

AP Environmental Science 2016-2017

Summer Assignment

First, **thank you** for enrolling in AP Environmental Science.

-If you are interested in Environmental Science, -and if you are willing to devote energy and time to the course, -you will be very successful. Interest and a desire to better understand the environment and our connections/relationship to it are clearly the two most important “prerequisites” for the class.

While it is my hope that one of your primary summer assignments is to **relax and enjoy the summer**, you **do** have what should be a very manageable, **three-part** summer assignment for this course that is intended to get you thinking about some of the issues we will cover during the school year. Much of the assignment can be finished while enjoying our beautiful beaches☺

Feel free to email me if you have questions.

1. **Letter of introduction:** Please write and **email** a short letter of introduction to me, as you would write and send a letter to a university professor at the University of *Fill-in-the-Blank*.
-Address your letter to lauramattair@iusd.org.
-The **Subject title** should be: *APES: Introduction to [Insert your name]*
Due date: **By Friday August 19th**

In your introduction, please share information regarding the following:

1. Please offer a brief description of: who you are (the characteristics which you feel stand out the most at this point in your life); your year in school for 2014-2015, anything you wish to share regarding family-siblings-guardian(s) and their career choice(s)
2. Please briefly state what you might be looking forward to the most in AP Environmental Science.
4. What are your other courses for the 2015 fall semester?
5. If applicable, feel free to state anything that you might be excited/anxious about regarding AP Environmental Science.
6. What book have you chosen to read for this summer’s reading assignment?

If your letter *lacks the requested subject title*, it **will lose points.

** If your letter does not contain the information requested above, it **will lose points**

Your letter should be relatively formal because it’s not a text message and I am your teacher ☺

2. **Reading Assignment # 1- Environmental Issue Book (DUE DATE: First day of class)**

Directions:

This assignment consists of the following 3 parts; please do all 3 for full credit:

- a. Over the summer, choose and read a book from the list below (borrow/buy; your decision)
- b. Answer the book reading questions (see page 2 of this document)
(if you hand write your answers, please make sure your handwriting is legible)
- c. Email me the title of your choice with your introduction letter (see above)

Please have your assignment completed and with you on the first day of class. You do not need to bring the book with you, just the completed reading questions.

1. “Out of Eden: An Odyssey of Ecological Invasion” by Alan Burdick
2. “Omnivores Dilemma: A Natural History of 4 Meals” by Michael Pollan
3. “Spillover: Animal Infections and the Next Human Pandemic” by David Quammen
4. “Exposed: Toxic Chemistry of Everyday Products and What’s at Stake for American Power” by Marc Schapiro
5. “Plastic: A Toxic Love Affair” by Susan Freinkel
6. “Collapse: How Societies Choose to Fail or Succeed” by Jared Diamond
7. “Song for the Blue Ocean: Encounters Along the World’s Coasts and Beneath the Sea” by Carl Safina
8. “Emerald Cities: Urban Sustainability and Economic Development” by J. Fitzgerald
9. “Green Metropolis: Why Living Smaller, Living Closer, and Driving Less are the Keys to Sustainability” by David Owen
10. “Garbology: Our Dirty Love Affair with Trash” by E. Humes
11. “Cadillac Desert: The American West and its Disappearing Water” by Marc Reisner
12. “Over a Barrel: The Costs of US Foreign Oil Dependence” by J. Duffield
13. “Lost Mountain: A Year in the Vanishing Wilderness-Radical Strip Mining and Devastation of Appalachia” by E. Reece
14. “A Spring without Bees: How Colony Collapse Disorder has Endangered our Food Supply” by M. Shaker

Book Reading Questions

1. Who is the author and what are his/her/their qualifications?
2. What environmental issues/controversies does it focus on?
3. Why do these issues (specific to your book) exist?
4. Why is it important that we understand and resolve these issues?
5. What was the author's (or authors') purpose in writing this book?
6. Discuss some of the book's strengths and weaknesses
 - a. What did you like/dislike about the book and WHY?
 - b. Is the book of historical importance, and, if so, WHY?
 - c. Will the book's content still be relevant a few decades from now, and WHY?
(If you choose a book from several decades ago, explain how it remains relevant today)
7. Write at least 3 well-designed questions that encompass the issues/controversies presented in your book. These questions should elicit discussion (not yes/no type answers).

3. Reading Assignment # 2: Environmental Science Textbook Reading (DUE DATE: First day of class)

Directions:

1. Read chapters 1 and 2 in the Botkin & Keller Environmental Science textbook.
2. Take reading notes (you can break up the readings as suggested or read the chapter all at one time)
3. Complete Key Terms for each Chapter

Chapter 1: Key Themes in Environmental Sciences (pages 1-22)

Reading Assignments:

Assigned Reading 1:

Pages 2-4 Case Study: Pacific Salmon: Iconic Fish of the Pacific Northwest
Pages 4-8 Sections 1.1 and 1.2 (Including *A Closer Look 1.1*)

Assigned Reading 2:

Pages 8-13 Sections 1.3, 1.4, 1.5 and 1.6

Assigned Reading 3:

Pages 13-16 Sections 1.7
Page 17-18 Critical Thinking Issue: Easter Island

Chapter 1 Key Terms:

-Carrying capacity	-Gaia hypothesis	-Sustainability
-Megacity	-Precautionary Principle	-Ecological Footprint
-Wicked Problems	-Environmental Ethic	

Chapter 2: Science as a Way of Knowing: Critical Thinking about the Environment (pages 23-43)

Reading Assignments:

Assigned Reading 1:

Pages 23-24 Case Study: Birds at Mono Lake: Applying Science to Solve an Environmental Problem
Pages 24-26 Section 2.1 (Including *A Closer Look 2.1*)

Assigned Reading 2:

Pages 28-35 Sections 2.2 and 2.3

Assigned Reading 3:

Pages 35-37 Section 2.4 and 2.5
Page 38 Critical Thinking Issue: What to Believe about Environmental Issues?

Chapter 2 Key Terms:

-controlled experiment	-operational definitions	-disprovability
-systematic errors	-deductive reasoning	-inductive reasoning