

**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: Integrates the study of gross and microscopic anatomy with physiology, emphasizing the analysis and interpretation of physiological data.

Prerequisites: One year of college biology and one year of college chemistry or school approval. 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 and Co-requisites:

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

Course Objectives:

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; and
- 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: February 16, 2009