

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

Course Prefix and Number: BIO 231

Credits: 4

Course Title: Human Anatomy and Physiology I

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

Integrates the study of gross and microscopic anatomy with physiology, emphasizing the analysis and interpretation of physiological data. Lecture 3 hours. Recitation and Laboratory 3 hours. Total 6 hours per week.

General Course Purpose

This course provides the content of the first semester of an introductory anatomy and physiology course for science majors and students pursuing entrance into professional schools.

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

Prerequisites: one year of college biology and one year of college chemistry or school approval.

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

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

- a. List and describe the major organ systems of the body
- b. List and describe the different types of tissues present in the human body
- c. Enumerate, using appropriate anatomical terminology, all of the bones in the human body
- d. Identify the major superficial and deep muscles present in the human body
- e. Explain the production of an action potential in muscles and neurons.

Major Topics to be Included

- a. Cellular anatomy and physiology
- b. Skeletal system
- c. Muscular system
- d. Nervous system

Effective Date of Course Content Summary (Month, Date Year): 2/16/09