Syllabus – Permaculture Design, Winter 2018-2019

Module 1: Pretro

- Group introductions
- Course orientation & requirements
- Group goals and guidelines
- Communication (NVC and conflict resolution)
- Learning styles & multiple intelligences

Learning Goals:

- Set a course culture of safety, respect and organization
- Create a positive & effective learning environment
- Encourage active listening in groups
- Value different ways of communicating and have confidence in utilizing tools of conflict resolution
- Orient participants to course content

Module 2: Foundations of Permaculture

- Definitions
- History of Permaculture
- Ethics
- Principles

Learning Goals:

- Know the Permaculture ethics and the Transition ethic and how to apply them to conscious decision making
- Learn the basis of how the Permaculture movement began, how it has grown, some of its progeny's and how the lineage links to this course.
- Gain a strong understanding of nature's principles and how they are at the foundation of design decisions and application
- Provide awareness of the world's problems and the current situation
- Shift from a place of problems to positive solution based thinking.
- Feel confident in defining Permaculture clearly to others

Module 3: Design Methods

- Needs, Functions and Outputs
- Zones
- Sectors
- Mapping

Learning Goals:

- Understand how to do a needs & yields analysis
- Gain a base understanding of closed loop systems
- Observe a site, document and recognize available resources and design constraints based on analysis.
- Identify energies or influences that effect a design site

- Be able to create a base map including zones & sector analysis for a site
- Know the basic elements included in mapping a site

Module 4: Pattern Literacy

- Physical patterns, emergent patterns, fractal patterns
- Functions of patterns
- Patterns in time
- Behavioural patterns
- Application of patterns in design
- Guilds

Learning Goals:

- Pattern recognition in nature and technology
- Learn the functions of patterns in nature and how to apply that knowledge to effective design
- Gain Pattern literacy and understand how to replace dysfunctional patterns with functional ones.
- Know the functions of and feel confident designing guilds
- Recognize that pattern literacy is fundamental in becoming good designers

Module 5: Soil

- Soil biology
- Soil classification and testing
- Biodynamics
- Soil remediation
- Composting
- Soil indicators

Learning Goals:

- Have a base understanding of the components of healthy soil and know the value of building soil.
- Know different ways to test soil
- Recognize different plant indicators and what they tell about soil health.
- Understand a multitude of different ways to remediate and build soil.
- Apply different composting techniques in appropriate situations.
- Identify key plants that bring nutrient to the soil.

Module 6: Trees

- Ecological function of trees in relation to earth, water, air and energy
- Succession
- Polycultures
- Forest gardens and food forests
- Plant and tree identification
- Plants as soil indicators

• Design for trees

Learning Goals:

- Understand the ecological functions of trees and recognize them as a keystone species in the ecosystem.
- Learn the stages of succession and how to intervene at appropriate times.
- Know the layers in a forest garden and different plants for each layer that grow locally
- Identify local plants and trees and see the difference in characteristics between species.
- Be able to integrate trees adequately and appropriately in design.

Module 7: Animals

- Design for wild and domestic animals
- Animal care
- Integrated pest management

Learning Goals:

- Recognize the intrinsic characteristics, functions and outputs of animals
- How to meet the needs of animals on site
- Learn techniques for integrating animal systems
- Understand effective and healthy ways to handle pests
- Know how to safely and ethically live with wildlife

Module 8: Water, Aquaculture & Earthworks

- Water facts
- Water conservation
- Water strategies & techniques
- Waste water treatment
- Water harvesting & storage
- Earthworks
- Aquaculture

Learning Goals:

- Understand how global water issues can affect us on a local level.
- Learn how to do a water audit.
- Recognize multiple ways in which to conserve water.
- Feel confident in applying strategies and techniques to capture, store, treat and release water safely and appropriately.
- Know how to calculate roof water catchment amounts.

Module 9: Climate

- Climatic Zones
- Climatic factors
- Microclimate

• Design for Climate

Learning Goals:

- Understand climate on a global scale and how we may design to moderate climatic factors
- Be able to identify, create and design microclimates
- Learn how to understand climate and its elements (light, wind, water)

Module 10: Cool Climate

- Cool climate characteristics
- Cool climate design challenges and strategies
- Cool climate design elements and techniques

Learning Goals:

• Be able to identify characteristics of cool climate and appropriate strategies and technologies to work with them in the home, garden, farm and community.

Module 11: Tropics

- Tropical climate characteristics
- Tropical climate design challenges and strategies
- Tropical climate design elements and techniques

Learning Goals:

• Be able to identify characteristics of wet, wet dry and monsoon tropics and appropriate strategies and technologies to work with them in the home, garden, farm and community.

Module 12: Drylands

- Dryland climate characteristics
- Dryland climate design challenges and strategies
- Dryland climate design elements and techniques

Learning Goals:

• Be able to identify characteristics of drylands and appropriate strategies and technologies to work with them in the home, garden, farm and community.

Module 13: Social Permaculture

- Client interview & designer checklist
- Community building (group processes and asset mapping)
- Governance (sociocracy and consensus decision making)
- Land access
- Right livelihood
- Legal structures
- Bioregionalism

Learning Goals:

- Gain confidence in the consultation and design process for clients.
- Be able to map assets and resources and identify community needs.

- Understand different models of decision making and how to apply them.
- Learn tools to provide for healthy group dynamics and efficient process.
- Recognize opportunities for land access locally.
- Become aware of ethical and effective business models and legal structures that support local economy
- Know ways to relocalize and create resilient communities.

Module 14: OS Permaculture

- Resiliency
- Permaculture economics
- Urban renewal strategies and design

Learning Goals:

- Able to identify risks and mitigate disaster using Permaculture design tools and techniques
- Know the steps in building a emergency preparedness plan and engaging local community in the process
- Learn a variety of different economic strategies and the value of utilizing multiple currencies and tools
- Feel confident in utilizing place-making tools, techniques and Permaculture strategies in urban environments

Module 15: Graduation

- Next steps (setting up a permaculture practice, further education, community involvement, goal sharing)
- Education (accessibility, open source, alternative education)
- Mapping and design presentations
- Talent show
- Certificates

Learning Goals:

- Think about niches in permaculture and practice effective goal setting
- Gain experience presenting to groups and receiving feedback
- Understand how to help others share their gifts