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. Remember that materials marked with *** must be read in the textbook.

Be sure to know the historically relevant scientists!

Nervous System Chapters

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
structural components of the cerebellar
regions of the brain (general)
***spinal cord injuries - locations, effects
protective mechanisms of the brain - the
many meninges, blood brain barrier
and its formation, etc.
cells associated with the nervous system
that do not playing a transmittal role
***reticular formations - use in rest
reflex arcs - action, pathways, use
balance - structures involved, the
relationship between the periphery and the
brain
****receptor types in the general senses -
nociceptors, proprioceptors,
Meissner’s corpuscles, Pacinian
corpuscles, Merkel’s disks, etc.

Chapter on the Senses

the major special senses, structure, function
vision - major structures associated with the
system both internal in the eye and
going to the brain
pathway of light into the eye
rods and cones - structure, function, location
taste and smell - how the organs involved
work, the way in which sensation is
perceived in the periphery and then
transmitted to the CNS
vision disorders - myopia, hyperopia,
presbyopia
static versus movement equilibrium sensors
- structures used, location
pathways through the special sense organs
to the brain

Endocrine System Chapters

the major endocrine glands and their
secretions and effects
steroid and non-steroidal hormones -
structure, location, effects
effects of hormones on the body and
examples of diseases associated with
problems in hormone secretion
brain and endocrine relationships -
hypothalamus and pituitary for example
***synergy - what it is, where it occurs