Comments and Study Questions for Campbell:
Nervous System (Chapter 48 pp 1011-1028)

General Biology 2
Spring 2008

General Comments: There are parts of this chapter (we are not reading the whole thing, unfortunately) that will be covered primarily in handouts and others where we will rely on the text. Please see the questions below.

Terms sensory, motor, and interneurons, dendrites, axon, axon hillock, soma, myelin, pre- and post-synaptic, glia, blood-brain barrier, oligodendrite, Schwann cell, equilibrium potential, gated channel, ligand and stretch gated channel, voltage gated channel, ungated channel ("channel), depolarization, hyperpolarization, graded potential, threshold, saltatory conduction, synaptic vesicles, EPSP. IPSP, temporal and spatial summation, neurotransmitter, CNS, PNS, autonomic, sympathetic, parasympathetic, somatic, enteric division

Study Guide:

1. The overview and section 48.1 are mostly important for general terminology – terms are listed above. Do not worry about comparative aspects (e.g., fig 48.2) except for general interest.
2. Read Section 48.2 and then read the handout which is more detailed.
3. Section 48.3 is generally quite good, be sure you understand the events of an action potential and how it propagates. This will also be covered in class.
4. Section 48.4 – most of this will be gone over in detail in class but be sure that you know the following: biogenic amines (epinephrine, norepinephrine, dopamine, serotonin), amino acid and peptide NTs (GABA, glycine and glutamine, substance P, endorphins) and note our old friend, NO and even CO!
5. Review the anatomy of the NS.