

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

**Course Prefix and Number:** BIO 205

**Credits:** 4

**Course Title:** General Microbiology

**Course Description:** Examines morphology, genetics, physiology, ecology, and control of microorganisms. Emphasizes application of microbiological techniques to selected fields. Prerequisites: BIO 101-102 and CHM 111-112 or equivalent, or permission of instructor. CHM 101-102 are acceptable equivalent courses. Credits for CHM 101-102 do not count toward the AS in Science degree. Lecture 3 hours. Laboratory and Recitation 3 hours. Total 6 hours per week.

**General Course Purpose:** This course emphasizes the application of microbial techniques to selected fields. It provides 4 credits of a laboratory science for the AS in Science degree.

**Course Prerequisites and Co-requisites:**

Prerequisites: BIO 101-102 and CHM 111-112 or equivalent, or permission of instructor. CHM 101-102 are acceptable equivalent courses. Credits for CHM 101-102 do not count toward the AS in Science degree.

**Course Objectives:**

Upon completing the course, the student will be able to

- a. Understand basic aseptic techniques;
- b. Understand principles of microbiology and culture of microbes;
- c. Understand identifications and culture of microbes; and
- d. Understand applications of microbiology in biotechnology.

**Major Topics to Be Included:**

- a. History of microbiology
- b. Cell structure
- c. Microbial metabolism
- d. Microbial genetics
- e. Immunology
- f. Microbes and disease
- g. Microbial ecology

**Effective Date of Course Content Summary:** February 16, 2009