

Outline for the Permaculture Design Certificate Course

Day One: Introduction

- History
- What is Permaculture
- Ethics of Permaculture
- Evidence of the need to act
- Permaculture in society

Day Two: Designing with Nature

- The sustainable human habitat
- Attitude principles
- Design Principles
- Concepts and themes of design
- Design Methods

Day Three: Natural Patterns

- Geometry in Nature
- Natural patterns through time
- Fractal objects
- Biomimicry
- The edge effect

The Weather

- Broad scale climatic classification
- Radiation
- Rainfall and humidity
- Temperature
- Wind

Day Four and Five: Water

- The role of water in nature
- Water, its management and conservation
- Management and use of residual waters

The Living Soil

- The life in the soil
- Types and characteristics of soils
- Soils and human nutrition
- Soil management
- Soil in cultures

Trees in Nature

- Trees and rainfall
- The biomass of a tree
- Trees and temperature

Day Six: The Cultivated Ecologies

- Plant communities and guilds
- Agro ecology and agro forestry systems
- The role of animals
- The health of plants and the relation to the soil

Day Seven: Aquaculture

- The water ecosystems
- Polycultures and appropriate species selection
- Ponds, feeding and requirements
- The Chinampas and the Wari Wari
- Mariculture

Earth Works and the use of machinery

- The ethics of earth works
- Types of machinery
- Herat resources
- Levels and leveling
- Planning Herat works
- The healing

Day Eight: The Arid Landscape

- Climatic factors
- Types of deserts
- Soils and natural resources
- Water in the arid landscape
- Desertification processes
- The human settlement in the desert

Day Nine: The Tropical Humid Landscape

- Climatic factors
- Tropical soils
- The tropical house
- Protein production
- Integrated land management

Day Ten: Cold and Humid Landscape

- Characteristics of the cold humid landscape
- Soils
- The house in the cold humid landscape

Design for Disaster Prevention

- Reading the landscape
- The species

Day Eleven: The Human Habitats

- The neighborhood and the city
- The use of energy
- The food

Sustainable architecture and structures

- Appropriated materials
- Bioclimatic design
- Light
- Space

Day Twelve: Invisible Structures

- Ancestral thought
- Solidaristic economies
- Association of producers and consumers; zero emissions
- Bioregions
- Ecovillages and intentional communities