The following are some suggestions as to topics to spend time studying. This list or any list like it cannot be expected to cover each and every topic possible for the upcoming exam. However, it should give you a reasonable idea as to the breadth of material. My suggestion is to use this list as a way to help you organize your notes and your reading.

**Skeletal System (and Joint) Chapters**

- skeletal system - functions
- bone type comparisons - shape, strength, locations
- bone marrow - types (red/yellow... function of each)
- types of bone and how they develop
- role of growth hormone in bone activity and how bones grow
- parts of a bone
- prevention of bone disease - osteoporosis
- mechanisms of ossification
- mineral absorption in bone.... positive and negative aspects
- bone cells from lecture
- Sharpey’s fibers - what it is, what it does, where it is found
- axial skeleton - major parts
- sternum and sub-divisions (like in lab)
- skull... major bones (like in lab)
- comparison of bone types (flat, long, etc.) with examples
- characteristics of the hyoid bone (what is unique about it compared to all other bones?)
- fractures - compound, simple, greenstick.... what they are like, when does each occur
- chelation therapy - use for
- bursa - general location and function
- immovable joints
- movable joints
- slightly movable joints
- associations of connective tissue and joint types
- subdivisions of joints based on structure, function, and location
- movement categories allowed by joints
- disorders of joints.... the two types of arthritis

**Muscular System Chapters**

- muscle properties
- comparisons of cardiac/skeletal/smooth muscle (as like in lab)
- locations of the three muscle types
- aerobic and anaerobic metabolic pathways employed by muscles

**Nervous System Chapters** (subject to reaching this point in lecture)

- functions of the nervous system
- bipolar/unipolar/multipolar cells
- structure of neuron and components associated with the relay of information between neurons
- definition location and function of the autonomic nervous system
- CNS/PNS comparisons
- chemical communication between neurons comparing and contrasting the sympathetic and parasympathetic nervous system
- resting potential/action potential
- facilitation/convergence/divergence of impulses
- action potential/resting potentials
- the graphic representations of nervous system function from lecture

(we will continue with more Nervous System materials for exam #3)

**Know Historical Figures Discussed In Lecture**

All of the “Closer Look” Sections and the “Making Connections” Sections in the above Chapters

Think broadly... how do systems relate to each other? What can changes in one system cause in another system?

Remember, only roughly 45% of the test is composed of memorization of detail. Another (approximately) 45% is composed of higher-level application questions. The remaining (approximately) 10% will be drawn from readings.