

## Schedule 1: Permaculture Design Course (PDC) - Programme v2a

Accredited with the Permaculture Research Institute (PRI), Australia, and, the Permaculture Association, Britain.

PRI PDC Facilitators: Ezio Gori, Lead Facilitator; Rory Clark, Assistant Facilitator; and, PermieTeam Network.

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Day Theme	Presentations and Discussions	Practicals, Site Visitations & Design Work	DVDs and Open Time	Outcomes
<b>Day 1</b> <b>Foundations of Permaculture Design</b>	<p><b>Introductions:-</b> Registration, introductions, expectations, course programme.</p> <p><b>Permaculture defined:-</b> Basic understanding of Permaculture/ecological farming systems (1.1).</p> <p><b>Permaculture Foundations:-</b> Ethics, Attitudes and Principles (1.2)</p> <p><b>Basic Permaculture Design Process:-</b> Site analysis; zone analysis, sector analysis, slope analysis, base mapping and final design (1.3).</p>	Site tour of teaching garden to explain application of Permaculture Design Principles	Homestead Revolution DVD	<b>Basic Permaculture Design</b>
<b>Day 2</b> <b>Homestead Garden Designs</b>	<p><b>Homestead Design Practice:-</b></p> <p>Living ecologies in Permaculture (2.1).</p> <p>Building healthy living soils (2.2).</p> <p>Methods of organic fertilizers (2.3).</p> <p>Companion planting and natural pest control (2.4).</p> <p>Water management (2.5).</p>	Garden practice – layout and preparation.	Permaculture Design DVD	
<b>Day 3</b> <b>Food Security &amp; Nutrition</b>	<p><b>Food Nutrition:-</b> “Real” food verses “danger” food (3.1); sprouting, juicing and preservation techniques (3.2).</p> <p><b>Food Security:-</b> Plant propagation (3.3), seed saving (3.4), and, cottage industries in the food economy (3.5).</p>	Site visit and nutrition demonstration.	Urban Agriculture DVD	
<b>Day 4</b> <b>Sustainability Worldview</b>	<p><b>Permaculture Project Design Process (own process):-</b> Strategy &amp; Design Process Framework (4.1), Design Process: site analysis, concept design, detailed design, implementation and operation (4.2).</p> <p><b>Ecological Footprint:-</b> Sustainability Overview from Findhorn Ecovillage (4.3), Global Footprint Network 2010 Annual Report (4.4), Ecological Wealth of Nations (4.5), Biodiversity Challenge (4.6), Anthropocene (4.7), and, Happy Planet Index (4.8 &amp; 4.9).</p>	Ecological Footprint group exercise and discussion	Home DVD	<b>Permaculture Consciousness</b>

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Day 5 Regenerative Agriculture	<b>Regenerative Agriculture:-</b> Keyline Principles (5.1), Climate (5.2), Geography (5.3), Yeoman's Scale of Permanance; Water (5.4), Access (5.5), Forestry (5.6), Buildings (5.7), Fencing (5.8), Soils (5.9).	Keyline design practice – map reading Setting out swales with A-Frame and water level, and, making raised beds.	Harvesting Water DVD Check in and Feedback	
Day 6 Soils and Plants	<b>Soil Fertility:-</b> Soil analysis (6.1), soil composition (6.2), composting (6.3), vermiculture (6.4), myco-remediation (6.5), soil vitality (6.6). <b>Plant Health:-</b> Seed diversity (6.7), companion plants (6.8), plant guilds (6.9), seedballs (6.10).Food vitality (6.11), refractrometer (6.12), integrated pest management (6.13).	Garden practice – seedlings, companion planting, guilds, seedballs and vermiculture.	Soils DVD	
Day 7 Farming Systems	<b>Farming Systems:-</b> Limited Till Systems (7.1); Conservation Farming (Zambia) (7.2); Natural Farming (Fukuoka) (7.3); Biodynamics (7.4). <b>Polycultures:-</b> Backyard Aquaponics (7.5), Polyface Farm (USA) (7.6). <b>Rainwater Harvesting:-</b> Urban (7.7), drylands (7.8 & 7.9), vetiver grass (7.10)	Food forest design and practice – integrated with swales, layering and planting.	Food Forest DVD	
Day 8 Waste Water and Sanitation	<b>Living Water:-</b> Emoto (8.1) and Schauburger (8.2); flow forms (8.3), Earth's Water Budget (8.4). <b>Waste Water Treatment:-</b> Constructed Wetlands, Restoration of Water, Living Machines (8.5), bioremediation (8.6), waste water design parameters (8.7), WET systems (8.8). <b>Appropriate Sanitation:-</b> Compost toilets (8.9), The Arborloo (8.10), tree bogs (8.11), Howard Higgins Theromophyllic EcoSan Waste Management System (8.12).	Visit of Permaculture type project	Project Design Work	<b>Integration of Ecological Systems into Permaculture Design</b>
Day 9 Built Environment	<b>Natural building technologies:-</b> Cob, adobe, strawbale, rammed earth, stone masonry, renderings, hybrid systems (9.1). <b>Permaculture Approach to Built Environment:-</b> Sustainable housing layouts (9.2), Permaculture town plan layout (9.3 & 9.4), large scale suburban project (9.5), Permaculture Applied to Natural Building (9.6), Green Buildings (9.7).	Natural building practice – cob, adobe, stone masonry, renderings.	Check in and Feedback around the Campfire	

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Day 10 Energy Descent Planning	<p><b>Biophysical Energy Economics:-</b> Energy Return on Energy Invested (10.1), entropy vs ecotropy (10.2), Future Scenarios (Holmgren) (10.3).</p> <p><b>Transition Movement:-</b> The Cuba Experience (10.4), Transition Influences (10.5), Transition Primer (10.6), Vision in Transition (Holmgren) (10.7 &amp; 10.8).</p> <p><b>Project Management Techniques:-</b> Foundations of Project Management (10.9), Strategic Planning Frameworks (10.10), project management process (10.10).</p>	<p>Beekeeping talk</p> <p>Project Design Work</p>	<p>DVD – The Power of Community – How Cuba Survived Peak Oil</p>	<p><b>Designing for Sustainable Communities</b></p>
Day 11 Building Sustainable Communities	<p><b>Ecovillage Perspectives:-</b> Findhorn (11.1) &amp; Zuvuya (11.2), Institutional and Land / Legal arrangements (11.3), The Anastasia Phenomena (11.4), Fundamentals for Ecovillage Design (11.5), Foundations for Sustainable Rural and Peri-Urban Development (11.6), Umbumbulu Vegetable Box Scheme (11.7).</p> <p><b>New Economics:-</b> Leaky bucket economics (11.8), social enterprise (11.9), complementary currencies (11.10), ethical banking (11.11).</p>	<p>Visit of Permaculture type project</p> <p>Project Design Work</p>	<p>DVD – In Transition 2</p>	
Day 12 Integrate Sustainability, Networking and Closure	<p><b>Design for Sustainability:-</b></p> <p>Sustainability Ethics:- Based on Earth care, People care and Fair share (12.1)</p> <p>Sustainability Attitudes:- Curtailment, co-operation, community, resilience, human scale (12.1)</p> <p>Sustainability Design Principles:- Enabling environment, minimize impact, minimize waste, biocapacity restoration (12.1 &amp; 12.2)</p> <p><b>Learning Pathways:-</b> Diploma of Applied Permaculture Design (12.3); GAIA Education Design for Sustainability (GEDS / EDE) (12.4 &amp; 12.5); Permaculture Networks – Permaglobal; Further training – RegenAg, Nutri-tech, Agro-Forestry; Permaculture Research Institute (PRI).</p> <p><b>Project Presentations:-</b> Group design projects, and, individual projects.</p> <p><b>Closure:-</b> Sharing and improvements; feedback survey; handout of PDC certificates; and, celebrations.</p>	<p>Project Design Work</p>	<p>Project Design Work and Celebration</p>	<p><b>Project Design Presentations and Permaculture Networking</b></p>