

Day 12 – 3/17/14

Student Learning Objectives

By the end of this class you will be expected to understand:

- The divisions of the nervous system and how they interconnect
- The general role of glial cells and the specific function of selected glial cells
- The structure and function of a neuron
- The mechanism of an action potential and neuron signaling
- The function of myelin in the nervous system

Support videos:

- Nervous System
 - <http://www.youtube.com/watch?v=x4PPZCLnVkA>
 - <http://www.youtube.com/watch?v=ob5U8zPbAX4>
- Action Potential
 - <http://www.youtube.com/watch?v=7EyhsOewnH4>
 - <http://www.youtube.com/watch?v=Iiiz5CpFCQo>

Assigned reading:

- Chapter 11: p246-256

Vocabulary:

- Nervous System
 - Central nervous system
 - Brain
 - Interneuron
 - Peripheral nervous system
 - Sensory neuron
 - Motor neuron
 - Somatic division
 - Autonomic division
- Neuron
 - Soma
 - Axon
 - Dendrite
 - Myelin
- Potential
 - Resting potential
 - Threshold
 - Sodium-potassium pump
 - Voltage-gated channel
 - Voltage-gated sodium channel
 - Voltage-gated potassium channel
 - Action potential
 - Refractory period
- Neuroglial cells
 - Schwann cell
 - Astrocyte
- Neurotransmitter
 - Acetylcholine
 - Dopamine
 - Serotonin