

Environmental Science

Syllabus (School Year)



Course Description:

Study the natural environment and learn how its habitats are affected by human activity. Conduct experiments to see how living things respond to changes in their environment. Travel by boat to the Back Bay Science Center to explore the habitats of Upper Newport Bay.

Day 1:

- 1) Create a timeline of the History of Environmental Science in America (Req 1)
 - Will be using timeline cards
- 2) Define vocabulary terms used in Environmental Science (Req 2)
- 3) Three Kinds of Pollution
- 4) Determine 10 different ways to conserve resources at home (Req 3.F.2)
 - How Long Will Your Trash Last?
- 5) Bees (Req 3.G.1)
 - Drones vs Worker bees
 - Bee Development
 - Pollination process
 - Honey and Beeswax – how are they made and harvested?
 - Jobs: Queen, Drones, and Workers
- 6) Homework: Due next class (Req 3.F.2)
 - Write up 10 ways to reduce pollution around your house (Req 3.F.2)
 - Practice at least 2 of these methods

Day 2:

- 1) Find out which packaging materials are biodegradable (Req 3.F.3)
 - Complete Biodegradable Packing Materials handout
- 2) Learn how the Greenhouse Effect works (Req 3.A.2)
- 3) Perform test for particulates that contribute to air pollution (Req 3.B.1)
- 4) Discuss Environmental Impact Assessments
- 5) Discuss Endangered Species homework (Req 3.E.1)
- 6) Homework: Due day 4 (Req 3.E.1)
 - Research one endangered species native to California and write a 100 word report and attach a hand drawn picture – MUST BE APPROVED BY INSTRUCTOR
 - Research its natural habitat, why it is endangered, what's being done to preserve it, and how many are left
 - Create an Environmental Impact statement for a proposed project (Req 5)

Day 3:

- 1) Air pollution test follow up (Req 3.B.1)
- 2) Review vocabulary (Req 2)
 - Vocabulary Jeopardy
 - Vocabulary test
- 3) Discuss oil spills and how they impact waterfowl (Req 3.C.2)
 - Perform experiment on how to clean up an oil spill
- 4) Build self-sustaining ecosystems
- 5) Homework: Due next class (Req 6)
 - Careers in Environmental Science Handout
 - Look up 3 careers in Environmental Science and research education, training, and experience for ONE

Day 4:

- 1) Outdoor plotting for plant and animal species (Req 4.A)
 - Trip to Back Bay Science Center
- 2) Review Homework
- 3) Sign off Blue Cards