

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** BIO 1

**Credits:** 4

**Course Title:** Foundations of Biology

**Course Description (including lecture hours, lab hours, total contacts)**

Develops a basic understanding of plant and animal form, function, and relationships. Prepares students who have a deficiency in high school biology. Credits cannot be included in any of the college's academic program. Lecture 4 hours per week.

**General Course Purpose**

Prepares students who have a deficiency in high school biology.

**Course Prerequisites/Corequisites** (*Entry-level competencies **required** for enrollment*)

none

**Course Objectives** (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

- a. List and understand the steps of the scientific method.
- b. Describe the fundamentals of matter.
- c. Complete a monohybrid cross and correlate it to the inheritance of traits.
- d. Draw and label the components of prokaryotic and eukaryotic cells.
- e. Explain the major tenets of natural selection.
- f. Write a complete taxonomic classification for an organism.
- g. Describe the all of the different types of habitats found on earth.

**Major Topics to be Included**

- a. What is Biology?
- b. Chemistry
- c. Cell Biology
- d. Genetics
- e. Ecology
- f. Evolution
- g. Taxonomy

**Effective Date of Course Content Summary (Month, Date Year):** 02/16/09