

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

Course Prefix and Number: NAS 161

Credits: 4

Course Title: Health Science I

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

Presents an integrated approach to human anatomy and physiology, microbiology, and pathology. Includes chemistry and physics as related to health sciences. Surveys the structure and function of the human body. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

General Course Purpose

This course is designed to provide the anatomy and physiology content required for students entering the health care professions, including the Emergency Medical Services AAS, Nursing AAS, and Respiratory Therapy AAS degree programs. The credits earned in this course do not satisfy the requirements of the Science AS degree or the science requirements of any of the transfer degree programs.

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

Prerequisites: CHM 1 and BIO 1 or high school level equivalents.

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

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

1. Articulate the general concepts of human anatomy and physiology
2. Explain the integrated structure and function of tissues.
3. Identify bones, muscles, and organ systems applying the appropriate anatomical terminology.
4. Identify and explain key features involved in maintaining physiological homeostasis in humans.

Major Topics to be Included

- a. Introduction to body organization, anatomical terminology and concept of homeostasis.
- b. Inorganic and organic molecular components of living systems, cell structure, passive and active transport, cellular metabolism.
- c. Concepts of infectious disease.
- d. Overview of histology and the integument, skeletal musculature, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems.

Effective Date of Course Content Summary (Month, Date Year): 02/16/09