

Course Name: Anatomy and Physiology I

Course Number: BIO* E211

Credits: 4

Catalog description: The first semester of a two semester course. Lecture and laboratory will stress the molecular and cellular theories of body homeostasis. Topics include the structure of cells and tissues and the integumentary, skeletal, muscular, and nervous systems, with an underlying stress on their chemical functioning. Lab deals with chemical analysis, histology, bone and muscle identification, articulations, and nervous system anatomy. 3 hours of lecture and 3 hours of laboratory

Prerequisite: Grade of "C" or better in both ENG*101 and BIO*105

General Education Competencies Satisfied:

HCC General Education Requirement Designated Competency Attribute Code(s):

None

Additional CSCU General Education Requirements for CSCU Transfer Degree Programs:

None

Embedded Competency(ies):

None

Discipline-Specific Attribute Code(s):

⊠ SCI Science elective

Course objectives:

General Education Goals and Outcomes:

None.

Course Specific Objectives:

- 1. Demonstrate knowledge of basic chemical & biological principles governing human life.
- 2. Demonstrate knowledge of specific details of human anatomy and physiology.
- 3. Acquire skills in the use of anatomical, physiological, and pathological terminology.



4. Acquire basic laboratory skills in dissection, microscopy, physiological experiments and science software.

Course Content:

Lecture

- 1. Introduction to the Human Body
- 2. Chemical Level of Organization
- 3. Cellular Level of Organization
- 4. Tissue Level of Organization
- 5. Integumentary System
- 6. Skeletal System (Axial Skeleton, Appendicular Skeleton, Articulations)
- 7. Muscle Tissue
- 8. Muscular System (Axial Muscles, Appendicular Muscles)
- 9. Nervous Tissue
- 10. Nervous System

Laboratory

- 1. General Anatomy & Terminology
- 2. Osmosis, Diffusion
- 3. Microscopy
- 4. Mitosis
- 5. Histology
- 6. Integumentary System
- 7. Skeletal System-Axial
- 8. Skeletal System-Appendicular
- 9. Muscular System-Axial
- 10. Muscular System-Appendicular
- 11. Spinal Cord and Spinal Nerves
- 12. Brain and Cranial Nerves
- 13. Reflexes
- 14. Senses

Date Course Created:

Date of Last Revision: 02/27/2017