

**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