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| **PROFESSOR:** | **PHONE NUMBER:** |
| **OFFICE LOCATION:** | **E-MAIL:** |
| **OFFICE HOURS:** | **SEMESTER:** |

1. **COURSE NUMBER AND TITLE, CATALOG DESCRIPTION, CREDITS:**

**BSC 1085C ANATOMY AND PHYSIOLOGY I (4 CREDITS)**

This is part I of a two-semester course in Anatomy and Physiology primarily intended for health science majors. This is an inquiry based lecture and lab integrated course and includes investigation on the structure and function of human systems including integumentary, skeletal, muscular, nervous and special senses. It is recommended that students complete BSC1010 and BSC1010L prior to taking this course.

1. **PREREQUISITES FOR THIS COURSE:**

SB1720 Testing Exemption or successful completion of all Developmental courses

**CO-REQUISITES FOR THIS COURSE:**

None

1. **GENERAL COURSE INFORMATION:** Topic Outline.

* Introduction to biology and chemistry
* Introduction to anatomy and physiology
* Tissues
* Integumentary system
* Skeletal System
* Muscular system
* Nervous system
* Special senses

1. **All courses at Florida SouthWestern State College contribute to the general education program by meeting one or more of the following general education competencies:**

**C**ommunicate clearly in a variety of modes and media.

**R**esearch and examine academic and non-academic information, resources, and evidence.

**E**valuate and utilize mathematical principles, technology, scientific and quantitative data.

**A**nalyze and create individual and collaborative works of art, literature, and performance.

**T**hink critically about questions to yield meaning and value.

**I**nvestigate and engage in the transdisciplinary applications of research, learning, and knowledge.

**V**isualize and engage the world from different historical, social, religious, and cultural approaches.

**E**ngage meanings of active citizenship in one’s community, nation, and the world.

**A.**  **General Education Competencies and Course Outcomes**

Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student’s general education along with the general education competency it supports.

1. Integral *General Education Competency or competencies*: **Communicate\***

2. Supplemental *General Education Competency or competencies*: **Think\*\***

* + - Compare and contrast the four biological macromolecules, their monomers and functions.
    - Describe the functions of the eukaryotic cell organelles, describe the cell membrane and differentiate the various transport processes.
    - Evaluate a disease or disorder in a body system**.\*/\*\***
    - Define homeostasis, explain homeostatic control mechanisms, and give examples of conditions that are maintained in the human body
    - Use anatomical terminology correctly
    - Compare and contrast the characteristics, classification, location and function of the four primary tissues and use a microscope to correctly identify tissues.
    - Describe the structure and summarize the functions of the integumentary system
    - Differentiate the two ossification processes and summarize the events involved in remodeling and repair of bones.
    - Identify the bones and the major bone markings on the axial and appendicular skeleton.
    - Describe the structure of various joints, demonstrate the types of movements these joints allow, and describe the factors that determine the stability of joints
    - Describe gross anatomy and the microscopic anatomy of skeletal muscle and apply it to the mechanism of contraction of a skeletal muscle cell.
    - Apply the process of skeletal muscle metabolism to aerobic and anaerobic cellular respiration, and evaluate the effect of exercise on these muscles.
    - Identify the major muscles of the body on models and demonstrate their actions.
    - Describe the characteristics, structure and functions of the nervous system cells (including neurons and glial cells), appraise their differences, and summarize how neurons transmit information to other cells.
    - Describe the structure and function of the central nervous system (CNS), analyze how information is processed and conducted throughout the CNS, identify how the CNS is protected, and identify and describe the function of the cranial nerve.
    - Describe the components of the peripheral nervous system (PNS) and discuss how they convey sensory information to the CNS and motor output to effector organs; also, identify and describe the function of the spinal nerves.
    - Construct the components of a reflex arc, discuss the function and importance of spinal reflexes, and demonstrate given reflexes.
    - Compare and contrast the somatic and autonomic nervous systems (ANS) and compare and contrast the structure and function of the sympathetic and parasympathetic branches of the ANS
    - Describe the structure and function of the special sense organs, and analyze how they
    - convert sensory information into nerve impulses and how the input is integrated.

**B.** **In accordance with Florida Statute 1007.25 concerning the state’s general education core course requirements, this course meets the general education competencies for science.**

* + - Students will demonstrate the ability to critically examine and evaluate scientific observation, hypothesis, or model construction, and to use the scientific method to explain the natural world.
    - Students will successfully recognize and comprehend fundamental concepts, principles and processes about the natural world

1. **DISTRICT-WIDE POLICIES:**

**Programs for Students with Disabilities**

Florida SouthWestern State College, in accordance with the Americans with Disabilities Act and the College’s guiding principles, offers students with documented disabilities programs to equalize access to the educational process. Students needing to request an accommodation in this class due to a disability, or who suspect that their academic performance is affected by a disability should contact the Office of Adaptive Services at the nearest campus. The office locations and telephone numbers for the Office of Adaptive Services at each campus can be found at <http://www.fsw.edu/adaptiveservices>.

**REPORTING TITLE IX VIOLATIONS**

Florida SouthWestern State College, in accordance with Title IX and the Violence Against Women Act, has established a set of procedures for reporting and investigating Title IX violations including sexual misconduct.  Students who need to report an incident or need to receive support regarding an incident should contact the Equity Officer at [equity@fsw.edu](mailto:equity@fsw.edu).  Incoming students are encouraged to participate in the Sexual Violence Prevention training offered online.  Additional information and resources can be found on the College’s website at <http://www.fsw.edu/sexualassault>.

1. **REQUIREMENTS FOR THE STUDENTS:**

List specific course assessments such as class participation, tests, homework assignments, make-up procedures, etc.

1. **ATTENDANCE POLICY:**

The professor’s specific policy concerning absence. (The College policy on attendance is in the Catalog, and defers to the professor.)

1. **GRADING POLICY:**

Include numerical ranges for letter grades; the following is a range commonly used by many faculty:

90 - 100 = A

80 - 89 = B

70 - 79 = C

60 - 69 = D

Below 60 = F

(Note: The “incomplete” grade [“I”] should be given only when unusual circumstances warrant. An “incomplete” is not a substitute for a “D,” “F,” or “W.” Refer to the policy on “incomplete grades.)

1. **REQUIRED COURSE MATERIALS:**

(In correct bibliographic format.)

1. **RESERVED MATERIALS FOR THE COURSE:**

Other special learning resources.

1. **CLASS SCHEDULE:**

This section includes assignments for each class meeting or unit, along with scheduled Library activities and other scheduled support, including scheduled tests.

1. **ANY OTHER INFORMATION OR CLASS PROCEDURES OR POLICIES:**

(Which would be useful to the students in the class.)