

# BIO 110 - ESSENTIAL BIOLOGY

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- Formulate useful questions about controversial subjects.
- Identify important and valid sources of information.

## Course Description

Essential Biology is geared toward the non-major. The course will cover broad areas of biology, engage the student in how biology relates to their own life, and how science and society interact. Core concepts covered include: Evolution, Structure and Function, Information Flow, Exchange and Storage, Pathways and Transformations of Energy and Matter, and Living Systems. Group 1 lab course.

## Credit Hours

4

## Contact Hours

5

## Lecture Hours

3

## Corequisites

BIO 110L

## Recommended Prerequisites or Skills

## Competencies

ENG 111, MTH 23

## General Education Outcomes supported by this course

Critical Thinking - Direct

## Course Learning Outcomes

### Knowledge:

- Understand the 5 core concepts the course addresses: Evolution, Structure and Function, Information Flow-Exchange and Storage, Pathways and Transformations of Energy Matter, Living Systems.

### Application:

- Apply the process of science to novel situations to solve problems and make decisions.
- Develop the ability to use quantitative reasoning and understand the role of data in biology.

### Integration:

- Tap into the interdisciplinary nature of science.
- Develop an ability to use modeling simulation to extend the knowledge gained in this course to new problems.

### Human Dimension:

- Articulate how science fits into society.
- Be able to communicate and collaborate with peers.

### Caring - Civic Learning:

- Develop a curiosity about biology and the drive to discover answers to your own questions.
- Value where humans fit into the environment and how they may impact it.

### Learning How to Learn: