

Ecology

Course Description: This course will review major ecological concepts, identify the techniques used by ecologists, provide an overview of local and global environmental issues, and examine individual, group and governmental activities important for protecting natural ecosystems. The course is designed to provide technical information, to direct the student toward current information, to identify problems and issues, to utilize research methodology for the study of natural ecosystems, and to consider appropriate solutions and analytical techniques. Discussion and understanding will be emphasized.

Big Ideas:

1. Students will be able to distinguish biotic and abiotic factors.
2. Students will evaluate human impacts on the environment.
3. Students will create solutions to local negative impacts on the environment.
4. Students will be able to perform various forensic science techniques to solve simulated crime scenes.

Essential Learner Outcomes:

ELO #	Essential Learner Outcome Description	Standards
1	Students will identify the need for homeostasis in the body and mechanisms used to maintain it.	LO1.A.Bio1; LO1.C.Bio1; LO2.A.Bio1; LO2.D.Bio1; LO2.E.Bio1; LO2.F.Bio1; LO2.G.Bio1
2	Students will be able to give examples and describe how structure complements function in the human body.	LO2.D.Bio1
3	Students will distinguish between the structure and function of the skeletal system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
4	Students will distinguish between the structure and function of the muscular system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
5	Students will distinguish between the structure and function of the nervous system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
6	Students will distinguish between the structure and function of the cardiovascular system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1

7	Students will distinguish between the structure and function of the respiratory system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
8	Students will distinguish between the structure and function of the digestive system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
9	Students will distinguish between the structure and function of the endocrine system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
10	Students will distinguish between the structure and function of the reproductive system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
11	Students will distinguish between the structure and function of the urinary system, emphasizing anatomical locations as well as physiological processes of the system.	LO2.C.Bio1
12	Students will be able to use anatomical vocabulary correctly to name and describe parts and functions of the human body.	LO2.C.Bio1