

BIOL 1010

Learning Modules outline the tasks that should be completed to master the biology outcomes from each chapter or group of chapters. Some of the tasks are optional, but highly recommended. Mandatory tasks must be completed by the specified deadlines. Mandatory tasks will consist of a short on-line quiz over the reading, and a short on-line critical thinking question. Sometimes, there will also be group assignments that will be assigned during class.

Learning Module 1

Learning Outcomes

- 1) List and define each level of biological organization.
- 2) Characterize the common features of all living things.
- 3) Distinguish between archaea, bacteria and eukarya.
- 4) Explain how mutation and natural selection contribute to life's biodiversity.
- 5) Describe the steps involved in designing a scientific experiment.
- 6) Distinguish between hypotheses and scientific theory.

Learning Tasks

- 1) Read Chapter 1 in your textbook.
- 2) Closely review figure 1.2. Can you list and describe each level of biological organization?
- 3) Closely review figure 1.3. Can you briefly describe what happens at each level of energy flow in a biological system?
- 4) Closely review figure 1.10. Can you explain the steps involved in conducting a scientific experiment?
- 5) Define the following, important biological terms.
 - A) Emergent Properties
 - B) Producers & Consumers
 - C) Homeostasis
 - D) Bacteria, Archae, & Eukarya
 - E) Mutations & Natural Selection
 - F) Hypothesis, Prediction & Scientific Theory