True Nature Design

Permaculture Design Certification Course

Harrison House Arts and Ecology
March 31 - April 14, 2019

COURSE OVERVIEW

Taught primarily by Warren Brush, the co-founder of Quail Springs Learning Oasis and Permaculture Farm, Casitas Valley Farm and Creamery, Sustainable Vocations and the founder of True Nature Design, a Permaculture consultation firm that works extensively in North America, Africa and other countries worldwide. To find out more about his work please visit his websites at:

www.quailsprings.org
www.sustainablevocations.org
www.permaculturedesign.us
www.casitasvalley.com
http://www.pri-kenya.org

Permaculture is a conscious integrated design system based on ecological principles that create resource efficient and productive human environments. Permaculture provides a framework for consciously designed landscapes that mimic the patterns and relationships found in nature. These systems yield an abundance of shelter, water, energy, and food for the provision of local needs that provide diversity, stability, and resilience for local populations.

This Permaculture Design Certification Course is designed to give the participant a thorough understanding of the principles and applications of permaculture in their lives and communities. Permaculture provides a tangible foothold in developing your next best steps toward living a sustainable lifestyle.   This course provides an internationally recognized certification through the Permaculture Research Institute of Australia.

Participants are introduced to some of the concepts of creative problem solving as a learning process, different approaches to problem solving and individual learning styles and how to use these tools effectively in teamwork.

Topics include:

- Eco-literacy for Sustainability
- Patterns & Processes in Nature

- Sustainable Design and Production Ecology
- Invisible Structures
- Permaculture at Work

1. Introduction

The course commences with an introduction to systems thinking, patterns in nature, and cultural regeneration to provide a context for introducing Permaculture, its influences, history, principles and ethics, issues of energy, sustainability and community resiliency.

Participants are introduced to some of the concepts of creative problem solving as a learning process, different approaches to problem solving and individual learning styles and how to use these tools effectively in teamwork.

2. Eco-literacy for Sustainability - Patterns & Processes in Nature

This section of the course introduces the basic underlying earth sciences and ecological process required for sustainable design and earth stewardship. Building on the introduction to patterns in nature, this section comprises detailed sessions on the patterning of ecological processes & their role and function in the design of sustainable systems;

• Landform & landscape reading, interpreting contour maps, key points, topographic features and their influence on soil, vegetation, water & microclimate

• Water in landscape: water management, collection & storage strategies, erosion control, dam construction & earthworks

• Soil: understanding & maintaining a healthy, living soil system and processes, mulches, soil testing and correcting common soil problems, minimum tillage and composting processes

• Forest ecology and forests role in the environment and bio-spheric processes: wind energy, water cycle, nutrient cycle, succession etc.

• Global climate systems, Biomes and climatic factors & influences, climate change & instability

• Microclimates: influencing factors and strategies to create specific microclimates

• Major climatic zones and their landform profiles. The major features and resulting management strategies for humid and arid, tropical and temperate areas – emphasis on examples of traditional sustainable systems

3. Sustainable Design and Production Ecology - Patterns in Design

This section begins with the design process and various concepts of patterning in design (zones, sectors, keyholes, spirals, flow etc), permaculture design methodologies and site analysis. This provides the framework for a more detailed exploration of the following design systems in permaculture:

ZONE I

• appropriate technologies, energy & resource efficient house design, selecting a house site etc

• home garden design: edible landscapes for urban & rural situations, small scale intensive vegetable production and functional design for home gardens

ZONE II

• Small Livestock & Poultry systems: small & large scale free-range chicken forage systems, chook tractors, chicken house design, chicken/ glass house. Also ducks, geese, quail, rabbits, guinea pigs.

• Orchard and food forest systems for temperate, subtropic and tropical environments, low maintenance strategies, diverse multi-story plant selection, site selection & preparation, implementation, planning for year-round production. Appropriate use of animals in integrated fruit production systems.

• Honey bees: husbandry needs and forage systems

ZONE III

• Windbreaks: location, design, function, yield, species selection, implimentaton

• Main crops: growing staple foods and major income generating crops

• Animal systems for Zones III and IV: characteristics, husbandry needs, forage systems, yields & functions of cattle, sheep, goats, horses, pigs & other common domestic farm animals.

ZONE IV

• Tree crops: design and management systems for low maintenance structural forests for fuel, timber & other yields, agroforestry, coppice woods and Integrated sustainable broadacre farming strategies

ZONE V

• Conservation forests for watershed management, native flora & fauna, spp refugia, reforestation, wildlife management, wildlife corridors, bushfoods and restoration ecology

THEMES

This section concludes with design strategies for various themes

• Utilities: roads, access ways and fences

• Aquaculture: low maintenance freshwater aquaculture systems for ponds & farm dams, edible water plants, biological water purification and treatment systems

• Integrated pest management and weed control in Permaculture systems

4. Invisible Structures

Bioregionalism and Transition planning sets the tone for this section followed by community economics and ethical investment, legal structures, land access, land ownership, community development, and bioregional organization strategies.

5. Conclusion - Permaculture at Work.

This introduces local, national and global permaculture networks and organizations, work opportunities and fields of operation, pathways to achieve skills and knowledge for different kinds of permaculture applications, further training options