

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

**Course Prefix and Number:** BIO 107

**Credits:** 4

**Course Title:** Biology of the Environment

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

Presents the basic concepts of environmental science through a topical approach. Includes the scientific method, population growth and migration, use of natural resources and waste management, ecosystem simplification recovery, evolution, biogeochemical cycles, photosynthesis and global warming, geological formations, atmosphere and climate, and ozone depletion and acid deposition. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

**General Course Purpose**

This course provides content covered in an introductory environmental course and can be used for credit toward the AS in Science degree.

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

Prerequisite: satisfactory placement on the reading and writing placement tests; students must complete developmental reading or writing courses, if needed, before enrolling in this course.

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

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

- a. Understand environmental science using a multidisciplinary approach.
- b. Use critical thinking skills to evaluate scientific and technical issues both personally and more globally.
- c. Understand key concepts of biology, chemistry, and physics and relate them to social, political, and ethical issues.
- d. Express scientific concepts in both oral and written form.

**Major Topics to be Included**

- a. Scientific Method
- b. Population Growth and Migration
- c. Use of Natural Resources and Waste Management
- d. Ecosystem Simplification and Recovery
- e. Evolution
- f. Biogeochemical Cycles
- g. Photosynthesis and Global Warming
- h. Geological Formations
- i. Ozone Depletion and Acid Deposition

**Effective Date of Course Content Summary (Month, Date Year):** 02/16/2009