# **ARRUPE BIOLOGY (ACBIO)**

Discover, search, courses (https://catalog.luc.edu/course-search/)!

### ACBIO 101 General Biology (3 Credit Hours)

Co-requisites: ACBIO 111

This course introduces the fundamental principles of Biology focusing on the field of cell structure and function, cellular reproduction, genetics, and evolution.

Outcomes:

Demonstrate an understanding of thermodynamics and organization in living systems, biochemistry and metabolism of organisms, and cell structure and function; Explain the central dogma, heredity, and regulation of gene expression

## ACBIO 102 General Biology II (3 Credit Hours)

#### Co-requisites: ACBIO 112

This course introduces the fundamental principles of Biology focusing the fields of evolution and evolutionary history, plant structure and function, animal form and function. Topics covered in the course include evolutionary processes, speciation, history of life on earth, plant biology, soils, homeostasis, animal biology, mammalian organ systems, community ecology, and environmental challenges as scientific and social problems.

Outcomes:

Demonstrate an understanding of biological evolution and differentiate between the processes of evolution, the functions and interrelationships of various organismal systems, explain major concepts of ecology, and evaluate scientific literature

#### ACBIO 111 General Biology Lab (1 Credit Hour)

Co-requisites: ACBIO 101

This laboratory course introduces the fundamental principles of Biology focusing on the field of cell structure and function, cellular reproduction, genetics, and evolution. Compare cell structure and function among organisms; Study the diversity of organisms at microscopic and macroscopic levels; and use current research techniques and instruments.

Course equivalencies: BIOL 111/ACBIO 111

Outcomes:

Differentiate and identify characteristics among taxonomic groups

## ACBIO 112 General Biology Lab II (1 Credit Hour)

Co-requisites: ACBIO 102

This course introduces the fundamental principles of Biology focusing on evolutionary principles and processes, cell structure and function, plant and animal biological processes, and ecological principles. *Outcomes:* 

Students will differentiate between the major taxonomic groups, make comparisons in cell structure and function, identify characteristics of selected organisms and understand the evolutionary and ecological relationships among taxonomic groups, demonstrate the ability to use current research techniques and instruments to study the diversity of organisms at the microscopic and macroscopic level