Biology Syllabus

Textbook: Biology Concepts and Applications, 9th Edition Author: Starr, Eves, Starr Email Address: <u>mmurphy@accountax.us</u>

Course Description:

This course is a laboratory course acceptable for college entry and provides a broad overview of biological systems from simple to complex life forms through inquiry-based laboratory investigations. This program promotes scientific thinking through problem solving, a process that encourages curiosity and careful inquiry. Includes multimedia support.

Attendance login requirements: Students must log into class at the scheduled class time and remain until class ends. Student must attend class 165 days per year.

Homework: Homework assignments will be given at the discretion of the instructor.

Class Participation: All class participation will be online. Instructor will give written feedback on progress and acceptable work directly to student online.

Course Grade Policy:

90-100 average = A

- 80-89 average = B
- 70-79 average = c

60-69 average =D

Below 60 = F

Tests/Exams: There will be a quiz after each unit of study. You will have two opportunities to pass the test with a grade of 60. Mid-Term and Final Exams will be counted twice in grade averaging.

Semester I

Chapter 1 Invitation to Biology

Chapter 2 Life's Chemical Basis

Chapter 3 Molecules of Life

Chapter 4 Cell Structure

Chapter 5 Ground Rules of Metabolism

Chapter 6 Where It Starts Photosynthesis

Chapter 7 How Cells Release Chemical Energy

Chapter 8 DNA Structure and Function

Chapter 9 From DNA to Protein

Chapter 10 Control of Gene Expression

Chapter 11 How Cells Reproduce

Chapter 12 Meiosis and Sexual Reproduction

Chapter 13 Observing Patterns in Inherited Traits

Chapter 14 Human Inheritance

Chapter 15 Biotechnology

Chapter 16 Evidence of Evolution

Chapter 17 Processes of Evolution

Chapter 18 Life's Origin and Early Evolution.

Chapter 19 Viruses, Bacteria, and Archaea

Chapter 20 Protists

Chapter 21 Plant Evolution

Chapter 22 Fungi

Mid-Term Exam

Semester II

Chapter 23 Major Invertebrate Groups

Chapter 24 Animals II The Chordates

Chapter 25 Plant Tissues

Chapter 26 Plant Nutrition and Transport

Chapter 27 Plant Reproduction and Development

Chapter 28 Animal Tissue and Organ Systems

Chapter 29 Neural Control

Chapter 30 Sensory Perception

Chapter 31 Endocrine Control

Chapter 32 Structual Support and Movement

Chapter 33 Circulation

Chapter 34 Immunity

Chapter 36 Digestion and Human Nutrition

Chapter 37 Maintaining the Internal Environment

Chapter 38 Reproduction and Development

Chapter 39 Animal Behavior

Chapter 40 Population Ecology

Chapter 41 Community Ecology

Chapter 42 Ecosystems

Chapter 43 The Biosphere

Chapter 44 Human Effects on the Biosphere

Final Exam