



Environmental Science

Course Guide

plus

Earn College Credit with the DSST® Exam

by

Cheri Frame, Credits Before College

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Course Schedule

Week	Suggested	Assigned	Week	Start Date
1	Getting Started			
2	Chapter 1			
3	Chapter 2			
4	Field Activity 1/2			
5	Chapter 3			
6	Chapter 4			
7	Field Activity 3/4			
8	<i>Break</i>			
9	Chapter 5			
10	Chapter 6			
11	Field Activity 5/6			
12	<i>Christmas Break</i>			
13	<i>Christmas Break</i>			
14	Chapter 7			
15	Ch 14 / Critical Thinking			
16	Chapter 8			
17	Field Activity 7/8			
18	Chapter 9			
19	Chapter 10			
20	Field Activity 9/10			
21	Chapter 11			
22	Chapter 12			
23	Field Activity 11/12			
24	Chapter 13			
25-29	DSST Exam Prep and Test			
30-31	Optional: Final Project Presentations			

Chapter 1 – A Global Perspective

Assignments are recommended to be completed in the order listed. Check the boxes as you go.

- 1. Survey the entire textbook chapter.
- 2. Read the chapter, taking notes as you read on the *Notes* pages in this Course Guide.
- 3. Make vocabulary cards (index cards) for the terms in each section.
- 4. Complete the worksheets in this Course Guide for each section of this chapter.
Repeat Steps 2, 3, and 4 until the chapter is complete.
- 5. Review Day. Review your notes, vocab cards, and worksheets. It is best to review your vocab cards daily, but today, ask someone to review your vocab cards with you - they give the definition and you say the term.
- 6. Complete the Chapter Quiz in this Course Guide. Review and correct any quiz questions that were incorrect.
- 7. Read a current events article related to Environmental Science. Write a summary and share what you have learned.
- ★ Record your grades on the *Grade Report* located in the front of this Course Guide.
- ★ Review the Field Activities for Chapters 1-2. You will be completing one of your choice after Chapter 2. Some may require advanced preparation.

Vocabulary Terms

Section 1.1

biosphere
consumption crisis
developed countries
developing countries
environment
environmental science
natural resource
nonrenewable resource
population crisis
renewable resource
sustainable world
biomass*

Section 1.2

applied science
ecology
experiment
hypothesis
pure science

Section 1.3

1.1 Environmental Problems

Directions: Draw a concept map (boxes containing ideas, connected by lines) like the one in the text on pg. 5. Identify the three categories into which most environmental problems fall. For each category, provide two examples of environmental issues.

Draw another concept map or chart to graphically illustrate Population and Consumption Crisis.

- Title two boxes: Population Crisis and Consumption Crisis.
- Write a short definition for each.
- List the environmental problems that occur when a country is affected by each crisis.
- Developed countries (nations) are affected by consumption crisis. Developing countries (sometimes referred to as emerging nations) are affected by population crisis. List three countries that are in each category (text pg. 11).

1.1 Renewable and Nonrenewable Resources

Renewable	Nonrenewable
Define	
List types	

Directions

- Write the definition for each type of resource in the first box.
- Select 3 objects around you, such as a pencil, notebook, or glass of water. By observation, list the natural resource from which each is made. Write that resource in the correct column.
- Add other resources to your list to include at least 5 resources in each column.
- Draw a picture of the resource next to each item in your list. This will help you create a visual image in your mind. Consider your learning style. If you visualize images in color vs. black and white, then make your drawings in color!

Tip: Neatness counts! Take care to use your best handwriting. Try for accurate spelling.

1.2 Major Fields of Study that Contribute to Environmental Science

Directions: Write in the fields of study next to the corresponding definition.

Biology	The study of life and living organisms.
	Animal kingdom
	Plants
	Microorganisms
	How organisms interact with each other and their environment
Earth Science	The study of Earth and its neighbors in space.
	Earth and its history
	Sun, moon, stars, planets and other objects and phenomena in space
	Atmosphere and weather
	Oceans
Physics	The study of matter and energy.
	Science concerned with the design, building, and use of engines, machines, and structures
Chemistry	The study of chemicals and their interactions.
	Chemistry of living things
	The chemical composition of the earth and its rocks and minerals
Social Sciences	The study of human society and social relationships.
	Places and the relationships between people and their environments
	Human societies and cultures and their development
	Human society

Oceanography
Geology
Sociology
Anthropology
Meteorology

Ecology
Geography
Biochemistry
Botany
Geochemistry

Astronomy
Microbiology
Engineering
Zoology

1.2 Law, Theory, Fact, Hypothesis, and Prediction

Directions: Predictions, hypotheses, facts, theories, and laws are separate parts of the scientific method. These terms tend to get misused. Write the example from below on the appropriate line (Hint: they are not in the correct order). Next, add an example of your own.

Water in the Arctic Ocean is cold.

Plants need nutrients to grow. Fertilizer adds those nutrients, so plants grow more.

I have a fever and sore throat. I might have strep.

Law of Gravity.

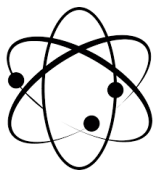
Matter is composed of atoms.



A Scientific **Law** is a statement, often mathematical, of natural phenomenon or relationships between things in the natural world. Laws simply describe the observation, not tell how they work. (That's a theory).

Example: _____

Your Example: _____



A Scientific **Theory** is an organized system of accepted knowledge that explains some aspect of the natural world.

Example: _____

Your Example: _____



A **Fact** is a statement that has been shown to be true.

Example: _____

Your Example: _____



A **Hypothesis** is a possible explanation for something that can be tested.

Example: _____

Your Example: _____



A **Prediction** is a guess what might happen based on observation.

Example: _____

Your Example: _____

1.3 Making Environmental Decisions

Values that Affect Environmental Decision Making

Fill in the chart from your text pg. 20.

Environmental Decision-Making Model

Draw a diagram that includes the 4-steps of decision-making.

Good to Know

Poverty is common in developing countries and its effects have a dramatic impact on environmental conditions and quality of life. Survival may necessitate activities that erode the environment. For example, using slash and burn to clear a plot of land in the rainforest for growing food.