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

# COURSE NUMBER AND TITLE, CATALOG DESCRIPTION, CREDITS:

## BSC 1094C Anatomy and Physiology II (4 Credits)

This is a combined lecture/lab course format designed to be the sequel to BSC1093C. This course examines how the body’s organ systems work together to maintain homeostasis. The following topics are covered: endocrine system, cardiovascular system, lymphatic and immune systems, respiratory system, digestive system, nutrition, urinary system, fluids, electrolytes, and acid-base balance, reproduction, growth, and development.

## PREREQUISITES FOR THIS COURSE:

Minimum grade of a “C” in BSC1093C.

### CO-REQUISITES FOR THIS COURSE:

None

## GENERAL COURSE INFORMATION:

Topic Outline

Endocrine system

Cardiovascular system

Lymphatic and immune system

Respiratory system

Digestive system

Nutrition

Urinary system

Fluids, electrolytes and acid-base balance

Reproductive system

Growth and development

## 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

1. 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.

General Education Competency: Evaluate

Course Outcomes or Objectives Supporting the General Education Competency Selected:

Identify the major endocrine organs, describe each of their hormones and the control of their release, and analyze the role of each hormone in homeostasis.

Evaluate a disease or disorder in a body system studied this semester.

Analyze the composition, physical characteristics and functions of blood, and explain the process of hemostasis and the associated disorders.

Describe the gross and microscopic anatomy of the heart, sketch the pathway of blood through the heart, and describe the contraction of cardiac muscle cells.

Explain how the cardiac conduction system controls cardiac contraction and show correlations to the events of the cardiac cycle.

Calculate cardiac output and describe associated homeostatic imbalances.

Describe the structure of blood vessels and outline and categorize the factors affecting blood flow, the control of blood flow through the body tissues, and the movement of fluids and nutrients across the capillary wall.

Identify the major blood vessels and circulatory pathways on models.

Describe the structure and function of lymphoid cells, tissues, vessels and organs and explain the formation of lymph.

Summarize the first and second line of nonspecific defense mechanisms and compare and contrast antibody mediated and cell mediated immunity.

Describe the structure and function of the respiratory system organs, the mechanics of breathing, the control of ventilation, and the respiratory volumes and capacities.

Compare and contrast the structure, function, and control of the digestive system organs.

Use the current Food Guide Pyramid to design a diet plan and analyze your diet, and list the vitamins and minerals, explaining their role in the body.

Describe the structure and function of the urinary system organs, identify urinary system structures on models, and explain how dilute and concentrated urine are formed.

Summarize water, electrolyte, and acid-base balance and their effect on homeostasis.

Describe blood pressure homeostasis by correlating the neuronal and hormonal control mechanisms for cardiac output, peripheral resistance, and blood volumes.

Describe the structure and function of the male and female reproductive organs and identify these organs on models.

Sketch spermatogenesis, oogenesis, ovarian cycle, and the uterine cycle and explain the hormonal control of the male and female reproductive systems.

Describe the events in fertilization and the progression of fetal development events.

## 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 <https://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 <https://www.fsw.edu/sexualassault>.

## REQUIREMENTS FOR THE STUDENTS:

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

## ATTENDANCE POLICY:

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

## GRADING POLICY:

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

| **Grade Percent** | **Letter Grade** |
| --- | --- |
| 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.)

## REQUIRED COURSE MATERIALS:

(In correct bibliographic format.)

## RESERVED MATERIALS FOR THE COURSE:

Other special learning resources.

## CLASS SCHEDULE:

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

## ANY OTHER INFORMATION OR CLASS PROCEDURES OR POLICIES:

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