

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

Course Prefix and Number: BIO 1

Credits: 4

Course Title: Foundations of Biology

Course Description: 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 and Co-requisites:
None

Course Objectives:

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; and
- g. Describe 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: February 16, 2009