Online Courses for High School Students
1-888-972-6237

Biology (Living Environment) (Credit Recovery)

A diagnostic driven credit recovery course is designed to give an expanded opportunity for students who did not succeed the first time in the course.

Students are given the opportunity in each learning unit to demonstrate their knowledge in that area of study. If they demonstrate competency in their unit assessment they will be presented with the following unit. If they do not demonstrate competency then they are required to do the entire unit.

Requirement:
For a student to take a credit recovery course, they must have already taken the class unsuccessfully and have the appropriate seat time.

Semester A

Biology A CR introduces students to the scientific method and the major concepts of biology from a historical and practical viewpoint. The three major themes of this course are the cell, the molecular basis of heredity, and the interdependence of organisms. Students who take this class will have a deeper appreciation for the complexities of living organisms. Life on this planet, unlike anywhere else in the observable universe, is complex and highly organized. Whether examining life on the molecular or the planetary level, it exhibits a highly organized structure that inspires awe by its genius and complexity. In the last 50 years, discoveries have launched new branches of biology that have transformed the daily routine, from conception to death. New challenges await, such as the current crisis in ecology, global warming, and the resurgence in viral disease. To make rational choices in the 21st century, the citizen must have a basic understanding of biological concepts and the reasoning behind them. Biology A CR is presented in a multimedia format using interactive modules, labs, narrated animation, text, and videos to present the study of life on this planet.

Prerequisite: Biology (Living Environment). (Student must have taken Biology (Living Environment) unsuccessfully and have the appropriate seat time).
Labs: All labs must be provided and administered by the home district.
Course Length: One Semester
Materials: None

The Principles of Life

- Biology's Big Ideas
- Cell Theory
- Carbon Compounds
- Cell Structures
- Eukaryotic Cells
- Prokaryotic Cells
- Cell Metabolism
- Transport Across Membranes

- Photosynthesis
- Cellular Respiration
- Principles of Life Exam

The Principles of Inheritance

- Cell Division
- Meiosis
- Reproduction
- Patterns of Inheritance
- Chromosomes
- Human Genetics
- The Structure of DNA
- From DNA to Proteins
- Gene Expression
- Human Genetics
- Genetic Engineering
- The Principles of Inheritance Exam

Plants

- Classifying Life
- Plant Classification
- Seedless Plants
- Seed Plants
- Gymnosperms
- Angiosperm
- Seed Dispersal
- Plant Tropisms
- Seasonal Changes in Plants
- Plants and Humans
- Plants Exam

Classification

- Classification Systems
- Kingdoms
- Eubacteria
- Archaebacteria
- Protista
- Fungi
- Plantae
- Animalia
- Viruses
- Protozoa
- Classification Exam

Animal Invertebrates

- Overview of Animal Kingdom
- Body Plans
- Phylum Placozoa

- Phylum Porifera
- Phylum Cnidarian
- Phylum Rotifera
- Phylum Mollusca
- Phylum Annelida and Platyhelminthes and Nemotoda
- Phylum Echinodermata
- Phylum Chordata
- Animal Invertebrates Exam

Animal Vertebrates

- The First Vertebrates
- Fish
- Amphibians
- Reptiles
- Birds
- Mammals
- The Primates
- Skeletal Systems
- Muscular Systems
- Sensory Reception
- Animal Vertebrates Exam

Semester Exam

- Semester Exam

Semester B

Biology B CR is a continuation of the basic course in biology, Biology A CR. The major concepts covered are population dynamics and evolution. Students explore population dynamics through the study of mutualism, predation, parasitism, and competition. The theory of evolution is presented, along with the many evidences and details that make evolution the backbone of modern biology. From biochemistry to evolution, biology fascinates people. Biochemists first astounded the world by showing that life obeys the same chemical principles as all creation, but that life engineers chemistry to its own needs. Decades later, Darwin shocked the world by suggesting that life evolves according to the conditions of the environment it inhabits. Evolution, often debated and derided, has survived to become a key concept of biology. This second course in biology examines the wonder of life and its mechanisms.

Human Body

- Homeostasis
- Circulatory System
- Respiratory System
- Digestive System
- Human Nutrition
- Nervous System
- Human Brain
- Endocrine System
- Reproduction in Humans

- Development in Humans
- Human Body Exam

Humans & Disease

- Immune System
- Infectious Disease
- Flu
- HIV
- Vaccines
- Non-Infectious Disease
- Autoimmune Diseases
- Cancers
- Cardiovascular Disease
- Alcohol and Tobacco
- Humans & Diseases Exam

Principles of Evolution

- Origin of Life
- Earth's Life History
- Charles Darwin
- Hardy-Weinberg Equilibrium
- Population Evolution
- Types of Selection
- Genetic Drift
- Comparative Morphology
- Comparative Biochemistry
- Human Evolution
- Principles of Evolution Exam

Populations & Communities

- Characteristics of Populations
- Population Growth
- Population Limits
- Population Growth Projections
- Community
- Symbiotic Relationships
- Predation and Parasitism
- Community Stability
- Succession
- Patterns of Biodiversity
- Populations & Communities Exam

Biomes

- Trophic Levels
- Biogeochemical Cycles
- Characteristics of Biomes
- Deserts
- The Mediterranean Biome and Grasslands

- Rainforests and Broadleaf Forests
- Coniferous Forests
- Tundra
- Freshwater Biome
- Marine Biome
- Biomes Exam

Human Impact on the Environment

- Human Population Growth
- Air Pollution
- Deforestation
- Water Pollution
- Water Shortage
- Fossil Fuels
- Alternate Energy Sources
- Global Warming
- Coral Reef Damage
- Overpopulation
- Human Impact on the Environment Exam

Semester Exam

- Semester Exam