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, ornaments, 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
10:30-12:00 Patterns in Nature “Design Applications”
(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)
c. 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 mm x 1 m$^2$ = 1 liter)
   b. Observation of water processes (existing resources, erosion, splash lines, etc)
   c. Drainage, destination, and harvesting ideas

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

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<th>Day Seven</th>
<th>8:00-10:00</th>
<th>Design Review</th>
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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 sustainability  
   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

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**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