COURSE 3 - What You Will Learn

Ecology – AIR

Determine the relationship between climate and vegetation from the qualities of air in temperature and chemical composition to create climate. Global warming, ozone, acid deposition, and the Clean Air Act.

Plants – the Rain Forest

Functions, ecology, and significance to earth's systems. Learn tropical deforestation and biodiversity loss. Investigate ways to halt the destruction.

Environmental Ethics

Value system in respecting earth, life, and the interdependence of all life. Moral duty, obligations, and principals of responsibility. Ensure resources for current and future generations.

Environmental Science – Pollution

Outdoors

Natural and man-made pollution: effects on plants, animals, environment, human health. Pollution abatement, toxin disposal to reduce exposure.

Environmental Science – Pollution

Indoors

Natural and man-made pollutants and effects. Exposure indoors to mold, asbestos, radon, sprays, cleaning agents. Illnesses and symptoms from poor air quality.

Endangered Plants & Wildlife

The Endangered Species Act impact to protect the endangered. Causes of species depletion and extinction.

Initiating Educational Programs

Business initiatives, industry, and conservation groups to better educate. Involvement with environmental programs that educate.

Education & Material Sources

Learn local, state, and federal sources for information and learn how to report pollution.

ENVIRONMENTAL SCHOOL

2023-2024

 Course 1
 November 4, 5, 2023

 Course 2
 January 6, 7, 2024

 Course 3
 February 3, 4, 2024

 Course 4
 March 2, 3, 2024

Course Daily Schedule:

8:30 a.m.	Registration
8:45 a.m.	Announcements
9:00 a.m.	Class begins
4:00 p.m.	Class ends

Required Reading:

 The National Gardener (TNG) magazine available online only at: gardenclub.org/member-resources

Guide for Students and Consultants

Cynthia Jackson, Chairwoman CGCI Environmental School

Mail registration and payment to: Berni Hendrix, Local School Chairman P O Box 1234, Ceres, CA 95307 Email: <u>vldschools@gmail.com</u> 209-402-2351

COURSE 4 - What You Will Learn

Ecology - WATER

Water supply: surface water, groundwater the hydrologic cycle, distribution, renewal, and management. Sustained ground water / aquifers. Effects of pollutants both man-made and natural. How to sustain useable water.

Plants – Aquatic Plants

Plant culture, beneficial plants, harmful plants, eutrophication and effect of pollutants. Aquaculture and associated food production.

Wetlands

Inland and coastal wetland function. Effect of agriculture, land development, mining pollution that cause wetland destruction. Natural wetland ecosystems that provide flood protection, erosion prevention, recharge groundwater supply, improved groundwater quality, habitat to support plant and animal biodiversity.

Environmental Sustainability

Causes of Global Water Crisis: drought, flood, and climate change. Using water efficiently and planning for a different future. Practices to sustain biodiversity in agriculture and economics to meet demands of world population. How not to interfere in the natural earth cycles to maintain the support system for all species.

Wildlife – Aquatic Animals

Fresh and salt water animals, their life cycles, and benefits to mankind. Special functions of estuaries, coastal and wetlands, coral reefs, and barrier islands. Impact of over-harvesting, pollution, disruption of habitat. Protection.

Environmental Awareness

Educate future generations with fun activities i.e., National Audubon Society, National Wildlife Federation, camp associations, and other business, industry, and government agencies. Get educational materials and consider its effectiveness. Determine if action programs are effective.

COURSE 1 - What You Will Learn

Ecology

Explore environmental challenges and opportunities for human population on how it impacts either as harmful or beneficial. Who pays the cost for an ever-consuming society? Recycle, Repurpose, Reuse.

Plants – Biodiversity

Evolution, extinction, genetic variation, diversity – understand them. The value and role of every species in the ecosystem.

Environmental Science

Non-renewable vs renewable resources. Pollution, consumption, technology, and economic factors effect on renewable, non-renewable, and perpetual resources. Conserve 'wasted energy' & avoid loss from 'vampire power'. Can management achieve sustainability?

Environmental Issues

Is the Earth finite? Does the Earth have a 'carrying capacity'? What is the "Tragedy of the Commons"? Understand the beneficial and harmful impacts that humans have on the environment. What are the problems in managing and disposing of solid waste?

Backyard Wildlife Habitat

Create wildlife habitat in home, school, public and commercial settings that use energy conservation, pest reduction, soil health without recreation and esthetic quality. Plan home landscapes to benefit and protect wildlife using planting practices, providing food, water, nesting, and protection.

Networking & Outreach

Learn how to influence industry, government, and people to pursue beneficial goals for life on earth.

Historic Actions and Leaders

Study the far-reaching impact on the environment by human action.

Sustainability

More than reducing, recycling, conservation, prevention, know what is necessary to reduce the Ecological Footprint.



ENVIRONMENTAL SCHOOL

course 1 The Living Earth

course 2 Land & Related Issues

course 3 Air & Related Issues

course 4. Water Issues

COURSE 2 - What You Will Learn

Ecology – LAND

Land types: forests, grasslands, desserts, mountains. Learn land type origin, and life forms in each. Understand soil renewal and reclamation. How to make cities more livable.

Plants – Agriculture

Food production and food plant origins with problems of distribution, farmland preservation, and genetic pool protection. Modified Genetics effect on food, animals, and environment.

Source Reduction of

Pollutants, Toxics

Pollution abatement by recycling materials. Know risk factors of toxins and disease. Pollution control through sustainability. Know green technology.

Coastal Zone Management

Value, uses, function of coastal ecosystems. Stress factors and pollution problems with management techniques.

Environmental Science Resources

Earth resources both renewable and finite on how impacted by economy and population. Learn methods of extracting resources. What are the 5 R's of earth care? Learn the types of 'wasted energy', 'vampire power' and making transit more sustainable.

Wildlife Animals - Misunderstood

Explore the value of animals and organisms and understand their positive contributions.

Earth Stewardship – Gardening with Nature

Conservation principles of home landscape with site limitations. Landscape for energy efficiency, native plants and wildflowers, composting, water conservation, integrated pest management, chemicals and fertilizers, wildlife habitat, nesting sites, water, and food plants.