"Together we can make the invisible visible to the heart of the people and the soul of the place"

Permaculture Design Course with Tierralegre A.C.

2011-2012

Tierralegre protege los recursos naturales y la biodiversidad de la Costalegre
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What is Permaculture?
Permaculture is an ecological design system for sustainability in all aspects of human endeavor. It teaches us how build natural homes, grow our own food and live more harmoniously with the natural world and our fellow humans. The term was coined by Bill Mollison and David Holmgren, the two co-founders of the movement, to mean "permanent culture" or "permanent agriculture".

Permaculture focuses foremost on the implementation of integrated systems design, but it also incorporates a crucial ethical system:

a. care of the earth—leave it better than you found it, more diverse.
b. care of people—almost as difficult as care of the earth in figuring out what people really need. It´s a tough one because it´s entangled in our concept of prosperity, wealth, lifestyle, etc.
c. return of all excess to care of earth and people.

Who is Teaching the Course?
Tierralegre Founder and Director Dave Collins will be the Head Instructor for the course. Dave holds an M.A. in composition and rhetoric, a B.A. in anthropology and received his Permaculture Design Certification in 2006 from Ecoversity. He´s been practicing and teaching permaculture ever since in addition to previous experience leading courses in the areas of sustainability, ecology, ecotourism and conservation, such as *Mexican Mangroves and Wildlife* program for the Earthwatch Institute (2003-07).

Various experts in their fields of organic agriculture, natural resource management, sustainable architecture, conservation biology, ecology, etc. will participate as guest lecturers during the course. All lectures in Spanish—the majority of guest lectures—will be immediately translated into English.

Course Methodology
Course content is delivered through an integration of lectures, visual presentations, group discussions, exercises, presentations, field trips and hands-on learning.

Where is the Course Taught?

All Permaculture Design Courses (PDC) should be tailored to the ecosystem in which they are taught and at the same time provide the foundation for applying the obtained knowledge to any ecosystem in the world. This particular course is taught at Tierralegre´s budding Permaculture Education Center in a tropical context—specifically the tropical dry ecosystem where we are based. Tierralegre can arrange to teach courses most places in the world so please inquire if your needs are better suited to receiving the course in another environment.

What´s Included in the Course?

Included in the course are all meals, camping accommodations, field trips, course materials, binoculars, and the Certificate in Permaculture Design for those students who satisfactorily complete the 72-hour course.

Elements of the Curriculum

One of the greatest legacies of the permaculture movement is the curriculum that was developed by its founders which theoretically should be present in all permaculture design courses, especially ones that present the Certificate in Permaculture Design as does this one. Some of the most salient elements of the curriculum are the following:

- **Evidence of the Need for Change and the Ethics of Sustainability**
- **Principles of Permaculture**
- **Observation and Landscape Analysis**
- **Pattern & Design**
- **Ecosystems: the Models of Nature**
- **The Gaian System: Climate and Biogeography**
- **Forests, Trees & Tree Care**
- **Water Harvesting, Management, and Conservation**
- **Building Soil Fertility**
- **Creating the Home System**
- **Natural Building Design (focus on bamboo and earth construction)**
- **Waste Recycling and Treatment**
- **Aquaculture and Animals**
- **Agroforestry and Forest Gardening**
- **Useful Plants and Planting Strategies**
- **Feeding Yourself from Home**
- **Garden Design & Establishment**
- **Integrated Pest Management**
- **Tools & Appropriate Technologies**
- **Patterns of Settlement**
- **Cooperative Economics, Money & Financial Systems**
- **Mapping and Design Exercises**
- **Urban Permaculture**
- **Ecovillage Dynamics**
- **Elements of Practical Design**
- **Team Design Projects**
- Broadscale Landscape and Systems Design

Permaculture Design Course Syllabus: 11-Day Course

Fundamentals (Section One)

Day 1—Ethics, Principles, and Design, The Key Permaculture Overview:

Evidence of systemic ecological and cultural crisis; derivation and evolution of ethics; spirals of degradation and the causes of health; energy and entropy; the permaculture innovation and synthesis; roots of permaculture knowledge; principles of energy efficient design, language and terms; exercise in observation of landscape; the nature of pattern in form, orders in natural phenomena; application of pattern to design; design process, purpose and methods.

Days 2-3—Natural Systems:

Principles of ecology; energy flux and materials cycling; conservation and diversity; guilds; cooperation; niches; forests as organism; climate, global weather patterns, and biogeography; forest impact on climate and the hydrologic cycle; functions of the tree; landscape analysis; the nature, sources, and value of freshwater; water's duties in the landscape; water movement, storage, and purification; water in the domestic system.

The soil community; oxygen/ethylene cycling and nutrient availability; soil biota regimes, mycorrhizal associations; carbon/nitrogen and other nutrient relationships; tropical and temperate soil conditions; building soil; physical properties of soils and soil testing; climate near the ground; factors in microclimatic design; windbreaks; moisture and humidity effects; modifying sunlight and capturing solar gain; thermal zones and frost pockets; limiting factors in living systems; exercise building swales, ponds, trellises, and/or brush fences; use of leveling devices.

Day 4 (half-day)—Natural History Field Trip into a Mangrove Ecosystem

Apply newly-obtained observational skills of natural systems as we paddle through La Manzanilla Mangrove in a skiff while learning about mangrove ecology and observing the bird life of one of *the* most productive tropical ecosystems. La Manzanilla Mangrove hosts the largest population of the American crocodile (*Crocodylus acutus*) on the coast of Jalisco, and was named an international Ramsar Site in 2008—thanks partly to the research and activism of Tierralegre.

Day 4 (half-day)—The Domestic System:

Design of the home system; zone and sector analysis; placement of elements for beneficial function; the domestic economy; staging of development in small permaculture systems; building design, materials, methods, and examples; conservation of energy; building as organism; nutrient cycling in the domestic system; biological treatment methods for human and animal waste: compost, constructed wetlands, biogas; urine as fertilizer.

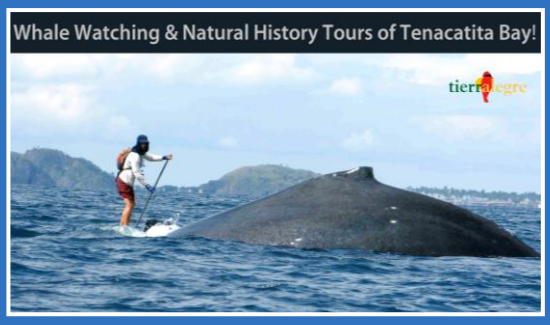
Day 5—Elements of Cultivated Ecologies:

Energy advantages of aquaculture; designing aquatic systems; water quality and species composition; animals as energy translators; their utility and efficient management; self-forage systems; intensive grazing; agroforestry systems with focus on bamboo; forest gardening and farming; alley cropping, coppice-with-standards; orchards as floristic communities; principles of pruning and tree health; useful plants and planting strategies; guild assemblies; plant identification, plant families, nomenclature; wildcrafting; establishment of nurseries and intensive small systems; economics and rolling permaculture. Self reliance and food security; the year-round harvest; methods of food storage and adaptation to climate; garden design, establishment, and methods; exercise in sheet mulch bed preparation; short design exercise in creativity; tools and their energy implications; choosing appropriate technologies; favorite tools.

Day 6—Community Design, Common Resources, and Larger Human Systems:

Patterns of human settlement; city and regional design; orders of magnitude; the village as building block of human community; building cooperative networks, organizations, and communities; resource inventories; business incubators; principles of economic design; how money works; the problems with present financial systems: interest, corporations, taxes, planning; community-based financial systems; the use of maps; simple methods of mapping; the integral urban house; resources in cities; appropriate scale for conviviality, economy, and security; components of village life; new village development; designing for human cooperation and interaction. Resources for further work; the permaculture movement; continuing education; how to organize locally; making a living; future visions and participant evaluations.

Day 7—Rest Day with Optional Activities



The PDC is an intense learning experience, and a day of rest, relaxation and/or recreation is an effective way to let all that newfound knowledge soak in a bit while one takes time to explore the surrounding tropical dry forest ecosytem, the community of La Manzanilla, or to enjoy the beach and Tenacatita Bay. This ensures that participants will be ready to tackle Section Two of the course with zest. Optional activities, not included in the course cost, may include learning to stand-up paddle board on Tenacatita Bay, whale watching (depending on the season), or a natural history / birding safari of the Costalegre.

Design Practicum (Section Two)

Day 8—Broadscale Landscape and Systems Design

Urban and Village systems; farm landscapes; design for wildlife; restoration and earthworks; economic design including financial systems; land access, regional strategies.

Days 9-10—The Elements and Practice of Practical Design (This is Where you get Your Hands Dirty!):

Review of Ethics and Principles; pattern languages; site analysis exercise; mapping & field surveying exercise; introduction of presentation skills; project planning; introduction to client interview, cost & budgeting, earning a living (half-day).

Actual practice helping to build a system(s) at the Center.

Day 11—Team Design Projects:

Formal group presentations of the team design with sketches, maps, and other multi-media modes of work; mentored, hands-on design work involving application of all presented skills; site observation and analysis, mapping, client interview, conceptual design, mind mapping.

Small group projects are for a real client(s) and based on an actual system(s) that will be integrated into the Tierralegre Permaculture Center or nearby in the communities of La Manzanilla or Los Ingenios.

Night 11—Talent Show!

Everyone has a talent. Here´s your opportunity to show yours—no excuses!

Sources

- *Permaculture: Principles and Pathways Beyond Sustainability.* David Holmgren, Chelsea Green, 2002.
- *Permaculture: A Designer´s Manual*. Bill Mollison, Tagari Publications, 1988.
- Permaculture Activist. *Permaculture Design Course Syllabus.* Retrieved October 9, 2011, from http://www.permacultureactivist.net/DesignCourse/PcSyllabus.htm#4