

ENST 123: Green Building

Fall 2018



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Office Hours: By appointment.
Class Days / Times: TH 3:00- 4:50 PM
Classroom: Campus Center for Appropriate Technology (CCAT)
Dates: 9/27/18 - 11/29/18

Course Description:

This course is intended to create a foundation that enables students to exercise and/or adopt natural building and construction methods. Students will examine standard building practices and explore *alternative* methods of *sustainable residential design* through hands-on activities, reading material, assigned podcast, group discussions, and guest speaker presentations. The last 15-20 minutes will be devoted to cleaning up classroom/ working areas.

Each student will build and work with natural materials (including, but not limited to - cobb, natural paint, hempcrete and lawn to garden conversion) and gain a working knowledge of what constitutes green building. Additionally, students will leave with instructions and experience that allows them to continue the use of green building methods after this course. This class is not course heavy, it is not intended to be challenging. This course is designed to inform the possibilities of using appropriated technologies within urbanized areas. Suggested Texts / Readings: Suggested reading assignments will be provided via email and Canvas attachments. CCAT has a library space which you are encouraged to explore.

Course Objectives:

Through this course, you will:

- Learn to natural make paint, hempcrete, and cobb, how to convert a lawn into a garden
- Work in consensus- based groups
- Explore alternative approaches to building materials and design
- Participate in hands-on activities with earthen building mediums
- Address and discuss the embedded energy that goes into making building materials
- Be able to take the knowledge of this course and apply it through internships, your home, or future coursework

- Be able to increase awareness within the community and encourage others to think “outside the box” and try new building techniques

Suggested Texts / Readings:

Suggested reading assignments will be provided on Canvas. CCAT has a library space which you are encouraged to explore.

Humboldt State University Learning Outcomes:

HSU graduates will have demonstrated:

- Effective communication through written and oral modes.
- Critical and creative thinking skills in acquiring a broad base of knowledge and applying it to complex issues
- Appreciation for and understanding of an expanded world perspective by engaging respectfully with a diverse range of individuals, communities and viewpoints.

HSU graduates will be prepared to:

- Succeed in their chosen careers.
- Take responsibility for identifying personal goals and practicing lifelong learning.
- Pursue social justice, promote environmental responsibility, and improve economic conditions in their workplaces and communities.

Environmental Studies Student Learning Outcomes:

Students completing this program will have demonstrated the ability to:

- apply knowledge of environmental systems to practical problems
- demonstrate competence in a skill that complements environmental studies knowledge.

Course Format:

This is a dual format class: the first ~30 minutes will be comprised of dialogue regarding the podcast, suggested readings, and the remaining time will allow students to perform hands- on tasks pertaining to the course building materials. As students work with these materials, both students and instructors will maintain a dialogue that explores the purpose and viability of the task, which enables students to ask questions and receive feedback as they work.

Course Materials:

While this course is not taught in a standard classroom, there will be required readings that students are encouraged to complete in order to fully participate in class discussions. All readings and multimedia materials will be available on canvas. No book is required.

Assignments: There will be a six assignments for this class. The assignment is to listen to the podcast assigned and answer a short question that will be due next class. The assignment can be hand typed or written and least a paragraph length (4- 5 sentences). This assignment is not graded but it does count towards participating because I will be using the assignment to take role. The assignment will be due at the end of our 30 minutes discussion. If you do not complete the

assignment please let me know, because if I will mark you absent and It will impact your attendance.

Course Requirements:

In class building assignments will be completed during class time only. As a final project, students are to choose an appropriate form of technology, or green building technique not covered in this course and present their research/findings to the group on the last day of class. Presentations will be done individually and should be 5 - 6 minutes in length, and utilize a visual aid such as Powerpoint, prezzi, photographs or a poster.

Attendance / Grading:

This one-unit course will be graded on a Credit/No-Credit basis.
 Attendance is *mandatory*.
 Three unexcused absences WILL result in a non-passing grade.
 One absence will not affect your attendance grade.
 Only one assignment will be allowed to turn in for late work.

There are opportunities for students to make up an absence or make up an assignment. Students can attend Volunteer Fridays at CCAT (from 10:00am - 4:00pm) for the duration of the class session (1.5 hours) and have their time signed off by a designated CCAT employee or Co-Director.

Class Schedule
 (Subject to change with fair notice)

Date	Topic	Activity	Assignment
9/27	Introduction to Green Building	<p>Activity: What us Green building, Introductions, Syllabus, tour CCAT Grounds and Resources.</p> <p>-Introduction to Green Building and Natural Building</p>	<p>Assignment: Podcast:<u>The Sustainable Builder & Natural Plasters: Chris Magwood</u></p> <p>Question due next class: Deconstruct the terms “green building”, what does it mean to you? How does the term “natural building” differ from “green building”?</p>

<p>10/4</p>	<p>Interdisciplinary perspectives/ Introduction to Natural Paint</p> <p>*The last 15 min of every class should be devoted to cleaning up classroom/site (if needed)</p>	<p>Activity: Discuss Last week's assignment / Question.</p> <p>Explore natural paint recipes, create unique blend at CCAT.</p>	<p>Assignment: Identify three methods of green building at CCAT, and research one we did not discuss in class. Write a paragraph of the one describing how it's used and why it interest you.(Hand in next class).</p> <p>Question due for next class: Now that you have learned about what green building is, how does it apply to your study of interest?</p>
<p>10/11</p>	<p>Lawn Conversion: Learn How to Convert your lawn. Part 1: Trenching & Sheet mulching process</p>	<p>Activity: Discuss Last weeks assignment/ Question.</p> <p>-Step by Steps how to convert lawn using Sheet mulching in an urbanized areas.</p> <p>- Our City Forest</p> <p>-Discuss video(s)</p> <p>-Discuss CCAT Project Go Outside: Visualize project at CCAT.</p> <p>-Discuss Final Project</p>	<p>Assignment: Lawn to Garden Conversion Podcast: For a Greener Yard, Lose the Lawn</p> <p>Question due next class: What's the importance of converting a lawn to a garden, or a rainscape? How does this related to green building and other sustainable gardening?</p>
<p>10/18</p>	<p>Lawn Conversion: Learn How to Convert your lawn. Part 2: Design & Mulch types</p>	<p>Activity: Discuss Last week's assignment/ Question.</p> <p>-Why plant California Native Shrubs?</p> <p>-Making natural mulch from leaves</p> <p>-Discuss Next's weeks Assignment: Converting lawn to garden at CCAT</p>	<p>Assignment: Come up with a design of an area in your yard, friend's yard etc. here in arcata or in your hometown where you can see yourself converting a lawn. (Hand in, next week)</p>

10/25	<p>Lawn Conversion: At CCAT</p> <p>*The last 15 min of every class should be devoted to cleaning up classroom/site (if needed)</p>	<p>Converting Lawn at CCAT (lay down cardboard, cover with straw/mulch)</p>	<p>Assignment: Tiny House Podcast:Building a Tiny Home</p> <p>Question: How is utilizing a tiny house relate to sustainability and green building/natural building?</p>
11/1	<p>Field Trip*</p>	<p>Activity: Discuss Last week's assignment/ Question.</p> <p>-Tiny House Field trip</p>	<p>Assignment: Podcast: Episode 1214: Natural Building with Cliff Davis</p> <p>Question due for next class: What are some difficulties about natural building? What's another difficulty that was not discussed in the podcast?</p>
11/8	<p>Cobblestone</p> <p>*The last 15 min of every class should be devoted to cleaning up classroom/site (if needed)</p>	<p>Activity: Discuss Last weeks assignment/ Question.</p> <p>Cobblestone introduction -Working with Cobb at CCAT</p>	<p>Assignment: Hemp certe Podcast :Is Hempcrete a Good Material for Ecological Buildings?</p> <p>Question due next class: Can you envision hempcrete used on a large industrial scale? Why or why not? What are some drawbacks of using hempcrete?</p>
11/15	<p>Hemp Compost</p> <p>*The last 15 min of every class should be devoted to cleaning up</p>	<p>Activity: Discuss Last week's assignment/ Question.</p> <p>-Making hempcrete insulation Compost bin</p>	<p>Assignment: Work on final project</p>

	classroom/site (if needed)		
11/22	Thanksgiving	NO CLASS	NO ASSIGNMENT
11/29	Final Project	Activity: Final Project Presentations	Final project due Student presentations 5-6 minutes Destress Potluck Bring food

Inclusivity:

Students in this class are encouraged to speak up and participate in-class. Each of us must show respect for each other because our class represents a diversity of beliefs, backgrounds, and experiences. We believe that this is what will enrich all of our experiences together. We recognize that our individual differences can deepen our understanding of one another and the world around us, rather than divide us. In this class, people of all ethnicities, genders and gender identities, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences. If you feel your differences may in some way isolate you from our classroom community or if you have a specific need, please speak with us early in the semester so that we can work together to help you become an active and engaged member of our class and community. (Adapted from HSU, CSU Chico, and Winona State University)

Students with Disabilities:

Students who wish to request disability-related accommodations must contact the Student Disability Resource Center in the Lower Library at 826-4678 (voice) or 826-5392 (TDD). More information is available at <http://www.humboldt.edu/disability/>. I will make every effort to accommodate students of all abilities.

Emergency Evacuation Plan:

Please review the evacuation plans for the lecture room (posted in the rooms). For information on campus emergency procedures, see the following website:

http://www2.humboldt.edu/businessservices/sites/default/files/images/Emergency-Procedures_1.pdf

University Policies and Procedures:

Please find relevant university policies and procedures such as Add/Drop Policy, Resources for Students with Disabilities, Academic Honesty Policy, Attendance and Disruptive Behavior Policy, Financial Aid, Emergency Procedures, and Counseling and Psychological Services at <http://www2.humboldt.edu/academicprograms/syllabus-addendum-campus-resources-policies>.