

# Online Three Epochs and Permaculture Design Certificate Course: In Depth

## **The Three Epochs of Humanity and Permaculture**

The word Permaculture was coined in 1978 by Bill Mollison, an Australian ecologist, and one of his students, David Holmgren. It is a contraction of “permanent agriculture”, or “permanent culture”.

According to Bill Mollison, the originator of the Permaculture design system, “Permaculture principles focus on thoughtful designs for small-scale intensive systems, which are labor efficient and which use biological resources instead of fossil fuels. Designs stress ecological connections and closed energy and material loops. The core of Permaculture is design and the working relationships and connections between all things. Each component in a system performs multiple functions, and each function is supported by many elements. Key to efficient design is observation and replication of natural ecosystems, where designers maximize diversity with polycultures, stress efficient energy planning for houses and settlement, using and accelerating natural plant succession, and increasing the highly productive edge-zones within the system.”

Permaculture is about designing ecological human habitats and food production systems. It is a land use and community building movement which strives for the harmonious integration of human dwellings, microclimate, annual and perennial plants, animals, soils, and water into stable, productive communities. The focus is not on these elements themselves, but rather on the relationships created among them by the way we place them in the landscape. This synergy is further enhanced by mimicking patterns found in nature.

A central theme in Permaculture is the design of ecological landscapes that produce food. Emphasis is placed on multi-use plants, cultural practices such as sheet mulching and trellising, and the integration of animals to recycle nutrients and graze weeds.

However, Permaculture entails much more than just food production. Energy-efficient buildings, waste water treatment, recycling, and land stewardship in general are other important components of Permaculture. More recently, Permaculture has expanded its purview to include economic and social structures that support the evolution and development of more permanent communities, such as co-housing and eco-villages. As such, Permaculture design concepts are applicable to urban as well as rural settings, and are appropriate for single households as well as whole farms and villages. From households to bioregional planning, Permaculture design is not limited by scale.

Ultimately, we can achieve ecological balance by synthesizing applied biology, eco-technology and integrative architecture: the merging of renewable energies and biological earth-systems.

Permaculture is about whole systems, not about separate components. Because each element in a landscape or the built environment affects every other element at a site, we believe that a complete, comprehensive assessment is tantamount to develop healthy, productive, energy efficient relationships between elements for the benefit of everyone involved in day to day operations and life. By paying attention to all the details: topography, climate, water, wind, sun, activity nodes and corridors, buildings, machinery and tools, the waste stream, plants and animals, it enables us to make best use of what is already on the ground, and what we intend to put there. With a dynamic interaction of elements in process, and an assessment of both spatial and temporal attributes, organized around sound ecological principles, we can maximize yields and balance the landscape. In order to accomplish this we conduct a three phase process as follows:

### **A Three-Phase Process**

Phase I: Initial discussion, protocol, history, institutional analysis, vision, mission, geopolitical assessment, bioregional delineation, values, objectives, needs, wants, budgets.

Phase II: On site assessment, abiotic and biotic factors, physical, biological and cultural attributes, landform, built environment, energy sources, present and historical land use features, activity nodes and corridors, land tenure, critical habitat foundations, soil composition, vegetation composition and cover, successional pattern and plant productivity, wildlife corridors, water resources, climatological factors, the waste stream.

Phase III: Recommendations based on assessment and needs, suitability analysis, the whys and wherefores of transitioning into a “green” environment.

### **The Process of Design and Site Planning**

The process of design: 1) Thoroughly evaluate the site and available ecological resources; 2) Investigate renewable and sustainable systems and materials; 3) Design the vision; 4) Develop and integrate systems; 5) Complete detailed design; 6) Create action steps for putting the plan into motion; 7) Manifest the design on the ground; 8) Maintain. A detailed report and site plan, whether for raw land or preexisting settlement, will be drafted.

A selection of the proficiencies addressed in site planning: practical homesteading skills; renewable energy (wind, solar, water, fire) systems; eco-building construction and home retrofit; biological waste management systems and waste detoxification; water collection systems; storage, cycling and distribution of fresh water; air and water purification; aquaculture; land restoration; utility plant landscapes and food forests; animals; community gardens; cooling, heating and climate regulation; recreation; noise abatement; peaceful sanctuary; biological diversity; nutrient storage; recycling; budgeting; maintenance; and management.

### **Course Summary**

This course will reveal to you the awareness of The Three Epochs of Humanity and Permaculture as a complete system of appropriate technology. It helps you research and access related systems of eco-agriculture and earth skills. You deepen their ability to understand personal needs, penetrate to the root of existing problems, and through the whole-systems approach of the Three Epochs and Permaculture curriculum, be able to pinpoint biases and dogma in preexisting systems of education and training received, and transcend them. You learn to turn theory into practice, becoming more astute observers of the landscape. And they learn hand-skills that can be used for life and passed down to the next generation.

You will be exposed to the belief that minerals, plants, animals and humans interact in one vast web of being. This affords you the opportunity to apply the lifestyle methods employed from the Three Epochs coursework that begin with whole thinking and move to specifics.

You will learn to use appropriate technologies that sustain life, realizing that how we make use of the natural world can be both ecologically sound and economically viable. You will be able to deliver the principles and skills learned in the course to a wider audience, family, friends, associates, where attitudes toward land-use and land-ethic will change. Overall health of nature and humanity is the first priority. You will become caretakers of the earth, thus giving heed to a “sustainability mindset”. By becoming aware of the structure, locational pattern and function of everything we see or place in the landscape, we are able to construct circular models where zero waste, use and reuse, and conservation become the essence of our thinking and doing.

The curriculum consists of assignments and hands-on practicum in the hunter-gatherer, agricultural, Permaculture and modern appropriate technology lifestyles, depicting human settlement patterns and land-use. The course is divided into six major areas. You will receive personalized instruction from your main facilitator. Your instructor will choose activities based on your profile and progress in your work. You will communicate your progress through e-mail, snail mail, digital photographs and, in circumstances of greater need, over the phone. Information packets, course and resource materials and a complete bibliography on related topics will be distributed. Student partnerships and team projects are encouraged, where appropriate.

The on-line course promotes practical hands-on activities in the field, based on season and site requirements, giving participants a basic background and context to extend the principles, methods and values of The Three Epochs and Permaculture into a working practice that moves beyond mere theory to develop life transforming skills and abilities. The primary method utilized is observation, where we learn to read directly from the Book of Nature, gather essential data from our observations and thereby assimilate this data into an agricultural and technological approach that works in a balanced fashion within the local bioregion that a site exists in. We will create working maps and models that depict the entire history of human settlement and landscape metamorphosis, while working through political, social, economic and environmental issues toward an ecologically sound and sustainable land use ethic. All of this is ultimately directed into a final design of the student’s home site.

## **Training**

Training in hunter-gatherer living and nature skills sharpens our ability to see life as it is and develop hand and eye coordination, placing us into an environment where we must observe and create what we need in an immediate and balanced way. If our assumptions are correct then there is still an enormous need to communicate information about these topics and related eco-agricultural and sustainable technological systems to students, educators, administrators, politicians, the media, farmers, architects, ranchers and the like. The dual approach of theory and practice is specifically project-based. Along with practical projects that we will tackle during the training, we will also be building communication skills, thoughtful introspection and the ability to enhance our work in the future with prospective clientele in whatever profession we choose or at our home site.

You will learn about leading trends in sustainable agriculture, i.e. Permaculture, Biodynamic Agriculture, Bio-intensive gardening, the eco-agriculture movement as purported by Acres USA, organic systems, the natural way of farming of Masanobu Fukuoka and indigenous systems of agriculture. You also learn about renewable energy systems (wind, water, solar), ecological building practices (straw bale, cob, earthbag, etc.) and everything from tool-making to animal husbandry. The curriculum includes all of these systems and merges them into a working whole.

Based on an understanding of the basic principles and ethics expounded during the course you will be able to evaluate your work in the field through an applied set of ideas that move from the whole to the specific. With astute observation and an understanding of essential and cyclical patterns found in the natural world you will be able to lift the veil of the landscape and create new ideas based on the archetypal energies and forms which give birth to all the diversified elements and interactions on the farm, in the garden, the home site, the village, suburbs and city.

### **Appropriate Technology and Small Intensive Systems**

By utilizing appropriate technologies that sustain, rather than hinder and destroy the balance of nature, an ethic and attitude of care, cooperation and the need to follow nature's pristine example will become apparent. We will learn to mimic the ecological processes within the local bioregion where we live and work, creating balanced ecosystems in their own right.

Because we postulate that we start small and stay relatively small with practices such as utilization of vertical space in our planning (stacking), ecologically based design, and increasing yields-not size of acreage, participants have the opportunity to deliver a unique point-of-view geared to small and mid-sized land-bases. By presenting holistic systems such as The Three Epochs and Permaculture to mainstream educators and students, and by showing how they can be economically viable and ecologically sound, at the same time, education policies toward land use and land ethic will change. You will become more sensitive to the overall health of human life, basic needs, and the needs of all beings in the landscape. By seeing wholes rather than parts, you will be more apt and willing caretakers who will work to restore and sustain the intended living environment for all creation.

### **A Balanced Middle Path**

The current education-information system will become a more flexible entity where cultural exchange between educators, students and stakeholders establish communication that precludes a deeper reading of the Book of Nature and the practical application of ideas quarried from that reading. Through a mixture of theoretical and participatory hands-on teaching and learning in the art of The Three Epochs and Permaculture methods, a responsive, learning dynamic results. By delivering a systemic approach such as The Three Epochs to a larger and more diverse audience, an ethically balanced "middle way" approach to land use leads to a sustainability "mind-set", viable for a large cross-section of producers, educators and students.

The systems approach is all-inclusive. If the underlying "law of unity" is constantly at the threshold of our thinking in education, research and communication, we will always be called to look for what brings us, and nature, together in harmony, rather than the separation from the natural world that most of the populace feels. This includes farmers and stakeholders who manage huge mechanized and mono-cultural corporate farms. They have "lost touch with the land". By studying and applying the principles and methodologies propounded in this course we take a step closer to the stability of sustainability that we, in one way or another, all seek, for ourselves and for future generations.

*In the Three Epochs of Humanity and Permaculture Certification Course we seek to integrate holistic education with all aspects of life and learning that promote personal self-discovery in the natural world by:*

- Encouraging self-reflection on Nature
- Increasing and defining ecological and bioregional literacy
- Studying cultural and natural diversity
- Teaching global - thinking and the spiritual understanding of the natural world
- Celebrating - change, observing and studying the rhythms and evolution of Nature
- Creating - sustainable designs for living within a region of study
- Recreating the - life and folk ways of local prehistoric and historic cultures
- Intertwining environmental and ecological studies with our daily existence

*“We must create designs for human settlements that incorporate principles inherent in the natural world in order to sustain human populations over a long span of time.” (John Todd)*

*The entire Permaculture Design Certificate Course is included in this on-line course.*

*Permaculture is a copyrighted word of the Permaculture Institute of Australia. Graduates of the certificate course are permitted to use the word Permaculture in their choice of livelihood.*

The Permaculture Design Certificate Course is a training utilizing Bill Mollison’s “*Permaculture: A Designer’s Manual*” as the essential text. The goal is to achieve a working understanding in ecologically-based site planning, design, implementation and management.

*The Permaculture Designer’s Manual is the main course text. You will receive this book along with your registration.*

**Biological-Ecological Design Precepts (By John Todd, Creator of the “Living Machine”):**

1. *The living world is the matrix for all design*
2. *Design should follow, not oppose, the laws of life*
3. *Biological equity must determine design*
4. *Design must reflect bio-regionality*
5. *Projects should be based on renewable energy sources*
6. *Design should be sustainable through the integration of living systems*
7. *Design should be co-evolutionary with the natural world*
8. *Building and design should help heal the planet*
9. *Design should follow sacred ecology*

**As we study the development of human settlement throughout history we will utilize what we have learned by creating a final design that depicts an ecologically-biologically sound and sustainable rural, suburban or urban settlement, emphasizing zero-waste, circular models of development and energy integration. Through observation, creating maps, learning appropriate hand skills, problem solving initiatives, community building and working in design teams, we will come to know our site intimately and build settlements that are self-sustaining. By invoking intuition and practicing the arts of communication, advocacy, planning and management, and backwards thinking, where we start with the whole and move to particulars, we come to know ourselves and our personal and team creative process, intimately. Areas covered during the course include:**

*-Primitive living skills; Pastoralism; Settlement, village life-ways and folkways; Map building and modeling; Permaculture principles; Concepts and themes in design; The local ecosystem; Forms of eco-gardening and farming; Broad scale, bioregional site design; The application of specific methods, laws and principles to design; Pattern understanding and observation skills; Climatic factors; Plants and trees and their energy interactions; Water: collection, storage, purification; Soils; Earth-working and earth resources; Infrastructure and roads; Zone and sector analysis; Food forests and small animal husbandry, forest management; Cropping and large animal husbandry; Harvest and utility forests; Natural forests; Land and forest restoration; Aquaculture; Planning the homestead; "Green" structures, ecological building practices; Craftwork and chores, machinery; "Natural" medicine; Clothing; Cooking and food preservation; Equipment, tools, bio-fuels and vehicles; Renewable energy, system design and implementation; Energy conservation; Biological waste management and recycling; Strategies for different climates; Urban and suburban strategies; Small farm and garden management and marketing; Project planning, budgets and timelines; Office procedures; Building and planning software; Communications; Emergency preparations, safety procedures; Building codes; Strategies of an alternative global nation; Political, social, economic issues and solutions; Designing public policy; Designing sustainable economy; Human settlement and local ecology; Site selection, mapping and modeling; Dividing, distributing, apportioning land; Practical work on design*