questions will come from the lecture material, not this review. Please be familiar with all of the topics we discussed in lecture.

1. What are the structural classification of joints?
2. What are the functional classification of joints
3. What are the three fibrous joints and where are they found?
4. What are the two cartilaginous joints and where are they found?
5. Identify the structures of the synovial joint
6. Compare origin to insertion
7. Be familiar with the movements: flexion, extension, etc
8. What are the types of synovial joints and where can they be found?
9. Discuss the shoulder joint. What disadvantages does it have? Advantages?
10. Discuss the hip joint. What disadvantages does it have? Advantages?
11. Review the types of injuries: strains, sprains, dislocations,
12. Compare the three types of arthritis discussed in the notes
13. What are the three types of muscles?
    1. How do they differ in their microscopic appearance?
    2. With regards to their nuclei?
    3. In how they are activated?
    4. Voluntary or involuntary?
14. Be familiar with terms
    1. Sarcolemma
    2. Sarcoplasm
    3. Sarcomere
    4. Sarcoplasmic reticulum
    5. T tubule
    6. Actin
    7. Myosin
    8. Myofibril
    9. Hypertrophy
    10. Hyperplasia
    11. Calveoli
    12. Calmodulin
    13. Syncytium
    14. Prime mover (agonist)
    15. Antagonist
    16. Synergist
    17. Fixator
15. Where do you find troponin-tropomyosin complex? Why is it relevant to muscle function?
16. How do actin and myosin interact to cause a muscle contraction?
17. Describe a neuromuscular junction and how it works, name the neurotransmitter
18. What is a motor unit?
19. How does smooth muscle contraction differ from skeletal muscle contraction?
20. Where are multi-unit smooth muscles found? Single unit?
21. How are muscles named?
22. What are the muscles in the scalp?
23. What are the muscles of mastication? Which cranial nerve innervates them?
24. What are the three major tongue muscles? Which cranial nerve innervates them?
25. Which muscle causes (name the prime movers/agonists. You may wish to add synergists as well)
    1. Head flexion
    2. Lateral head flexion
    3. Head extension
    4. Spinal flexion
    5. Spinal extension
    6. Lateral spinal flexion
    7. Inhalation
    8. Forceful exhalation
    9. Shoulder flexion
    10. Shoulder extension
    11. Shoulder abduction
    12. Shoulder elevation
    13. Forearm flexion
    14. Forearm extension
    15. Supination
    16. Pronation
    17. Wrist flexion
    18. Wrist extension
    19. Finger flexion
    20. Finger extension
    21. Opposition
    22. Finger abduction
    23. Finger adduction
    24. Thigh flexion
    25. Thigh extension
    26. Thigh abduction
    27. Thigh adduction
    28. Knee extension
    29. Knee flexion
    30. Plantar flexion
    31. Dorsiflexion
    32. Toe flexion
    33. Toe extension
26. Be familiar with the compartments of the thigh and of the knee





































