

Department:

Biology

Course Description:

This course is an anatomical study of the systems forming the human body. Emphasis is placed on the organs forming each system, the embryonic development of the system, and the functions of the tissues and organs of each system. The course includes a brief physiological review with each system and will consist of three hours lecture and one- and one-half hours of laboratory work per week.

Course Competencies:

The learning outcomes and competencies detailed in this syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups for this course as approved by the Kansas Board of Regents. (Kansas Regents Shared Number Course and Title: **KRSN Course BIO2020 Anatomy and Physiology.**)

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

1. List and describe the parts of a typical human cell.
2. List and describe the tissues forming the organs of each body system.
3. List and describe each organ in each body system.
4. Give the exact location of each organ and structure of the body.
5. Describe some of the disorders associated with each body system.

Course Content:

- A. Introduction
 1. Life processes
 2. Levels of structural organization
 3. Structure and function of the parts of a cell
 4. Types and functions of the tissues of the body
 5. Gross anatomy of the human body
 6. Brief review of body systems
- B. Integumentary system
 1. Structure and function of the two layers of the skin
 2. Structure and function of the epidermal derivatives
- C. Skeletal system
 1. Names and arrangement of the bones forming the skeleton
 2. Anatomical and histological study of a bone
 3. Names and locations of the bones forming the skeleton
 4. Definitions and locations of the joints of the skeleton
- D. Muscular system
 1. Identification and function of the major muscles
 2. Structure and function of the three types of muscular tissue
 3. Anatomical study of a skeletal muscle

4. Terms and methods of naming skeletal muscles
- E. Nervous system
 1. Central nervous system
 2. Peripheral nervous system
 3. Autonomic nervous system
 4. Cellular structure of a neuron
 5. Structure and function of the eye and ear
 6. Receptors of taste, smell, and the cutaneous senses
- F. Endocrine system
 1. Overall function of the system in homeostasis
 2. Names and locations of the endocrine glands
 3. Anatomy of each gland
 4. Names and functions of the hormones produced by each gland
- G. Cardiovascular and lymphatic systems
 1. Anatomy and function of systemic and pulmonary circulation
 2. Structure and function of the fetal cardiovascular system
 3. Anatomy and function of the blood vessels
 4. Study of the heart and support tissue
 5. Parts and functions of whole blood
 6. Identification and functions of the major arteries and veins
 7. Structure and function of the lymphatic system
- H. Respiratory system
 1. Anatomy and functions of the parts of the system
 2. Lungs and support tissue
 3. Structure and function of the breathing mechanism
- I. Digestive system
 1. Structure and function of the organs forming the system
 2. Structure and function of the digestive glands
 3. Muscular activity in digestion
- J. Urinary system
 1. Structure and function of the organs forming the system
- K. Reproductive system
 1. Structure and function of the organs forming the system

Learning Assessments:

Competencies may be evaluated by multiple measures, including tests, quizzes, written assignments, and lab assignments.

Instructional Materials:

eBook: Tortora, G. J. & Derrickson, B. H. (2020). *Principles of Anatomy and Physiology* (16 ed.). John Wiley & Sons. ISBN: 978-1-119-66268-6

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the “Disabilities Self-Identification Form” on our [Disability Services website](#).

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an [online report](#) about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our [Equity Grievance Policy](#).