

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

**Course Prefix and Number:** BIO 145    **Credits:** 4

**Course Title:** Basic Human Anatomy & Physiology

**Course Description:**

Surveys human anatomy and physiology. Covers basic chemical concepts, cellular physiology, anatomy, and physiology of human organ systems. Assignments require college-level reading fluency, coherent written communication, and basic mathematical skills. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week. 4 credits

**General Course Purpose:**

The purpose of BIO 145 is to provide students with an overview of structures and functions of major organ systems and how they contribute to homeostasis.

**Course Prerequisites/Corequisites:**

None

**Course Objectives:**

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

**Introduction to A&P**

- Define and use appropriate terminology to effectively communicate information related to anatomy and physiology.
- Describe the principle of homeostasis and the use of feedback loops to control physiological systems in the human body.
- Describe the basic chemical architecture and processes of the human body.
- Describe the components and processes of a typical animal cell.
- List the four tissue types and state the function and location of each.

**Organ Systems**

- Identify the anatomy and describe the physiology of the:
  - Integumentary system
  - Skeletal system
  - Muscular system
  - Nervous system
  - Endocrine system
  - Cardiovascular system and blood
  - Lymphatic system and immunity
  - Respiratory system
  - Digestive system
  - Urinary system
  - Fluid, electrolyte, and acid-base balance
  - Male and female reproductive systems

**Major Topics to be Included:**

- Introduction to A&P
- Organ Systems

**Effective Date/Updated:** January 1, 2022