Permaculture Design Certificate Course Outline
By Geoff and Nadia Lawton

Chapters of The Designers’ Manual by Bill Mollison

Day: 1 Chapter 1: Introduction

• Evidence that we need to act
• Introduction to permaculture
• Ethics
• Definition of permaculture
• Real world design
• Brief worldview of permaculture (what does it do and where?)
• What does this course do for you?

Day: 2 Chapter 2: Concepts & Themes in Design

• Sustainable systems
• Agricultural systems that can satisfy these criteria of sustainability
• The natural hierarchy of production per unit area in natural systems:
• Permaculture is primarily a design for a sustainable, human-controlled support systems.
• The Prime Directive of Permaculture.
• Principles of natural systems and design.
• Guiding principles of permaculture design:- Design can be for aesthetic and
• functional purposes. Permaculture design concentrates on function.
• The web of life and net of functional relationships of designed ecosystems.
• Potential energy capture within systems energy flows to useful life niches or storages available as yield.
• Diversity is related to stability
• Yield defined

Day: 3 Chapter 3: Methodology of design
• Design emphasizes patterning of landscape, function, and species assemblies.
• Permaculture science and ethics of design patterning
• Approaches to design
• Maps
• Analysis of elements
• Sector planning
• Observational
• Experiential
• Zones
• Sectors
• Slope
• Orientation
• Experiential
• Putting it together
• Surveying
• Methods of Design
• Concepts and themes in design
• Principles and laws of natural systems
• Conversion of a laws and principles to a directive to act
• Entropy extension
• The principle of chaos and disorder
• The first law of thermodynamics, energy auditing
• The Over-run thesis
• The Life Ethic thesis
• Resources, Their nature and management
• Definition of resource use effect

Day: 4 Chapter 4: Pattern Understanding

• Revelation, seeing in one example 1000 questions
• Seeing pattern as valuable connections
• Growth patterns and explosive patterns
• Scale of orders of size
• Events and pressure between media
• Recognizing pattern
• Pattern evolutions __
• Applying patterns in productive design
• Information dense pattern as teaching systems
• Traditional uses of pattern

Day: 5 Chapter 5: Climate Factors

• Climate and classic landscape profiles
• Climate Differences
• Temperate Tropical, Arid, continental climates, the maritime effect and rain
• shadows
• Orographic effects
• Classic landscape profiles
• Major landscapes Humid and Arid __
• Minor landscapes Volcanic, islands high and low, coasts, flatlands, wetlands, estuaries
• Ecosystems as climate moderators

Chapter 6: Trees and their Energy Transactions

• Wind
• Light
• Rain
• Types of forest
• Fuel – Forage – Structural – Shelter; animal barrier – Food – Natural –
• Conservation
• Establishment of forest
• Forest management

**Day: 6 Chapter 7: Water**

• Water
• Water harvesting earthworks
• Rechargeable water and non-rechargeable water
• The duties of water in landscape design
• Swales
• Gabions
• Limonia
• Dams
• Types of dams
• addle dams
• Ridge dams
• Key point
• Valley dams
• Contour dams
• Evaporation strategy
• Hard surfaces like roofs and roads
• Irrigation systems
• Components of irrigation systems
• Irrigation rules for arid regions
• Waste water systems

**Day: 7 Chapter 9: Earthworking and Earth Resources**

• Earthworks and earth resources
• Terra-forming
• Earthworks necessary and ethical
• Landscape restitution
• Moving earth with Machinery and Hand tools
• Planning earthworks prior to the actual job
• Soil tests
• Surveying and site pegging
• Planting after earthworks
• Slope measurements
• Levels and leveling
• Types of earthworks
• Banks
• Benching
• Terracing

Chapter 10: Humid Tropics

• The tropical house
• Waste systems
• Garden design
• Wet terraces
• Main crops
• Food forest layers
• Seeds, cuttings, root divisions
• Small animal systems
• Large animal management
• Mulch and forage production
• Seasonal timing
• Tropical settlements

Day: 8 Day OFF

Day: 9 Chapter 8: Soils
• Soils
• Difficult soils
• Understanding soil erosion as number one global problem
• Understanding where and why soils are conserved or increased
• Understanding pH acid/alkaline analysis and interpret the consequence
• Compost and the decomposition cycle of humus creation
• Creation of humus in soil
• The function of the hair roots of plants feeding on minerals and structuring soil
  • with starch exchange.
• What can be done locally plants, mulch holes and nuclei (story of the bush
  • turkey nest).
• Soil conditioning with the key line system: Difficult soils, Alkaline soils, Acid soils, Platin, Caliche, Non-wetting soils, Clay

**Day: 10 Chapter 11: Dry land Strategies**

• Anti-evaporation strategies
• The dry lands house
• Waste systems
• Garden design
• Shade system food forest/main crops
• Seasonal timing
• Seeds
• Mulch and forage production
• Dry land settlements
• Small animals
• Grazing patterns

**Chapter 12: Humid Cool to Cold Climates**

• House design and attachments
• Heating systems
• Waste systems
• Crop season extension
• Garden design
• Main crops and storage
• Food forests
• Mulch and forage production
• Seeds, tubers
• Seasonal timing
• Small and large animal systems
• Grazing cycles and pan-nage

Day: 11 Chapter 13: Aquaculture

• Aquaculture
• Select species (plant and animals) for pond size.
• Set up self-foraging systems for fish
• Pond sizes
• Mini-ponds in gardens
• Self- Forage Systems
• Aquaponics
• Half day design exercise

Day: 12 Chapter 14: The Strategies of an Alternate Global Nation

• The strategies for an alternative global nation
• Invisible structures
• Necessary legal structures
• Formal and informal financial strategies
• Trade
• Self-referencing authentication, quality and education
• Village systems
• Half day design work
Day: 13 Chapter 14: The Strategies of an Alternate Global Nation

- Permaculture local groups (associations), institutes, academies and universities
- Unintentional community establishment
- Permaculture aid
- Design presentation in the afternoon
- Celebration party in the evening

Day: 14 Half day: Permaculture nation, conferences, networks, teacher registrations.

- Certification
- Where to from here?
- Group photo