Syllabus:

Oregon State UNIVERSITY | **Professional and Continuing Education**

Permaculture Design Course Fall 2014, Spring 2015

NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course Blackboard site for enrolled students and may be more current than this sample syllabus.

Permaculture Design is a method of landscape planning that can be applied at scales from the home garden to city block to village to farm. It is an ethically based whole-systems design approach that uses concepts, principles, and methods derived from ecosystems, indigenous peoples, and other time-tested practices to create sustainable human settlements and institutions. Although rooted in horticulture and agriculture, Permaculture design is interdisciplinary, touching on a wide range of subjects including regional planning, ecology, animal husbandry, appropriate technology, architecture, and international development.

The course consists of narrated and animated slide shows by Permaculture instructors, educational video tours, assigned readings and viewing of selected material, and interactive assignments that all build up to each student completing an extensive final design project portfolio. Each student posts their work on a blog that is viewed by other students, who are required to give feedback on each others' work.

Upon satisfactory completion of the course, students will receive a Permaculture Design Course Certificate affiliated with the Cascadia Permaculture Institute, Permaculture Institute USA, and Oregon State University.

Instructors:

Andrew Millison – Class Instructor
Email: millisan@hort.oregonstate.edu
Link to instructor's on-line bio/website:
www.beaverstatepermaculture.com/profile/AndrewMillison

Blackboard:

This course will be delivered via Blackboard, your online learning community, where you will interact with your classmates and with me. Within the course Blackboard site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects. To preview how an online course works, visit the Ecampus Course Demo. For technical assistance, Blackboard and otherwise, contact PACE at 541-737-4197 or learn@oregonstate.edu.

Syllabus:

Schedule:

Week 1: Pattern Observation: The Watershed
Presentations:
- PDC 1 Instructor Introduction
- PDC 2 Permaculture Introduction
- PDC 3 State of the World - Future Scenarios
- PDC 4 Ethics and Investments
- PDC 5 Project Scales and Examples
- PDC 6 My Work
- PDC 7 Watershed
- PDC 8 Core General Model
- PDC 9 Deforestation Effects
- PDC 10 Beavers and the Watershed
- PDC 11 Contour Lines and Topography

Supplemental Readings and Videos: Linked in weekly folder
Assignments:
- 1) Choose Your Design Site
- 2) Watershed Mapping

Week 2: Site Analysis: Macro to Micro
Presentations:
- PDC 12 Climate, Topography, Precipitation
- PDC 13 Macro-Climate Analysis Case Study
- PDC 14 Macro Watershed Assessment
- PDC 15 Case Study Water and Soil
- PDC 16 Solar Aspect
- PDC 17 Fire, Wind and Slope
- PDC 18 Sector Compass
- PDC 19 * Survey and Mapping
- PDC 20 Digital Mapping Resources
- PDC 21 Site Analysis Assignment Examples
- PDC 22 Identifying Microclimates and Mapping Microclimates

Supplemental Readings and Videos: Linked in weekly folder
Assignments:
- 3) Base Map
- 4) Sector Compass

Week 3: Design Principles & Methods
Presentations:
- PDC 23 Zones
- PDC 24 Case Study Design by Zones and Sectors
- PDC 25 Design Methods
- PDC 26 Design by Pattern
- PDC 27 Conceptual Design

PDC 28 Principles 1-4
PDC 29 Principles 5-8
PDC 30 Principles 9-12
Supplemental Readings and Videos: Linked in weekly folder
Assignments:
5) Current Zones of Use Map
6) Client Questionnaire

Week 4: Permaculture Soil Perspectives and Strategies
Presentations:
PDC 31 Principles of Ecology
PDC 32 Ecological Succession
PDC 33 Intro to Soils
PDC 34 Composting
PDC 35 Soil Improvement Methods-Small Scale
PDC 36 Soil Improvement Methods-Large Scale
PDC 37 Scales of Landscape Permanence
Supplemental Readings and Videos: Linked in weekly folder
Assignments:
7) Soil Jar Test
8) Compost Resource Report
9) NRCS Web Soil Survey Map and Report

Week 5: Whole Systems Water Design
Presentations:
PDC 38 Landforms-Rehydration-Dehydration
PDC 39 Rainwater Harvesting Principles
PDC 40 Swales and Gabions
PDC 41 Keyline Water Management
PDC 42 Keyline Silvopasture and Agroforestry
PDC 43 Aquaculture
PDC 44 Urban Water Strategies
PDC 45 Rainwater Harvesting Cisterns
PDC 46 Greywater Systems
PDC 47 Biological Water Treatment
Supplemental Readings and Videos: Linked in weekly folder
Assignments:
10) Water Flow Analysis and Map
11) Elevation Map

Week 6: Trees, Gardens and Plant Systems
Presentations:
PDC 48 Trees and Forest Gardens
PDC 49 Plant Guilds
PDC 50 Forest Garden Succession and Hedgerows
PDC 51 Forest Garden Examples
PDC 52 Solar Bowl

PDC 53 Animals
PDC 54 Appropriate Technology
Supplemental Readings and Videos: Linked in weekly folder
Assignments:
12) Plant ID and Research
13) Plant Guild Design

Week 7: Village, Community, Economy

Presentations:
PDC 55 Bioregions
PDC 56 Village Elements
PDC 57 Village Examples
PDC 58 Village Patterns
PDC 59 Access to Land
PDC 60 Economics
PDC 61 Invisible Structures
PDC 62 Right Livlihood
Supplemental Readings and Videos: Linked in weekly folder
Assignments:
14) Bioregional Quiz
15) Climate Questionnaire

Week 8: Dryland Climate and Urban Strategies

Presentations:
PDC 63 Drylands Intro
PDC 64 Drylands Indigenous and Traditional Strategies
PDC 65 Dryland Plant and Garden Strategies
PDC 66 Drylands Design for Fire
PDC 67 Dryland Village and Building Strategies
PDC 68 Case Study Neighborhood
PDC 69 Urban
Supplemental Readings and Videos: Linked in weekly folder
Assignments:
16) Regional Disaster Assessment and Preparedness
17) Client Questionnnaire

Week 9: Cool and Cold Humid Climate Strategies

Presentations:
PDC 70 Cool Humid Climate
PDC 71 Cold Humid Climate
PDC 72 Forestry
PDC 73 Mycology
PDC 74 Temperate Garden
PDC 75 Case Study - Temperate Garden
PDC 76 Design for Flood
PDC 77 Graphic Communication
Supplemental Readings and Videos: Linked in weekly folder

Assignments:
    18) Zone 1 Microclimate Design

Week 10: Tropical Climate Strategies
Presentations:
    PDC 78 Tropics Intro
    PDC 79 Tropics Indigenous and Traditional Strategies
    PDC 80 Tropics Plant and Gardening Strategies
    PDC 81 Tropics Design for Hurricane
    PDC 82 Tropics Village and Building Strategies
    PDC 83 Seeds and Nurseries
Supplemental Readings and Videos: Linked in weekly folder
Assignments:
    19) Final Design Project

Measurable Student Learning Outcomes:
- Comprehension of the Permaculture design system and the protocols for the Permaculture site design process.
- Understand the basic Permaculture design strategies for water, soil, gardens, trees, climatic zones, structures, and communities.
- Apply Permaculture teachings to all assignments.
- Articulate the Permaculture design system through feedback to other students and presentation of projects and assignments

Required Materials:
- Each student must have a way to document their design work and post it to the internet, whether it is a digital camera, scanner, or if they do their mapping projects using a computer program.
- Students will be producing maps and visual designs, so may need to obtain colored pencils, markers, rulers, circle templates, a sketchpad, or other art supplies deemed necessary by the student depending on the presentation of their work.

Learning Resources:
- Required Text: "Earth User's Guide to Permaculture, 2nd edition" by Rosemary Morrow, Kangaroo Press 2006
- Link to reading assignments on an online reader
- Narrated presentations on Blackboard
- Educational video segments on Blackboard
- Links to online video material

NOTE to prospective students: Please check with the OSU Bookstore for up-to-date DVD, course packet, and textbook information for the term you enroll

(http://www.osubookstore.com/ or 800-595-0357). If you purchase course materials from other sources, be very careful to obtain the correct ISBN.

Evaluation of Student Performance:

- Students will be graded on completion of content quizzes, class assignments, peer review comments, and the final design project:
- Each content quiz will be worth 4 points, with 10 quizzes total (40 points)
- Each assignment will be worth varied points, with 19 assignments (140 points)
- Each student will make 2 peer review comments on other student's work (to be assigned by instructor) worth 2 points per week (20 points)
- Instructors may give students extra points on an assignment for exemplary work.

Course Policies:

Incompletes — Take this course only if you plan to finish it in a timely manner. Enrollment can be transferred to the next semester that the course is being taught for a $100 transfer fee.

Statement Regarding Students with Disabilities:

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS) with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Expectations for Student Conduct:

Student conduct is governed by the university's policies, as explained in the Office of Student Conduct: information and regulations.

In an academic community, students and faculty, and staff each have responsibility for maintaining an appropriate learning environment, whether online or in the classroom. Students, faculty, and staff have the responsibility to treat each other with understanding, dignity and respect. Disruption of teaching, administration, research, and other institutional activities is prohibited by Oregon Administrative Rule 576-015-0015 (1) and (2) and is subject to sanctions under university policies, OSU Office of Student Conduct.

Academic Integrity — Students are expected to comply with all regulations pertaining to academic honesty, defined as: An intentional act of deception in which a student seeks to claim credit for the work or effort of another person or uses unauthorized materials or fabricated information in any academic work. For further information, visit Avoiding Academic Dishonesty, or contact the office of Student Conduct and Mediation at 541-737-3656.

Syllabus:

Conduct in this online classroom — Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the university's regulations regarding civility. Students will be expected to treat all others with the same respect as they would want afforded themselves. Disrespectful behavior to others (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors in the course (such as persistent and unreasonable demands for time and attention both in and out of the classroom) is unacceptable and can result in sanctions as defined by Oregon Administrative Rules Division 015 Student Conduct Regulations.

Communications:

Ground Rules for Online Communication & Participation:
- Online threaded discussions are public messages, and all writings in this area will be viewable by the entire class or assigned group members. If you prefer that only the instructor sees your communication, send it to me by email, and be sure to identify yourself and the class.
- Posting of personal contact information is discouraged (e.g. telephone numbers, address, personal website address).
- Online Instructor Response Policy: I will check email frequently and will respond to course-related questions within 36 hours Monday through Friday, unless I post to the class in advance that I will be offline for a specific period of time, in which case Marisha Auerbach will monitor class questions. I cannot guarantee a response on the weekend or on National holidays.
- Observation of "Netiquette": All your online communications need to be composed with fairness, honesty and tact. Spelling and grammar are very important in an online course.
- What you put into an online course reflects on your level of professionalism. Here are a couple of references that discuss writing online:
  - http://goto.intwg.com/
  - Netiquette: http://www.albion.com/netiquette/corerules.html.

  Please check the Announcements area and the course syllabus before you ask general course "housekeeping" questions (i.e. how do I submit assignment 3?). If you don't see your answer there, then please contact me.

Guidelines for a productive and effective online classroom
- The discussion board is your space to interact with your colleagues related to current topics or responses to your colleague's statements. It is expected that each student will participate in a mature and respectful fashion.
- Participate actively in the discussions, having completed the readings and thought about the issues.
- Pay close attention to what your classmates write in their online comments. Ask clarifying questions, when appropriate. These questions are meant to probe and shed new light, not to minimize or devalue comments.
- Think through and reread your comments before you post them.
- Assume the best of others in the class and expect the best from them.
- Value the diversity of the class. Recognize and value the experiences, abilities, and knowledge each person brings to class.

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- Disagree with ideas, but do not make personal attacks. Do not demean or embarrass others.
- Do not make sexist, racist, homophobic, or victim-blaming comments at all.
- Be open to be challenged or confronted on your ideas or prejudices.

Student Assistance:

Contacting the instructor — Contact the instructor via e-mail for any communications that you wish to remain private. For questions in which the answer may be a benefit to the rest of the class, please post your question on the discussion forum. I will monitor that forum and respond according to the same time stated above in the Instructor Response Policy.

Technical Assistance — If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact PACE at 541-737-4197 or learn@oregonstate.edu.

Course Evaluation:

There will be a discussion board for anonymous feedback throughout the course. I seek to accommodate the diverse experiences and learning styles of the students, and am open t feedback for improving the course, during this semester and subsequent semesters.

OSU Student Evaluation of Teaching — Course evaluation results are extremely important and are used to help me improve this course and the learning experience of future students. You will receive an email with the course evaluation after the course has ended.