OBJECTIVES

What does it mean to design ecologically?

What tools do we need to form ecological frameworks that help us develop design proposals that protect and/or regenerate natural system function?

How do we value—and subsequently prioritize—natural elements, functions, and systems?

How do we balance the desires and needs for robust ecological function and other program requirements?

How do we integrate and combine ecological function with other program requirements?

How do we transform scientific knowledge into built expression?

What is the difference between ecological planning and ecological design?

What tools do we need to bridge the gap between site analysis and design?

What kinds of tools best address thinking and generating experientially rich proposals vs those that are better at addressing programmatically based proposals, and what kinds of tools best address high performance strategies and designs?

How do we create landscapes that engage their participants to more highly value and to care about ecological systems?

These are the primary questions that we will address in this studio. Thus, developing skills for exploring, becoming more facile in addressing, and expressing through physical proposals these (and other) questions will constitute the studio’s primary objectives. Rather than aiming to form discrete, fixed, and complete intellectual positions that might be considered “answers,” we will, in fact, take a converse approach and resist ideological positions and methods for working. Instead, we will build upon previous studio teaching and ecologically-related courses and expand your repertoires for design by addressing a more complex program, a bigger site, a more rigorous application of ecological knowledge, and a different set of analysis/design development tools. Ultimately, you should have improved skills in the following at both a landscape scale (acres large) and a site scale (an acre +/-):

- Identifying and Critiquing the ecological value of elements, functions, and processes
- Critiquing the success of other designers’ proposals with regard to ecological preservation and/or regeneration
- Applying ecological principles to design proposals
- Utilizing both quantitative and discrete forms of analysis and more subjective, creative means for exploring ecological ideas—and moving between the two modes of working more facilely
- Deriving program, formal expression, and salient experience from ecological principals—that is, making landscapes that are rich in experience, full of wonder, and memorable for those who experience them.
APPROACHES

Questioning Recursively
Just as the objectives were introduced via questions, the studio will approach the studio’s work as a questioning and exploratory endeavor that, in its proposals, asks further questions of you in your work and provokes the imaginary users and participants of your proposals to ask further, engaging questions of the enticements you have created for them. As such, our approach will be decidedly different than considering design a problem-solving endeavor or even one in which a particular program must be fit into a particular site. Rather, the ecological analysis and objectives will form substantive means for generating design ideas, form, and expression (content) and will constitute a strong force in determining outcomes. In other words, rather than program being the primary generator—as is most often and conventionally the case—our process will be driven by ideas derived from asking questions of ecology. Thus, we will work recursively between scholarly, scientific findings and artistic exploration.

Site Readings
We will pursue our explorations through a series of what I call "Site Readings."

The “Reading” part indicates how these explorations will record observations of your site. These readings will record objective, empirical observations but ALSO record more subjective, lyrical, observations. They will be both scientific AND artful, demanding that you rigorously use both sides of your brain and all types of thinking required to produce robust, effective designs that are both ecologically sound and humanistically meaningful (i.e. they engage people’s hearts and minds). As such, these readings are never site isolated as either “analysis” or “design,” instead, articulating territory in between. They are intended to avoid “analysis paralysis.”

The “Site” part is a play on words for “Sight” Readings, which is when a musician is given a piece of music (a score) that s/he has never seen before and—on the spot—plays it, reading and playing as s/he goes. [For your edification, I had always intended to be a concert pianist and was a piano performance major before architecture school.] Musicians don’t play every note correctly or get every phrase line right the first time through; they learn something new each time they play it through again. Like musicians, we are going to “read” sites and interpret them as we go. We are going to re-read them through subsequent readings, each time learning something new. And you will be asked to re-read even after you have proposed a design to include something(s) you missed or that will make your proposal better. In a continuation of the music metaphor, practice makes perfect!

Negotiated Independence
Studies are by nature self-directed pursuits. You get from them what you invest in them. This studio is no exception except for the fact that I will give you more independence than you are likely accustomed. Just as I do not believe that design should be prescriptive, I do not believe that studios should be highly controlled by their instructors. On the one hand, I will be strongly urging you to pursue your own individual passions — what intrigues you, what excites you, and what makes design fun for you. Furthermore, I will be allowing you to generate your own program and even decide on your own specific products. As you pursue these activities, Hillary and I will make suggestions that it will be your decision whether to take or not. You must “own” your decisions and your products. On the other hand, I will maintain a very high standard on the level of production, craft, content, thoroughness, and robustness of those products—all of which are results of what I consider excellent schooling and 30 years of professional practice. Thus, your job is not to please me but to meet the performance standard that I have set for you and the class. My job will be to mentor you to the best development of your passions and intentions. Our job together will be to develop a negotiated, agreed upon direction and set of products.

Conclusive Speediness
The professional practice design world runs fast and toward definitive conclusions, and this is the model that we will use in this studio. Plus, students tend to postpone decision making and, thereby, think too much and make/produce too little. Therefore, the work of this studio is designed to necessitate that you focus on production and choose a pursuit and see it through. Therefore, rather than undertake a series of projects that remain preliminary until a final design presentation that is, correspondingly, heavily weighted in terms of grading, we will undertake five projects that a) will be relatively evenly weighted and b) you will present as final products. An appropriate metaphor might be to view the projects as a series of sprints in which you must choose a lane and run like the wind; while the lane (i.e. the quality of the ideas) you choose does matter, what matters more in allowing you to “win” is how well you run the race (i.e. how well you develop your chosen content).
SITE

We will be using North Campus as our study site. We will first begin by “reading” the entirety of North Campus. One of the reasons to focus on North Campus is the availability of the 2008 Master Plan by Sasaki/URS/Andropogon, which provides valuable base material, insight, and a “springboard” for our investigations; it is also less than thorough in its incorporation of ecological principles (which we will directly address). After investigating the larger site of North Campus, each of you will choose a specific, smaller site on which to focus.

OVERVIEW OF PROJECTS

You will receive detailed project descriptions when they are assigned. The following offers an overview to let you know what’s coming and understand the larger arc of the studio.

Note that each project has interim deadlines that MUST be met to ensure proper, progressive development of your individual project. In addition, consistent completion of work that contributes to the studio’s collective development is part of your obligation to the studio, just as it will be in professional practice.

Site Reading 1 • Identifying + Valuing Ecological Components

Issued January 6 • Due January 20

Part 1 • Inventory natural elements and characterize them according to criteria; Complete Assigned Reading; (working in pairs)

Part 2 • Identify primary functions + processes; Quantify elements according to relevant criteria (working in pairs)

Part 3 • Assign value to elements; Identify potentials (individual)

Site Reading 2 • Developing an Ecological Structure Plan

Issued January 20 • Due January 27

Part 1 • Read Master Plan Report; Critique strategies + tactics proposed by Master Plan Design Team (Group activity)

Part 2 • Propose improvements AND apply Site Reading 1 knowledge by developing an Ecological Structure Plan for North Campus (Individual)
Site Reading 3 • Exploring through (Fun) Creative Mappings

Part 1 • Complete Assigned Reading; Identify a site, a passion, and a question found through previous projects; Identify model mappings

Part 2 • Complete three “swatch mappings”

Part 3 • Hone ideas/question/media and complete Creative Mapping(s)—Work hard while having fun!

Site Reading 4 • Generating Design from Explorations and Generating Explorations through Design

Part 1 • Brainstorm three syntheses of ecological principles, concepts, or ideas + program + aesthetic expression

Part 2 • Identify three case studies and propose initial ideas for their transformation as applicable to your design / One paragraph

Part 3 • Synthesize understandings of Site Readings 1, 2, and 3 into a design proposal that allows users to experience and/or explore the ecological content that, in part, generated your design

Site Reading 5 • Site Re-Reading

Part 1 • Reevaluate, re-view what has been neglected, forgotten; Layer on additional content

Part 2 • Revise, Organize, and Deliver 1) a thorough and clear argument through words and images of how and why you developed your ideas and 2) a well-developed and experientially engaging design.

I am happy to be teaching this studio and glad that you are in it. You will get from this course what you put into it. Go for it!
TEXTS/COSTS

No books are required for the course. Relevant texts and images will be on reserve and available to the class. Instructor will post readings electronically that students may choose to print. Students will be responsible for acquiring case studies research materials via photocopying and/or internet. Students will be responsible for acquiring materials for Creative Mapping assignments. I understand that you are graduate students and are perhaps on limited budgets; we will work together to keep these costs within your budget.

ASSESSMENT

Assessment will be based on what students produce given the equitable allotment of time afforded to each student by Hillary and me. We are aware that students span the spectrum of learning styles and that each of you is different, which means that some of you will require more lengthy explanations than others. However, we have limited studio time and must be fair in our adjudication of studio time; those students needing additional time will be accommodated according to what is reasonable by scheduling time outside of studio that is mutually beneficial.

Grading will reflect objective/quantitative achievement and the instructor’s professional judgments about design excellence, level of rigorous thought, thoroughness, level of craft and precision, communicative and graphic quality, and apparent effort.

Project Weighting
Site Reading 1 • 15%
Site Reading 2 • 15%
Site Reading 3 • 25%
Site Reading 4 • 30%
Site Re-Reading • 15%

Grades will reflect the presence (or lack) of the following:

• New work and consistent, progressive development is required for each class; in other words, production at the last minute, Hail Marys, or similar blitzkrieg work efforts are inconsistent with the design development goals of the Studio, the Department of Landscape Architecture, the School of Natural Resources, and accepted standards of environmental design and will, therefore, be downgraded. This expectation includes not only project assignment (Site Reading) final deadlines but also interim deadlines within each Site Reading.

• Students are expected to be in attendance for the entirety of each studio period, including being on time and not leaving early.

• Students are expected to constructively contribute to the intellectual discourse of the class and the critique of fellow students’ work. In other words, even if you are a reserved, taciturn person, you are expected to engage in discussions, not only when prompted but also by your own initiative.

• Work must be pinned up and ready for critique at the times specified.

NO GRADE will be given without submission of final documentation for ALL assignments. No exceptions. This documentation must be complete and of a quality that it may be shared with the public, in a way that represents the high standards and reputation of the School and the University. Keep in mind that the resolution of the electronic images should be 300dpi so that it can be professionally printed.

All members of a group who worked collectively on a project will receive the same grade.

Late Work will not be accepted except under extenuating circumstances that are approved prior to deadline.
## Grade Value Description

A+ 4.3 Outstanding work—Work that evokes “wow” responses for both thought and craft, significantly contributes new, critical, and/or evocative ways of viewing the course subjects.

A 4.0 Very Good Work—Work that evokes praise from observers and is an example that the Department and School may display as representative of goals and outcomes. Complete, demonstrating rigorous thought, well-crafted, compelling. Developed in consistent manner and/or demonstrates continual improvement.

A- 3.7 Very Good Work—Very well developed, engaging, and insightful but is not quite as complete, demonstrating of rigorous thought, well-crafted, and/or compelling as it might have been. Developed in consistent manner and/or demonstrates continual improvement.

B+ 3.3 Good Work—Well developed and engaging, demonstrating a comprehensive and thoughtful argument, and is insightful, but lacks some rigor in development of argument and/or craft. Developed in consistent manner and/or demonstrates continual improvement.

B 3.0 Satisfactory Work—Fulfills the assignment and is engaging but lacks some degree of rigor, insight, and/or specificity in intellectual development, in craft, and/or development in consistent manner or continued improvement.

B- 2.7 Barely Satisfactory Work—May completely fulfill assignment in ways that are somewhat engaging but has sufficient gaps in demonstrating insight, development of craft, and/or intellectual development in rigor, thoroughness, or specificity. May lack development in consistent manner or continued improvement.

C+ 2.3 Very Acceptable but not Satisfactory Work—Does not completely fulfill assignment or fulfills the assignment in a perfunctory way that is not sufficiently engaging. Has sufficient gaps in demonstrating intellectual development in rigor, thoroughness, and/or specificity, as well as craft. Lacks insight. May lack development in consistent manner or continued improvement.

C 2.0 Acceptable Work—Does not completely fulfill assignment or fulfills the assignment in a perfunctory way that is not engaging. Has sufficient gaps in demonstrating development of craft and or intellectual development in rigor, thoroughness, or specificity. Lacks insight. May lack development in consistent manner or continued improvement.

C- 1.7 Barely Acceptable Work—Incomplete, failing to demonstrate rigorous thought, visually unsophisticated, and/or partially lacking technical competence. Lacks insight and development in consistent manner or continued improvement.

F 1.3 Unsatisfactory Work—All final grades below C- are indicative of failure at the graduate level and cannot be counted toward degree.

## OTHER CONSIDERATIONS

As a synthetic discipline, most landscape/architecture/art practitioners are loathe to claim ideas as solely their own. Therefore, the sharing, borrowing, and even taking of ideas is encouraged. This is not stealing or plagiarism; it is the application, the rigor, the creativity, and indeed, the transformation of an idea that makes it unique and “yours.” Violations occur only when used without attribution and when used without transformation. Any work that is judged to be either wholly or in part based on the work of another student or author (published or not), which is not properly credited (i.e. footnoted), will be considered plagiarism, and therefore failing to meet the major educational objectives of the University. No warnings will be issued. Also considered University violations will be deliberate attempts to withhold shared class materials, impede the progress of fellow students’ work, or damage of others’ work, and such acts will be dealt with accordingly.

All intellectual property rights of student works, including but not limited to mappings, drawings, models, etc., are governed by the applicable University policies: Copyright, Patent and Trademark policies.

If you require an accommodation due to a disability, please let me know, and we will pursue accommodation through the University’s policies.

If Hillary or I ever do anything that makes you feel uncomfortable, please let me/us know RIGHT AWAY so that we can address and resolve it.

Finally, if something is not clear to you, let me know RIGHT AWAY, and we will find a way to address it. I may not be able to address it at that moment because of consideration of your classmates’ time or because it might call undue attention to you. However, your understanding is important, and I will exercise all reasonable means to support your constructive progress in the course.
SNRE 590B: Ecological Site Design II
Winter 2016: MWF 9-11:40 3028 Dana

Instructor: MaryCarol Hunter, PhD, RLA  mchunter@umich.edu
GSI: Hillary Hanzel  hanzelhi@umich.edu
For both, office hours by appt.

Syllabus
This course will introduce you to design that embraces wellbeing of humans along with that of nature. It will extend your platform for evidence-based design to include theory from the fields of environmental psychology and aesthetics. We will focus on people’s immediate experience of their environment, learning about the use the human scale in design, the sensory experience of place and its role in wellbeing, and response of people to nature elements in the built environment. You will achieve greater fluency in the use of 3D graphical investigation as a key process in designing a space. In addition, there will be some coordination with your engineering class so that your final project will be accompanied by a grading plan. You will complete several investigative assignments before embarking on the focal project. There will be readings throughout the course in support of evidence-based design. All readings will be posted on Canvas.

Learning Goals
Learn how to design for psychological ecosystem services using an evidence-base
Develop a visceral sense of space, depth and topography based on the human scale
Discover techniques to amplify your creativity
Learn to design with sketches and section-elevation drawings rather than reliance on 2D plan view

Evaluation
40% Investigative Assignments
   Major project:
30% Design Development
30% Final Design

Each grade will reflect the quality of the design work as well as the process that employed. This also includes being ready for desk crits with new drawings or design products for each studio meeting. It also includes participation in discussion and critique. See next page for description of grade values.

Late Assignment Policy
For the sake of fairness to all students in the course, deadlines will be strictly enforced. Unless you’ve made prior arrangements, lateness will impact your grade. If you have trouble completing a particular assignment, this must be discussed with me before the deadline. At the end of the semester, students with will be assigned a letter grade on the basis of the work that has been completed. “Incompletes” will be given only in extenuating circumstances under special permission.

Academic Honesty
All students are responsible for maintaining the highest standards of honesty and integrity in every phase of their academic career. The penalties for academic dishonesty are severe; ignorance of what constitutes dishonesty is not an acceptable defense. We live in a postmodern world where “borrowing” the ideas and designs of others from the internet is part of the creative process. If there is a circumstance where using the work of another is important, then you must acknowledge the source of the idea, photo, drawing, text, etc. by providing a website address or some other form of formal reference.