

Department: Science

Course Name: Science 7 – Life Science

Course Description:

Seventh Grade Science is a basic life science course that provides students with an understanding of the major tenets of biology. This course is designed to build a foundation for future studies in the biological sciences. Students study living organisms at all levels of the hierarchy from interactions at the sub cellular level to complex ecosystems. Learning through exploration and problem analysis develops thinking skills.

Content:

Introduction to Life Science and Scientific Method
Classification of Living Things
Evolution and Adaptations to Environmental Change
Cells and Cellular processes
Introduction to Heredity and Genetics
Bacteria, Protists, Viruses, and Fungi
Major Invertebrate Groups
Major Vertebrate Groups
Plant Structure and Processes
Organ System Function
Principles of Ecology

Skills:

Apply the scientific method in the investigation of a simple problem
Collect data using laboratory and field methods
Deploy laboratory and field equipment to investigate problems
Practice measurement skills and conversions
Organize information in chart or graph
Identify variables, follow methods, analyze and draw conclusions from student generated data
Communicate their findings in laboratory reports
Create presentations using basic technological applications
Develop basic dissection skills
Apply deductive or inductive reasoning to connect facts, ideas, or events
Observe and develop awareness of interactions between living things and their environment
Utilize learning management system

Text and Resources:

McGraw Hill Life iScience Student Edition

Methods of Instruction:

Laboratory experiments
Demonstrations illustrating methods of experimentation
Project based learning
Class discussion with emphasis on integrating concepts
Computer simulations
Lecture
Video/DVD on scholarly topics

Verified websites
Guest lecturers
Science apps
Interactive presentations and apps

Methods of Evaluation:

Laboratory investigations
Demonstration analysis paragraphs
Projects
Class participation
Tests
Quizzes
Online assessments

