# Chapter 35: The Nervous System

#### Learning Objectives:

* Biology I: V2 – Outline representative mechanism that cells have evolved for communicating and coordinating their functions in a living organism; V3 – Explain how cell regulatory mechanisms ensure balance in living systems that interact continuously with their environments; V4 – Apply knowledge of cellular regulatory mechanisms to explanations of aberrant cell behavior.
* Biology II: II8 – Describe the structure and function of the nervous system, the musculoskeletal system, the respiratory system, and the mechanisms of internal transport and regulation in various organisms; VI – Explain how regulatory mechanisms at the level of the whole organisms ensure balance in living systems that interact continuously with their environments; compare regulatory mechanisms within and across species.

1. Group Project:

Select one of following neurodegenerative diseases. Describe: 1) how it was named; 2) the signs/symptoms observed in the patient; 3) what is anatomically and/or physiologically changed in the patient; 4) current treatments and; 5) select a video that illustrates the disease from the patient/family perspective.

Alzheimer’s disease
Parkinson’s disease
Huntington’s disease
Amyotrophic lateral sclerosis

2. In-Class Project:

A) Find the correct answers to Review Questions #4 to 13 on pages 1105 and 1106. Note the page of Chapter 35 on which you found the answer. Be prepared to share your group’s answers with the rest of the learning community.

B) Find the correct answers to Review Questions #14 to 23 on pages 1106 and 1107. Note the page of Chapter 35 on which you found the answer. Be prepared to share your group’s answers with the rest of the learning community.

3. Outside of Class Homework:

Answer the following Critical Thinking Questions on page 1107: 24, 28, 33, 35, 36