Twelve-Day Schedule

Permaculture Design Course

February	
Day One	
8:00-10:00	Arrival, Welcomes, & Logistics (Intro to Permaculture: definition, global and local history, designs for sustainable living-including and beyond agriculture)
10:00-10:30	Tea Break
10:30-12:00	Overview of Current Global & Local Situation
	(Video: The Story of Stuff-21 minutes)
12:00-1:30	Lunch
1:30-3:00	Intro to Permaculture Ethics and Main Principles
	(Video: Introduction to Permaculture, Sections I & II-13 minutes)
3:00-3:30	Tea Break
3:30-4:30	A Look at Natural Systems (Nature Cycle Activity)
Day Two	
8:00-10:00	Intro to "Resources" (Resource Walk & Analysis Activity)
	(Video: Helping Nature Help You, Permaculture-5 minutes)
10:00-10:30	Tea Break
10:30-12:00	Resource Display "Diversity is the Key"
12:00-1:30	Lunch
1:30-3:00	Intro to "Site Analysis and Design Concepts"
	(Video: Intro to Permaculture Design, Methods of Design & Observation- 9 minutes)
3:00-3:30	Tea Break
3:30-4:30	Site Analysis Activity

Days 1-2 Focus: Intro to Permaculture and Observation of Resources

- I. Global and Local Issues
 - a. A look at global issues (challenges) such as: Peak Oil, Population pressures, economics, and pollution
 - b. A look at how the global perspective is linked to local challenges: malnutrition, poverty, resource utilization, agriculture, and education
- II. Ethics and Main Principles
 - a. Earth Care, People Care, Fair Share
 - b. What are principles? (See Principle Comparison sheet for summary of Mollison, Holmgren, and Nordin)
- III. Natural Systems
 - a. Nature Cycle Explanation
 - b. Nature Cycle Outdoor Activity (everybody brings something from nature to the circle, discuss any known uses/benefits, place in middle and discuss nutrient return)
- IV. Resources
 - a. What is a Resource? What is a Waste?
 - b. Resource Walk Activity with Analysis of Resource Benefits
- V. Locally Available Resources
 - a. Importance of Local Resources in Sustainable Systems
 - b. Resource Display with emphasis on economics, health, and sustainability
- VI. Site Analysis
 - a. Importance of Site Analysis in preparing for Designing (knowing what you have)
 - b. Observation of Elements:

Sensory: hear, feel, see, touch, taste

Specific:

Sensory: what we hear, smell, taste, feel, see **Climate:** temps, rainfall patterns, seasons

Microclimates: fluctuations within a climate, small variations (water features,

termite mounds, geological features)

Elements: available resources, existing structures, utilities, adjacent influences, history of site, restrictions, boundaries, slope

Soil: type, structure, organic resources, markets, constraints

Water: water sources, drainage, flow, erosion, catchment, harvesting, standing water, hygiene

Plants: existing vegetation, trees, gardens, landscaping, foods, medicines, building supplies, fuel, ornamentals, protectors

Animals: existing animals, structures, pathways, habitat, management issues

Sector Influences: sun, shade, wind, fire, animals, people, smells

Human/Personal "stakeholder": work areas, recreation, access, driveways, pathways, long term plans, needs, wants, community

c. Sectors: Directions (aspect), sun, wind, rain, storms, fire

Day Three 8:00-10:00 Analysis and Resource Assessment of Individual Sites 10:00-10:30 Tea Break Patterns in Nature "Design Applications" 10:30-12:00 (Pattern Power Point) 12:00-1:30 Lunch 1:30-3:00 Soil Basics 3:00-3:30 Tea Break 3:30-4:30 Soil Observation Walk (with eco-san) Day Four 8:00-10:00 Arrivals & Intro to Mapping & Design (Mapping Handout) 10:00-10:30 Tea Break 10:30-12:00 Mapping Activity (small group outdoor activity) 12:00-1:30 Lunch 1:30-3:00 Water Basics (Video: Global Gardener, swales/ Help Nature Help You, Water-9 min) 3:00-3:30 Tea Break 3:30-4:30 Water Observation Walk

Days 3-4 Focus: Patterns, Soil & Water Basics, Intro to Mapping and Design

- I. Patterns
 - a. Patterns in Nature
 - b. Outdoor activity (pattern search)
 - c. Practical Applications (edge, spirals, keyholes, structures, flowforms, etc)
- II. Soil Basics
 - a. Soil formation and Succession
 - b. Soil nutrients, sources, availability, composting basics
 - c. Soil activities (comparisons, settling jars, how a compost "eats")
- III. Soil Walk
 - a. Observations of natural processes
 - b. Human impacts and solution-oriented discussions (hidden treasures-trash pits, sweeping piles, gutters, etc)
 - c. Composting Toilets
- IV. Intro to Mapping and Design
 - a. What is a Map?—what's there. What is a Design?—what you want to be there.
 - b. Elements and characteristics of a good map (DOGSTAILS-date, orientation, grid, scale, title, author, index, legend, sources)
- V. Mapping Activity
 - a. Small group or individual activity practicing mapping skills on-site
- VI. Water Basics
 - a. Water cycle & water table (tie clear bag to plant, observe at end of session)
 - b. Human impact on both in Malawi (globally)

- e. Working with water (4 S's, harvesting, managing, swales, etc)
- d. Possible outdoor demonstration
- VII. Water Walk Observation
 - a. Estimating water catchment and harvesting needs $(1 \text{mm x } 1 \text{m}^2 = 1 \text{ liter})$
 - b. Observation of water processes (existing resources, erosion, splash lines, etc)
 - c. Drainage, destination, and harvesting ideas

Day Five	
8:00-10:00	Mapping Individual Sites
10:00-10:30	Tea Break
10:30-12:00	Intro to "Zones" (Zones 00, 0, 1 & 2)
12:00-1:30	Lunch
1:30-3:00	Soil Practicals
3:00-3:30	Tea Break
3:30-4:30	Soil Practicals-Small Group Demonstrations
Day Six	
8:00-10:00	Scavenger Hunt (see activity sheet)
10:00-10:30	Tea Break
10:30-12:00	Intro to Guilds and Guild Activity
12:00-1:30	Lunch
1:30-3:00	Water Practicals
3:00-3:30	Tea Break
3:30-4:30	Water Practicals-Small Group Demonstrations
4:30	Homework Assignment (complete map, start a design: water resources, zones 0,1,2)

Days 5-6 Focus: Zones 1&2, Guild systems, soil and water practicals

- I. Zones 00, 0, 1&2 (Zones as a tool for energy efficient designs)
 - a. Zone 00 (mental/physical health "healthy=heal thy")
 - b. Zone 0 (resources, energy use, building materials, water sources)
 - c. Zone One (high energy, high utilization, irrigation, and daily functions and use)
 - d. Zone Two (high energy, less irrigation, more perennials, orchards, daily/weekly functions, small animal management)
 - e. Practical Applications (edge, spirals, keyholes, structures, flow forms, etc)
- II. Soil Practicals and demonstrations (all afternoon)
 - a. Heap/pit/container compost
 - b. Mulching
 - c. Worm farm
 - d. Liquid Manure
- III. Scavenger Hunt
 - a. Reinforcement of Observation activities, cooperation, and sharing of knowledge
 - b. Discussion on seed availability, collection, and storage
- IV. Guilds
 - c. Intro to using guilds as a "design tool", seven universal components (food for us (needs), food for soil, climbers, supporters, miners/diggers, groundcover, protectors/attractors)
 - d. Guild activity (small groups designing specifically assigned guilds on paper-large field, borehole, flower pot, etc)
- V. Water Practicals and demonstrations (all afternoon)
 - e. Swale
 - f. Harvesting systems
 - g. Drainage management
 - h. Borehole/bathing area conversion

Day Seven

10:00-10:30	Tea Break
10:30-12:00	Intro to Zones 3 & 4
12:00-1:30	Lunch
1:30-3:00	Zone 3 Transition Strategies
3:00-3:30	Tea Break
3:30-4:30	Propagation Techniques and Practicals
Day Eight	
8:00-10:00	Intro to Zone 5 "Forest Systems" (see activity sheet)
10:00-10:30	Tea Break
10:30-12:00	Permaculture Animal Management (Power Point?)
12:00-1:30	Lunch
1:30-3:00	Guild Practicals
3:00-3:30	Tea Break
3:30-4:30	Guild Practicals-Small Group Demonstrations

Days 7-8 Focus: Zones 3, 4, & 5, Transforming Zone 3, propagation, guild practicals

- I. Zones 3 & 4
 - a. Zone Three (rain fed annual and perennial, grains and staples)
 - b. Zone Four (woodlot management, animal grazing, low maintenance)
- II. Zone Three Transition
 - a. Global shift from industrial/monocropping to diverse sustainabiltiy
 - b. Diversifying agriculture
 - c. Guild system strategies (observation of Nature's Gift "maize garden")
- III. Propagation practicals
 - a. Planting seeds, cuttings, truncheons, root divisions, air and ground layering
- IV. Zone 5 "Forest Systems"
 - a. Description of Zone 5 and its importance
 - b. "What is a forest?" activity, looking at relationships and natural functions
- V. Animal Management
 - a. Element assessment (needs, products, intrinsic characteristics)
 - b. The use of animals in zones and guilds
 - c. Animal management ideas (chicken tractors, chicken runs, aquaculture, designing animal pens over fish ponds, large animal grazing, beekeeping, wild animals)
- VI. Guild Practicals and demonstrations (all afternoon)
 - a. Three guild areas (possibilities: borehole, end of drains, functional landscaping, bathing water area, maize garden)

Day Nine	
8:00-10:00	Design Work (adding zones 3-5, animals)
10:00-10:30	Tea Break
10:30-12:00	Large Land Management Techniques
12:00-1:30	Lunch
1:30-3:00	Land Design Practicals
3:00-3:30	Tea Break
3:30-4:30	Land Design Practicals Continued
Day Ten	
8:00-11:00	Field Visit
11-12:30	Lunch
1:30-3:30	Field Visit
3:30-4:30	(Return)
4:30	Homework Assignments (Finalize presentations)

Days 9-10 Focus: Large Land Management, Design Practicals, Field Visit

- I. Large Land Management Techniques
 - a. Finding contour (A-frames, line levels, observing water flow)

- b. Keyline, dams, gully restoration, swales
- c. Zoning and guild placement
- II. Design Practicals
 - a. Small group outdoor activity:
 - b. Brief site assessment, sector analysis, zoning, and design specifics
 - c. Creation of brief design for an area (possibly large and small scale)
- III. Field Visits
 - a. Observations of Permaculture in Practice

Day Eleven	
8:00-10:00	Design Presentations
10:00-10:30	Tea Break
10:30-12:00	Presentation Discussion and wrap-up
12:00-1:30	Lunch
1:30-3:00	Community & Urban Permaculture Strategies
3:00-3:30	Tea Break
3:30-4:30	Resource Management Ideas "zero-waste, the 3R's, solar"
Day Twelve	
8:00-10:00	How to Get Started "Overcoming Obstacles"
10:00-10:30	Tea Break
10:30-12:00	Action Planning
12:00-1:30	Lunch
1:30-3:00	Taking It Home
3:00-4:30	Tea Break Combined with Certificate Ceremony!

Days 11-12 Focus: Design Presentations, Community strategies, Urban Permaculture, Appropriate Technologies, Getting Started, Action plans, and Sharing with others

- I. Design Presentations
 - a. Presentations of maps and designs by each participant
 - b. Group feedback, suggestions, and discussions
- II. Community Strategies
 - a. Importance of 'Invisible Structures'
 - b. 'Intentional' communities
 - c. Alternative economies (LETS, farmers markets, co-ops,
- III. Urban Strategies
 - a. Small scale zoning
 - b. Stacking functions
 - c. Creative use of space (i.e. window boxes, container gardening, public areas)
- IV. Resource Management ideas (gallery walk-solar electricity, solar dryer, solar cooker, paper briquettes, fuel-efficient stoves, etc)
- V. Getting Started
 - a. Where, when, and how to start
 - b. Start small and experiment
 - c. Personal and professional Permaculture
 - d. Overcoming obstacles and perceived barriers
- VI. Action Planning
 - a. Personal, professional, community or all
- VII. Taking it Home
 - a. Learning styles and teaching methods used
 - b. Teaching by example
 - c. The difference between being a teacher and a facilitator
 - d. Ideas for implementation and integration
 - e. Role modeling and creating learning opportunities