

**Study Guide for Exam 5**  
**Psy 120: Spring 2005**

**The Nervous System (Chapter 2)**

With respect to the nervous system and the individual neurons of which it is comprised, know the following:

1. the parts of the nervous system
  - central (CNS)
  - peripheral (PNS)
  - the somatic division of the PNS
  - the autonomic division of the PNS
  - the sympathetic division of the autonomic nervous system
  - the parasympathetic division of the autonomic nervous system
  
2. the functions or descriptions of the following parts of the brain
  - cerebral cortex
  - cerebrum
  - corpus callosum
  - frontal lobe
  - occipital lobe
  - parietal lobe
  - temporal lobe
  
3. The following activities of the individual neuron:
  - resting potential
  - action potential
  - absolute refractory period
  - the all or none law
  
4. The parts of the neuron or its activity:
  - dendrite
  - soma
  - axon
  - myelin sheath
  - neurotransmitter
  - terminal button
  - synapse
  
5. The behaviors associated with the following neurotransmitters (chemicals in the brain):
  - acetylcholine
  - norepinephrine
  - dopamine
  - serotonin
  - endorphins

## **The Psychological Disorders (Chapter 12)**

With respect to the psychological disorders, know the following:

1. the definition of a psychological disorder (the four Ds involved in that definition)
2. the advantages and disadvantages of using a classification system like the *Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> ed. (DSM-IV)*.
3. what the *DSM-IV* is
4. the major classes of disorders in the *DSM-IV* (e.g., Anxiety, Mood, Dissociative, etc.)

## **Sensation and Perception (Chapter 3)**

1. **Video:** *Discovering Psychology: Sensation and Perception*
2. Know the difference between sensation and perception.
3. What is an absolute threshold and what are the absolute thresholds for the various senses under ideal conditions.
4. Know what sensory adaptation is and be able to identify examples of sensory adaptation.
5. **The Visual System**
  - a. Know what the function is of the following:
    1. the retina
    2. rods
    3. cones
    4. the bipolar and ganglion cells
    5. the optic nerve
    6. the optic chiasm
    7. the visual cortex of the occipital lobe
    8. the occipital lobe
  - b. Know (1) the *trichromatic* theory of color vision and (2) the *opponent process theory* of color vision.
  - c. Perception of forms, patterns, and objects
    1. the reversible figure
    2. feature analysis (assembling forms)
      - a. bottom-up processing
      - b. top-down processing
  - d. The Gestalt Principles: Looking at the Whole Picture
    - a. the phi phenomenon
    - b. figure and ground
      - a. proximity
      - b. similarity
      - c. continuity
      - d. simplicity
      - e. closure
  - e. Perceiving depth or distance
    1. binocular depth cues: (a) retinal disparity and (b) convergence
    2. monocular depth clues: (a) motion parallax and (b) pictorial depth clues