

# SOPHIA Learning

## HumBio1001: Human Biology (3 semester credits)

### COURSE DESCRIPTION

Students in the Human Biology course will analyze fundamental biological principles related to the human body. Course topics include the molecular and cellular basis of life, genetics, organ systems, and the impact of nutrition and exercise on human health.

**Course Effective Dates:** September 2012 – Present

**Prerequisite(s):** Entry level Gen Ed course – no prerequisites

**Length of course:** This is a self-paced course. Students have 60 days with an additional 30 day extension (if needed) to complete the course.

**ACE CREDIT® Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in survey of human biology (3/13).

### LEARNING OUTCOMES

Upon completion of the course, the student will be able to:

1. Describe basic human biology concepts.
2. Describe skeletal and muscular systems.
3. Articulate nervous system and sensory system related to human health.
4. Analyze respiratory, circulatory, immune and digestive systems.
5. Describe urinary, endocrine, and reproductive systems.
6. Describe genetics and biotechnology and their application.

### OUTLINE OF MAJOR CONTENT AREAS

- Science Basics
- Cells
- Macromolecules
- Homeostasis
- Metabolism
- The Skeletal System
- Skeletal Muscles
- Organ Systems Health and Disorders
- Neurons
- The Nervous System
- Sensory Systems
- The Respiratory System
- The Circulatory System
- Blood
- The Immune System
- Applications of Immunology
- Cancer
- The Endocrine System
- The Reproductive System
- The Digestive System

- The Urinary System
- Genetics and Biotechnology
- Genes and Inheritance
- DNA
- Biotechnology

**GRADING**

This is a pass/fail course. Students are required to complete all 18 formative and 6 summative assessments with an overall course average of 70% or better.