# Chapter 33;Units 1-3

#### Learning Objectives:

* Biology 2 (II.5): Describe the general organization of the animal body and vascular plants.
* Biology 2 (V.1): Explain how regulatory mechanisms at the level of the whole organism ensure balance in living systems that interact continuously with their environments; compare regulatory mechanisms within and across species.

**Project 1:**

Complete the end of the chapter “Review Questions”. Make sure to answer each question thoroughly and include page numbers from the text where the answers can be found. Be prepared to discuss your answers in a group setting during class.

**Project 2:**

Complete the end of the chapter “Critical Thinking Questions” according to your group number. You will be sharing your responses with members from the other groups during class. (This is a modified “Jigsaw” method. To use this “Jigsaw” have everyone meet in their groups for a specified amount of time. While they are discussing their responses/ideas separate everyone into new groups so that each new group has a representative from the original group. Have the new groups meet for a specified amount of time to share their responses/ideas. This way each person holds a piece of the overall puzzle.)

Group 1: 29-31

Group 2: 32-34

Group 3: 35-37

Group 4: 38-40

**Project 3:**

Divide the class into small groups. Assign each group to work epithelial tissue, connective tissue, muscle tissue, or nervous tissue. Every group will use their resources (textbook, notes, internet, etc.) to create a PPT that fully describes their assigned topic. Their PPT should contain descriptive text and visual aids (pictures, diagrams, videos, etc.). They can share their PPT in class, through their school’s LMS, or through Google Docs.

**Project 4:**

Create a diagram or table that compares the body plans and bioenergetic of various animals. Then answer the following questions…

1. What are the evolutionary benefits of the various body plans?
2. Is there any relationship between energy use and body plan? Energy use and body size?
3. Explain why the BMR of humans is so much higher than the SMR of an alligator?
4. Why do you think having a bilateral body plan is useful for mammals?

**Project 5:**

Create a research paper on how the medical field is related to human homeostasis.