

# Oatland Island Wildlife Center

## High School Program Guide

### **Biology**

#### **'Georgias Dynamic Coast'**

Survey the geological, ecological and evolutionary history of the Georgia coast. Students will examine how enmeshed various scientific disciplines are in this 600 million year overview of coastal natural history and ecology. This class will not only examine the impact of geology on organisms but on entire systems as well.

This class corresponds with GPS Unit 1 Focus-Organization

GPS Alignment- SB1, SB3, SB4, SB5, SCSH1, SCSH2, SCSH3, SCSH4, SCSH5, SCSH7, SCSH8

#### **'It Begins With the Sun'**

Follow the trail of energy as it works its way from the sun, into photosynthesis and up through successive trophic levels. Attention will be paid to bioenergetics at the various levels as well as the path that the energy travels.

This class corresponds with GPS Unit 2 Focus-Energy Transformations

GPS Alignment- SB1, SB3, SB4, SB5, SCSH1, SCSH2, SCSH3, SCSH4, SCSH5, SCSH7, SCSH8

#### **'Reproduction'**

An exploration of the reproductive strategies employed by organisms found along the Georgia coast. By examining the characteristics and benefits of both sexual and asexual reproduction, students will gain an understanding of how these strategies assist various species to be successful in their respective habitats.

This class corresponds with GPS Unit 3 Focus-Growth and Heredity

GPS Alignment- SB1, SB2, SB4, SB5, SCSH1, SCSH2, SCSH3, SCSH4, SCSH5, SCSH7, SCSH8

#### **'Homeostasis'**

This course is an examination of the processes by which living things maintain a constant internal environment. In this class we pay particular attention to the dynamic conditions faced by organisms along our coast.

This class corresponds with GPS Unit 4 Focus-Equilibrium

GPS Alignment- SB1, SB2, SB3, SB4, SB5, SCSH1, SCSH2, SCSH3, SCSH4, SCSH5, SCSH7, SCSH8

## **Chemistry**

An overview of the natural applications of chemistry concepts, this class also looks incorporates some of the basics of the new field of chemical ecology. Appropriate for chemistry and physical science classes.

GPS Alignment- SC2, SC3, SC5, SC7, SCSh1, SCSh2, SCSh3, SCSh4

(Physical Science- SPS1, SPS2, SPS6, SCSh1, SCSh2, SCSh3, SCSh4, SCSh5, SCSh7, SCSh8)

## **Physics**

Topics ranging from balanced and unbalanced forces, Newtons laws, to light, acceleration, momentum and more will be discussed using our trails and animals as a backdrop. Includes, as an option, practice problems to reinforce skills in setting up and/or solving simple physics equations. Appropriate for physical science and physics classes.

GPS Alignment- SP1, SP2, SP3, SCSh1, SCSh2, SCSh3, SCSh4, SCSh5, SCSh7, SCSh8

(Physical Science-SPS2a, SPS8, SCSh1, SCSh2, SCSh3, SCSh4, SCSh5, SCSh7, SCSh8)

## **Geology**

Experience the beach from a geologists perspective! This class takes a closer look at the coast to discover the forces that formed and continually shape and reshape our island home.

GPS Alignment- SG1, SG3, SG4, SCSh1, SCSh2, SCSh3, SCSh4, SCSh5, SCSh7, SCSh8

## **Zoology**

Various topics can be addressed involving observation and, in some cases, collection of specimens.

Insects

Fish

Marine life (Intertidal Zoo)

Reptiles/Amphibians

Birds

Mammals

GPS Alignment- SZ2, SZ3, SZ4, SZ5, SCSh1, SCSh2, SCSh3, SCSh4, SCSh5, SCSh7, SCSh8