

Living Green Course Syllabus

Course Description:

In Living Green, students will learn to think and take actions that lead to a more environmentally sustainable way, including how to make changes to one's home and garden to make them more environmentally friendly. Students will also learn the best diet and shopping practices to have the smallest impact on the environment, as well as how to properly recycle and to use responsible cleaning products and other chemicals. Students will learn to analyze their own carbon footprint, and ways to make their community a cleaner and safer place. Students will also learn the newest and most forward-thinking approaches to "living green," including permaculture and ecovillages, and will learn how others around the world are making changes for the better.

10 credit hours

Course Outline

Unit 1: Thinking Green

- 1.1 What is Sustainability?
- 1.2 Root Causes of Unsustainability
- 1.3 Thinking Green: Life Cycle Analysis

Unit 2: A Green Home

- 2.1 Using Water Wisely
- 2.2 How to Keep Your Home the Right

Temperature (The Green Way)

- 2.3 Efficient Appliances
- 2.4 Weatherizing
- 2.5 Solar Panels
- 2.6 LEED Certification
- 2.7 Passive and Zero Energy Houses

Unit 3: An Eco-Friendly Garden

- 3.1 Going Native
- 3.2 How to Attract Bees, Butterflies, & Birds
- 3.3 Water-Smart Tips for Your Lawn
- 3.4 Grow Your Groceries
- 3.5 Rainwater Catchment Systems
- 3.6 Food Forest Vegetable Gardens

California Standards

In Unit 1 students will learn:

To identify what is "sustainable" and the root causes of unsustainability.

To analyze the life cycle of different products, to determine how environmentally friendly they are or are not

[Biology: 6a, 6b, 6e Earth Science: 4a, 4b, 4c, 6d, 8a, 8b, 8c]

In Unit 2 students will learn:

The basics of maintaining an eco-friendly home. How to use water wisely, and to control the temperature of the home in an environmentally friendly way.

The basics of efficient appliances, weatherizing, and solar panels.

About LEED certification, as well as passive and zero energy houses.

[Earth Science: 4a, 4b, 4c, 6d, 8a, 8b, 8c]

In Unit 3 students will learn:

How to make and keep an eco-friendly garden.

To identify and grow native plants.

To keep plants that attract bees, butterflies, and birds, and why that is important.

Water-smart tips for keeping a lawn, as well as how to grow your own vegetables.

How to install and use rainwater catchment systems.

To make and maintain food forest vegetable gardens. [Biology: 6a, 6b, 6e, 6d]

Unit 4: Groceries and Diet Choices

- 4.1 What is Organic?
- 4.2 Free Range & Grass-fed
- 4.3 Fair Trade Products
- 4.4 Farmer's Markets
- 4.5 Meat and the Environment
- 4.6 Avoiding Plastic Grocery Bags
- 4.7 Community Supported Agriculture

Unit 5: Recycling

- 5.1 How to Compost
- 5.2 What is Recyclable?
- 5.3 Upcycling
- 5.4 How to Deal With E-Waste
- 5.5 Getting Rid of an Old Junker Car
- 5.6 How Landfills Work

Unit 6: Green Cleaning

- 6.1 Good Cleaning Products
- 6.2 What is Okay to Put Down the Drain
- 6.3 Disposing of Used Motor Oil
- 6.4 Disposing of Other Harmful Chemicals/ Cleaners
- 6.5 Disposing of Old Medicines

Unit 7: Your Carbon Footprint

- 7.1 Thinking About Your Carbon Footprint
- 7.2 Best & Worst Cars for Fuel Consumption
- 7.3 Tips to Increase Your Fuel Economy
- 7.4 Greening Your Commute
- 7.5 Carbon Offsets

In Unit 4 students will learn:

To choose groceries with the environment in mind, as well as to make diet choices along the same lines.

To understand what it means to be "organic," as well as free range and grass-fed.

What fair trade products are, and how to look for and shop at farmer's markets.

Meat and the impact that raising meat has on the environment.

To avoid plastic grocery bags, and the principles of community supported agriculture.

[Biology: 6a, 6b, 6e]

In Unit 5 students will learn:

How to more effectively recycle, how to compost, and to determine which things are recyclable.

The concept of upcycling.

How to properly dispose of E-waste, how to get rid of an old car, as well as how landfills work.

In Unit 6 students will learn:

Which cleaning products are not harmful to the environment, and what is okay to put down a drain. How to dispose of used motor oil correctly, as well as the disposal of other chemicals, cleaners, and medicines.

In Unit 7 students will learn:

The notion of a carbon footprint and how to calculate your own carbon footprint.

The best and worst cars in terms of fuel consumption. Tips to increase mileage and fuel economy, as well as how to make a commute more environmentally sustainable.

The idea of carbon offsets and how they work.

[Earth Science: 4a, 4b, 4c, 8a, 8b, 8c]

Unit 8: Greening Your Community

- 8.1 Community Gardens
- 8.2 Cleanups
- 8.3 Guerilla Gardening

Unit 9: Approaches to Living Green

- 9.1 Permaculture
- 9.2 Transition Towns
- 9.3 Ecovillages
- 9.4 Ecocities

In Unit 8 students will learn:

How to contribute to the beauty and sustainability of your own community through community gardens, cleanups, and guerilla gardening.

In Unit 9 students will learn:

The different approaches and practices for "living green."

About permaculture, transition towns, ecovillages, and ecocities.

[Earth Science: 6d, 8a, 8b, 8c]