# Chapter 37: The Endocrine 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.
* 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; III1 – Outline the fundamentals of the endocrine system at the systemic level; 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 the following diseases. Describe: 1) the endocrine organ involved; 2) the function of the hormone involved; 3) the signs/symptoms observed in the patient; 4) a famous person with this disorder; and 5) current treatments.

Gigantism/acromegaly
Addison disease
Type 1 diabetes
Hypopituitary dwarfism
Graves disease/Hashimoto thyroiditis

2. In-Class Project:

A) Find the correct answers to Review Questions #4 to 12 on page 1177. Note the page of Chapter 37 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 #13 to 20 on pages 1177 and 1178. Note the page of Chapter 37 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 1178: 21, 26, 27, 29, 30