

# Environmental Science

## Syllabus (Summer)



### Course Description:

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

### Monday:

- 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) Discuss Environmental Impact Assessments (Req 5)
- 6) Review Homework
- 7) **HOMEWORK:**
  - Due Wednesday (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**
      - (1) Research its natural habitat, why it is endangered, what's being done to preserve it, and how many are left
  - Due Friday (Req 3.F.2 & 5)
    - Write up 10 ways to reduce pollution around the your house
      - (1) Practice at least 2 of these methods
    - Create an Environmental Impact statement for a proposed project
  - Due Friday (Req 6)
    - Look up 3 careers in Environmental Science and research education, training, and experience for ONE

### Tuesday:

- 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) REMINDER: Endangered Species report due tomorrow!

### Wednesday:

- 1) Review Endangered Species Homework (Req 3.E.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

### Thursday:

- 1) 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
- 2) Air pollution test follow up (Req 3.B.1)
- 3) Build self-sustaining Ecosystems

### Friday:

- 1) Outdoor plotting (Req 4.A)
  - Take pontoon to Back Bay Science Center
- 2) Review homework
- 3) Sign off Blue Cards