



Kaw Permaculture's

Spring 2012 Permaculture Design Certification Course

Description:

As a community we are entering a period of energy and resource depletion, and an inevitable decline in our global economy. Learn how the sustainability movement known as permaculture promises to create an ecologically sound and economically viable system which neither pollutes nor exploits our planet. The first part of this course consists of 48 hours of lecture, video and field work covering topics including food security, permaculture ethics, ecological principles, system design, sustainable soils, food production, earth works and construction of human habitats. The second part of the course consists of four, 6 hour practicum sessions that emphasize hands-on experience in land assessment, planning, and system design and includes developing skills in agroforestry management, creating plant guilds, using design charrettes, constructing earthworks and using sustainable building technology. Together, both segments of this curriculum complete the 72 hour requirement for the international certification in Permaculture Design (PDC).

Texts: *Gaia's Garden: A Guide to Home-scale Permaculture*, Toby Hemenway, 2nd Edition
Permaculture: A Designer's Manual, Bill Mollison, Chapters 1 -6
Permaculture: Principles & Pathways Beyond Sustainability, David Holmgren

Course Objectives:

1. Describe the dependence of our agricultural economy on the availability of cheap and abundant fossil fuel energy.
2. Explain the impact of declining energy resources on the sustainability of food production.
3. Define sustainable agriculture in terms of ecological principles, resource conservation and systems design that emulates natural ecosystems.
4. Review the history of permaculture, its ethics and goals.
5. Describe the ecological principles guiding permaculture design and practice.
6. Describe permaculture design principles, planning and implementation.
7. Explore the dynamic aspects of biologically rich and diverse soils, soil building and conservation.
8. Describe perennial polyculture agricultural systems from no-till raised bed gardens to cultivation of food forests.
9. Explore the creation of landscapes that harvest water, influence microclimates and build soil structure.
10. Describe energy efficient approaches to home heating, energy conservation and renewable energy generation.

I. Permaculture Design Lectures and Field Sessions:

Description: (Wednesday evening lectures and Saturday field trip sessions)

1. **February 8, 2012** *Food Security and Energy Depletion*, lecture & video (Power of Community). **6 – 9:00 pm**, Dreher Family 4-H Building, Lawrence, KS

This presentation explores our agricultural dependence on fossil fuels and how we might meet the challenge of energy depletion to make a successful transition to a sustainable future.

2. **Feb. 15** *Introduction to Permaculture Principles and Ethics*, lecture and video (Sepp Holzer, *Farming with Nature*, 37 min.). **6 – 9:00 pm**, Dreher Family 4-H Building

Introduction to principles, ethics and applications for the urban and rural landscape. The lecture will be followed by a group discussion of permaculture applications, resources, organizations and community projects.

3. **Feb. 22** *Ecological Principles in Practicing Permaculture*, lecture & video (Last Stand of the Tall Grass Prairie). **6 – 9:00 pm**, Dreher Family 4-H Building

This lecture will explore the inter-relationships of life forms on the planet and how humans can create sustainable and balanced ecosystems that provide an abundance of food while maintaining species diversity and environmental stability.

4. **Feb. 29** *Introduction to Permaculture Design*, lecture & video, (Lawton, *Introduction to Permaculture Design*, part I, 45 min.). **6 – 9:00 pm**, Dreher Family 4-H Building

This lecture will examine natural patterns and living systems so that we can learn to mimic nature in creating sustainable landscapes and food production. We will explore the basic design principles as taught by David Holmgren and Bill Mollison, and will outline the basic steps in planning, assessing land resources, designing and implementing projects including earthworks and swales.

5. **March 7** *Cultivating Sustainable Soils*, lecture & video, (Lawton, *Introduction to Permaculture Design*, part II, 35 min.). **6 – 9:00 pm**, Dreher Family 4-H Building

This presentation will focus on living and biologically diverse soils that support abundant life. We will examine basic soil types, their chemistry, nutrient cycling, and dynamics of interaction of life in the soil. We will learn the basics in creating productive soils without the use of petrochemical inputs, and the use of unconventional methods including biodynamic farming.

6. **Mar. 10** Field Trip, *Composting, garden bed preparation with double digging and raised beds*. **1 – 4:00 pm**, Vajra Farm

7. **Mar. 14** *Food Production: Polyculture gardening*, Lecture & video (Lawton, *Permaculture Soils*, 97 min.). **6 – 9:00 pm**, Dreher Family 4-H Building

This presentation will explore the creation of gardens that rely on organic inputs and methods that involve growing annual and perennial plants in dynamic association to enhance nutrient recycling, soil building and ecosystem health. Emphasis will be given to no-till raised bed cultivation methods.

8. **Mar. 17** Field Trip, *Demonstration tour of no-till raised bed gardens and food forest production.* **1 – 4:00 pm**, Vajra Farm
9. **Mar. 28** *Food Production: Creating Food Forests*, Lecture & video (Lawton, Establishing a Food Forest, 80 min.). **6 – 9:00 pm**, Dreher Family 4-H Building
Introduction to the concept of polyculture forest garden systems, which include creating ecological guilds and tree stacking with nitrogen fixing species. Emphasis will be given to the development and maintenance of fruit and nut tree food forests.
10. **Mar. 31** Field Trip, *A walkabout in temperate woodland and prairie ecosystems.* **1 – 4:00 pm**, Vajra Farm
11. **April 4** *Earth Works: Water catchment, swales, dams and terraces*, lecture & video (Lawton, Water Harvesting, 90 min.). **6 – 9:00 pm**, Dreher Family 4-H Building
A major component of the creation of sustainable human environments is the capture of water in the soil and on the land for irrigation and aquaculture. Construction and control mechanisms will be explored to enhance the positive and mitigate the negative effects of sun, wind and water in terms of erosion and soil building.
12. **Apr. 7** Field Trip, *Reading the landscape and observation of patterns in nature*, student projects and techniques for site mapping. **1 – 4:00 pm**, TBA
13. **Apr. 11** *Sustainable architecture and construction*, Lecture & video (Green Architecture), **6 – 9:00 pm**, Dreher Family 4-H Building
This lecture will survey the different approaches to the construction of energy efficient structures and the construction of buildings using sustainably produced materials. We will explore the construction of passive solar, berm, cob, chord and SIPs structures.
14. **Apr. 14** Field Trip, *Laying out keylines, digging swales and small ponds*, **1 – 4:00 pm**, TBA
15. **Apr. 18** Student Project Presentations. **6 – 9:00 pm**, Dreher Family 4-H Building
16. **Apr. 21** Field Trip, *Green buildings and renewable energy systems*, **1 – 4:00 pm**, TBA

Lectures will be held at the Dreher Family 4-H Building, 2110 Harper Street, Lawrence, KS, and Field trips will be held at Vajra Farm, Michael Almon's Forest Floor Permaculture site and other to-be-determined sites

II. Permaculture Practicum

Description:

This practicum is offered as a part of the Permaculture Design Certification Course. Its purpose is to provide the student with practical experience in the implementation of permaculture design. The practicum consist of a total of 24 hours of field work that will culminate in fulfilling the requirement of 72 hours of instruction for a certificate in permaculture design.

1. **April 28** Overview of a broad-acre permaculture farm, planning improvements by design charrette. Preparation of raised beds and tree guilds for polyculture vegetable, and fruit production. **10 am – 4:30 pm, TBA**
2. **May 5** Overview and maintenance of urban food forest and integrated fruit & nut tree farm permaculture systems. **10 am – 4:30 pm**, Forest Floor Permaculture and Chestnut Charlie's Nut Tree Farm
3. **May 12** Design improvement by design charrette. Implementation of small scale designed system for water a catchment and irrigation in a newly created forest garden system. **10 am – 4:30 pm**, Prairie Lovesong Farm
4. **May 19** Participation in the construction of earth works or energy efficient structures. **10 am – 4:30 pm, TBA**

Course Fees:

Complete 72 hour Permaculture Design Certification Course: \$700.00

Sixteen Session (48 hrs) Lecture/Field Trip Segment: *Introduction to Permaculture Ethics, Principles and Design*. Does not include certification: \$460.00

Individual Lecture Sessions: \$35.00

Permaculture Practicum Sessions: \$60.00 each

Registration: For more information please contact Steve Moring at 785-691-7305 or moringse@gmail.com.

Registration forms are available by going to the internet link:

<http://www.kawpermaculture.org/permaculture-design-certification-course/>

Instructors:

Steve Moring is the lead instructor. He is the founder of the Kaw Permaculture Collaborative and the Kansas Permaculture Institute. He owns and manages Vajra Farm, a 45 acre permaculture training site in Jefferson County, KS. He received his training in permaculture from Midwest Permaculture and has been teaching permaculture courses for 4 years. Learn more....

<http://www.permacultureglobal.com/users/1922-stephen-moring>

PDC Certification:

The PDC is an international certification that is based on a standard curriculum originally developed by Bill Mollison and the Permaculture Research Institute of Australia. For more information, please refer to the following web sites:

<http://midwestpermaculture.com/about/certification/>

http://www.permaculture.org/nm/index.php/site/professional_practise_pages