NORTHWEST FLORIDA STATE COLLEGE

Course Syllabus

Course Name: Principles of Biology I
Course Number: BSC1010C
Section: 10106
Location: ONLINE
Class Meeting Times: ONLINE
Credit Hours: 4
Instructor Name: Dr. Geoffrey Smit
Instructor Office Location: 350/216 Niceville Campus
Instructor Email: smithg33@nwfsc.edu

Course Curriculum

In this course students will apply the scientific method to critically examine and explain the natural world. This course will cover molecular biology, cellular biology, genetics, metabolism, and replication.

Goals

- *Students will learn and apply basic scientific principles and methodologies related to collecting and analyzing data.*
- *Students will gain a basic understanding of key biological concepts including: what constitutes a living organism, major groups of biological molecules and their functions, basic cell composition and functionality, inheritance patterns and genetics, gene expression, and evolutionary processes.*
- *Students will be exposed to scientific writing and the components of a scientific manuscript/report.*

Objectives

Student Learning Outcomes:

- *Students will demonstrate scientific literacy by articulating and practicing the scientific method.*
- *Students will evaluate data regarding validity.*
- *Students will read and interpret a variety of scientific data.*
- *Students will identify major macromolecules and state their importance to living organisms.*
- *Students will explain metabolism.*
- *Students will compare and contrast prokaryotic and eukaryotic structures and processes of cell division and replication.*
- *Students will explain gene expression.*
- *Students will solve problems in transmission genetics.*

Student Expectations of the Course

- *The instructor will be available outside of class to answer questions.*

- *The instructor will return graded assignments promptly.*
- *The instructor will respond to student emails within 2 college business days.*
- *Updated grades will be available throughout the course in the online learning management system.*

How Student Performance will be Measured

- *Students will be evaluated with a combination of the following: quizzes, module exams, lab handouts, a formal manuscript/lab report writing assignment, and a final exam.*