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

# COURSE NUMBER AND TITLE, CATALOG DESCRIPTION, CREDITS:

## BSC 1011 General Biology II (3 Credits)

This course builds on the cell biology presented in BSC 1010 and examines the mechanisms of genetic change in populations, the adaptation of living things to their environment, the concept of niche and the processes leading to biodiversity, population growth and regulation, energy flow and biogeochemical cycling in the biosphere, and interactions of creatures with the living and non-living components of their ecosystems.

## PREREQUISITES FOR THIS COURSE:

(BSC 1010 and BSC 1010L) with a grade of “C” or better

### CO-REQUISITES FOR THIS COURSE:

BSC 1011L

## GENERAL COURSE INFORMATION:

Topic Outline

 Mechanisms of evolution

 Population genetics

 Hardy-Weinberg equilibrium

 Classification and taxonomy

 Biodiversity

 Ecology

 Conservation and sustainability

## 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 outcomes/objectives assessed in this course which play an integral part in the student’s general education along with the general education competency they support.

 General Education Competency: Evaluate

Course Outcomes or Objectives Supporting the General Education Competency:

 Calculate evolutionary changes in populations using the Hardy-Weinberg equilibrium.

 Analyze hierarchical classification and its relation to evolutionary relationships among species.

2. Listed here are the outcomes/objectives assessed in this course which play a supplemental part in the student’s general education along with the general education competency they support.

General Education Competency: Engage

Course Outcomes or Objectives Supporting the General Education Competency:

 Outline the threats to biodiversity and the current methods of ecological conservation.

 Describe methods for lowering individual ecological footprints.B. Additional Course Learning Outcomes

 Outline the process of microevolution.

 Distinguish between allopatric and sympatric speciation.

 Define the major evolutionary forces.

 Differientiate among the three domains of life.

 Categorize the distinguishing characteristics of viruses, protists, fungi, plants, and animals.

 Identify adaptations involved in the evolutionary movement of organisms from an aquatic to a terrestrial lifestyle.

 Describe the relationships and interactions among biotic and abiotic ecosystem components.

 Analyze population growth patterns and the factors that influence them.

## 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. 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.)