Permaculture Design and Practice

Lisa DePiano
Permaculture Design & Practice

STOCKSCH 297PD-SEC01

University of Massachusetts, Amherst

French Hall Room 106
Thursdays 2:30-5:15
Spring 2015

Instructor:
Lisa DePiano, M.R.P. ldepiano@umass.edu
Office hours by appointment

TA:
Cynthia Espinosa Marrero, M.S.E.E.Candidate cespinosasarrerro@antioch.edu

Course Description:
This three-credit course includes in-class lectures, field trips, design studio and a hands-on field component, to offer students a deepened and applied practice in permaculture design process and techniques. The course culminates with students developing a permaculture design and community engagement process for the UMass Agricultural Learning Center.

Learning Objectives:
Students will develop an understanding of:

• The difference between sustainability & regeneration
• The farm as an ecosystem
• Permaculture as a design framework and a set of techniques
• Farm scale permaculture
• A whole systems design process
• How to effectively communicate ideas through graphics and presentations

Enrollment Requirements:
Prerequisite: STOCKSCH 197G (previously PLSOILIN 197G) or instructor approval.

Reading Materials:
There are no required texts for this course. All course-reading materials are found on e-reserves and material online through the open education initiative.
Assignments and Grading:

Case Study Report Back (10 points): In design teams, students will present a 20-30 minute presentation on a selected case study and relate the case study to the course project.

Quiz’s (15 points): There will be a total of 3 quiz’s on both course content and class readings. Each quiz will be worth 5 points.

Mid-Term (25 points): Each student will work with their design teams to present a 15 minute Site Analysis Synthesis to the class. Each individual student is required to write a 3-5 page SWOT analysis outlining the Strengths, Weaknesses, Opportunities and Threats of the project.

Final (25 points): Final and Detailed Design Each student will work with their design teams to present a 15 minute Design Concept and an individual (TBD) instructor approved detailed design element.

Attendance (25 points): Students are required to attend and participate in each class and to notify the instructor in advance in the case of an excused absence. At the beginning of each class an attendance sheet will be passed out and it is the students responsibility to make sure they sign it. There is a total of 13 classes each class is worth 2 points. Students will start out with 4 free points. If the student arrives more than 15 minutes after the class has started or after the attendance sheet has been passed around they will only receive 1 point for the day.

Grading:

Grades for the course will be based upon student’s ability to achieve the learning objectives and assignments mentioned above. In addition attendance is mandatory and will be a significant portion of the overall grade.

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<thead>
<tr>
<th>Grade</th>
<th>Number</th>
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<tbody>
<tr>
<td>A</td>
<td>95-100</td>
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<tr>
<td>A-</td>
<td>90-94</td>
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<tr>
<td>B+</td>
<td>87-89</td>
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<tr>
<td>B</td>
<td>83-86</td>
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<tr>
<td>B-</td>
<td>80-83</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
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## Permaculture Design and Practice Course Syllabus

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<thead>
<tr>
<th>Grade</th>
<th>Number</th>
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<tbody>
<tr>
<td>C</td>
<td>73-76</td>
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<tr>
<td>C-</td>
<td>70-72</td>
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<tr>
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<tr>
<td>D</td>
<td>60-66</td>
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<tr>
<td>F</td>
<td>59 or Below</td>
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<table>
<thead>
<tr>
<th>Assignment</th>
<th>Total Points</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>25</td>
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<tr>
<td>Quiz Average</td>
<td>15</td>
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<tr>
<td>Case Study Report</td>
<td>10</td>
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<tr>
<td>Back</td>
<td></td>
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<tr>
<td>Mid-Term</td>
<td>25</td>
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<tr>
<td>Final</td>
<td>25</td>
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### Late Assignments:
Late assignments will be penalized at 5% of the potential project grade per day, including weekends i.e. one day late highest grade A-, two days B+, etc. If you have a good reason for being late notify me as soon as possible to schedule another due date. Assignments will no longer be accepted one week after they are due.

### Academic Honesty Policy:
All of your work for this course will follow the academic honesty policy established by the University of Massachusetts. You can find a copy of the policy in the student handbook at [http://www.umass.edu/dean_students/codeofconduct/acahonesty/](http://www.umass.edu/dean_students/codeofconduct/acahonesty/)

### Disability Policy:
The University of Massachusetts, Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), Learning Disabilities Support Services (LDSS), or Psychological Disabilities Services (PDS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements.
Permaculture Design and Practice Course Syllabus

**Course Calendar**  This calendar is subject to change

The course is structured in the following pattern:

<table>
<thead>
<tr>
<th>Phase 1 Forming</th>
<th>Phase 2 Site Analysis</th>
<th>Phase 3 Design</th>
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<tbody>
<tr>
<td>Weeks 1-3</td>
<td>Weeks 4-7</td>
<td>Weeks 8-14</td>
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**Week 1:**
Course introduction, goals and permaculture overview, principles, design process, design teams and roles

Studio: Creating design teams, design team niche analysis, personal and design team goals

Readings: Permaculture Principles and Pathways Beyond Sustainability, David Holmgren, Intro and Chapter 1

**Week 2:**
Project overview, farm design examples, map making and data layering, site analysis and assessment: The Scale of Permanence

Studio: client interview, Amanda Brown

Readings:
Edible Forest Gardens, Dave Jacke Chapter 3 pages 141-164

**Week 3:**
Site Analysis and Assessment Day (meet at the Agriculture Learning Center)

Reading: Edible Forest Gardens, Dave Jacke, finish chapter 3

**Week 4:**
Fundamentals of Public Presenting, Site analysis and assessment: Layers presentation

Studio: Create Draft A & A synthesis
Permaculture Design and Practice Course Syllabus
Reading: The Resilient Farm and Homestead, Ben Falk pages 54-78

**Week 5:**

Design Charrette held at the Agriculture Learning Center
Reading: The Permaculture Handbook, Peter Bane 41-56
Homework: Make a mind map of the different elements of the project

**Week 6:**

Case Study Presentations and Content, Going from A and A to Design, Design Concept and Graphic Standards

Studio:
Prepare Site A and A Summary and initial design recommendations

Readings: The Resilient Farm and Homestead pages 78-102
Quiz section 1: On Moodle

**Week 7:**

Case Study’s and Content

Studio: Mid-Term Site Analysis and Assessment Group Presentations

Listen: Permaculture on Organic Farms
http://www.extension.org/pages/71918/permaculture-on-organic-farms-webinar#VJLT_eMo4m-

**Week 8:**

Field Trip: TBA

Reading: Sustainable (R)evolution: 54-58
Homework: Watch: How Cuba Survived Peal Oil, Movie
https://www.youtube.com/watch?v=UWWces5TkCA

**Week 9:**
Permaculture Design and Practice Course Syllabus

No Class Spring Break

**Week 10:**

Case Study: Agricultural lessons from Cuba, Cynthia Espinosa

Studio: Design Concept

Read: Case Study

**Week 11:**

Optional Site Visit and Studio Time

Read: Case Study

**Week 12:**

Case Studies

Studio: Finish Design Concept and Individual Designs

Read: Case Study

Quiz: Section 2 on Moodle

**Week 13:**

Final Presentations

**Week 14:**

Evaluations and next steps

Quiz: Section 3 on Moodle