

LA 489/589 – Landscape Architecture Design & Process

Biomimicry Global Design Challenge

Spring 2015 – Mon/Wed/Fri 1:00 to 5:00pm
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Studio description

This term we will prepare submissions in the student category of the Biomimicry Global Design Challenge. The competition prompt reads as follows: *Look to the abundance of lessons nature has to offer and develop a biomimetic design that solves an important food system challenge while protecting the health of our planet.*

- The entry must involve a technology, product, service, or process that addresses a challenge related to improving the food system.
- The entry must show a clear connection between a biological mechanism, process, pattern, or system, and the technological solution submitted; i.e., the solution must emulate a natural model(s).
- Entries must describe an entirely new solution and represent a given team's unique work and intellectual property.

Students must submit their team's entry by the end of term to pass studio.

Biomimicry as a tool for Design

The process of thinking about design through a Biomimic lens asks designers to shift their thinking from "What am I going to make?" to "What does my design need to do?" We are not designing products, we are designing processes.

Thus Biomimicry is a great way to continue to teach students of Landscape Architecture how to think about and design for systems, not just individual places or objects. Systems based thinking is how we must design in order to meet the challenges of shrinking resources on a changing planet. We must always take into account the impact of designed places on the larger living systems in which they reside. We must always think about the impact on future generations, not just our own.

4/589 Studio as Preparation for Comprehensive and Masters Project

This being your second to last studio, we have high expectations. First and foremost we expect students to work in a very self-directed manner. In order to create successful competition materials students must work above and beyond the baseline we prompt through studio assignments and benchmark goals. We expect new work produced for every single studio day.

Second, we ask students individually and as part of a team to create a plan, and use research to guide the design process. These two activities do go hand in hand. Research feeds and develops design, but one must have a plan of attack for research. We don't just "do research." We need to understand what we need to accomplish by researching. Each team will create plans for design process and research, developing clear and specific statements of goals for information acquisition and design development.



Overview of Studio Structure

We place emphasis on design exercises and processes that aid in finding inspiration in nature. We will adhere to Kenny Helphand's famous edict "GET OUT!" by going outside as a required part of this studio's curriculum. Keep this quote taken directly from the Biomimicry Design Toolbox in mind: "A recent study found that "four days of immersion in nature, and the corresponding disconnection from multi-media and technology, increases performance on a creative problem-solving task by a full 50%" ([Atchley et al. 2013](#))

Challenge yourself to experiment with new methods this term including but not limited to:

Loose Drawing
 Writing
 Outward Looking
 Reading
 Peer Reviews
 Gestation
 Quiet/Break
 Make Openly (photography, poetry, ceramics, etc.)
 Observation

We will actively and explicitly apply most of these methods for studio exercises and studio assignments.

Learning Objectives

The purpose of this studio is to develop students':

- a) Exposure to modes of design process outside the traditional approaches in Landscape Architecture.
- b) Ability to Critically read a competition brief.
- c) Skills in balancing a good design with a clear and persuasive presentation.
- d) Skills in working within a constrained set of expectations for design development and presentation.
- e) Ability to make an effective "Pitch." This is swiftly becoming an essential mode of communication across all design fields.
- f) Ability to formulate and follow a research plan that develops design tactics.
- g) Familiarity with research methods including literature review, interviews, and direct observation
- h) Ability to assess and iterate design proposals
- i) Familiarity with the concepts and design process of Biomimicry

Competition Logistics:

- Students will work in teams of 2 or 3
- All teams will have to submit their final entry by June 10 @ 5pm to receive a grade for studio
- Students will form design teams after the initial research stage
- Teams will declare a final goal for entry after midterm (more on this later)

Important Dates and Deadlines

- January 20, 2015 — Registration opens.
- April 15, 2015 — Online submission form becomes available.
- August 3, 2015 — Submissions are due.
- August 4 – September 7, 2015 — Preliminary judging.
- September 11 — Open category finalists are notified.
- October 2015 — Open category finalists pitch to experts; Open and Student category winners named at awards ceremony (USA, location to be announced).
- October 2015 — The 2016 Food Systems challenge begins; first prototype round begins for finalists from the 2015 Open category.

Guidelines for Studio Participation and Success

Attendance:

Come to all scheduled classes. If you are unable to attend, you must notify either Anne or Emma in advance to request an excused absence. No more than two absences are allowed. Failure to communicate about absences will affect your grade.

Grading:

We will assess each student based on his/her individual skill development throughout the studio. Effort, exploration, work ethic, and innovation will factor into how each person expands her/his design skills. The instructors will communicate with each student individually throughout the term about their progress and how she/he can continue to build skills and knowledge.

Criteria for evaluation:

- Earnestly work towards developing and expanding your skills
- Show consistent progress in work throughout the term – new individual and/or team work for every studio day.
- Participate in Studio
- Give constructive feedback to your peers
- Complete all assignments -- class and individual
- Attend Studio, on time -- no more than 2 absences will be allowed, please communicate with either Anne or Emma about foreseen and unforeseen absences
- Studio meets 1 – 5pm and we expect you to be present and working during that time.
- Present cohesive presentations for each assignment. Participate in clear constructive discussion in pin ups.

Professionalism and Studio as Workplace

Upon the acceptance to this professional program you are preparing to enter a professional work environment. In this environment respect for your peers and faculty is key to fostering a healthy and creative environment. We expect each of you to strive to maintain this professional atmosphere within the studio.

The studio space is expected to be a place any studio member should feel comfortable working at any time of the day. This is a 24 hr. policy that includes the following guidelines.

- General atmosphere in the studio should be professional and respectful.
- Music must not disturb others in studio – headphones are always the default way to listen to music. If someone asks you to turn your music down, or put on headphones, you must comply.
- TV, movies, videos, etc. are not to be played over speakers, ever. The only exception is for studio work that requires the viewing of videos, TV, etc.
- No video games, or other games will be played in studio.
- When you use a group space, clean it up when you are done.
- Keep computer area clean and clear.
- Studio Computers are shared resources. Do not hog the computers.
- Any member of the studio has the right and responsibility to request that any distracting, disrespectful or unprofessional conduct in studio stop.

Accommodations for differently abled persons:

Please let either Anne or Emma know if you need special accommodation for a documented physical or learning “disability“. We think of it not as a “dis” but a different and will do everything we can to accommodate your needs. We can also point you towards helpful University resources.

You may also wish to contact Disability Services in 164 Oregon Hall at 346-1155 or disabsrv@uoregon.edu.

Academic Misconduct Policy

The University Student Conduct Code (available at conduct.uoregon.edu) defines academic misconduct. Students are prohibited from committing or attempting any act that constitutes academic misconduct. By way of example,

students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor. Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas) and use only the sources and resources authorized by the instructor. If there is any question about whether an act constitutes academic misconduct, it is the student's obligation to clarify the question with the instructor before committing or attempting to commit the act. Additional information about a common form of academic misconduct, plagiarism, is available at www.libweb.uoregon.edu/guides/plagiarism/students.

Inclusion Statement

The School of Architecture and Allied Arts is a community that values inclusion. We are committed to equal opportunities for all faculty, staff, and students to develop individually, professionally, and academically regardless of ethnicity, heritage, gender, sexual orientation, ability, socio-economic standing, cultural beliefs, and traditions. We are dedicated to an environment that is inclusive and fosters awareness, understanding, and respect for diversity. If you feel excluded or threatened, please contact your instructor and/or department head. The University Bias Response Team is also a resource that can assist you. Find more information at their website at <http://bias.uoregon.edu/index.html> or by phoning 541-346-2037.

Preliminary Calendar:

Studio is an organic, often non-linear learning experience. With that in mind we reserve the right to change the schedule as needed to accommodate any shifts or opportunities that occur during the term. This is for the benefit of making the most out of the time we have together.

DATES	ACTIVITIES	ASSIGNMENTS
Week 1		
Monday 3/30	<ul style="list-style-type: none"> • Studio Introduction (overview and schedule) • Function / Strategy • Animal and Built Forms Flip Cards • Drawing to understand / Drawing to explain to others 	Prepare research assignments to present on Wednesday (4/1)
Wednesday 4/1	<ul style="list-style-type: none"> • Research Topics Presented • Nature Journal Introduced 	Nature Journal Entry Due Friday
Friday 4/3	Field Trip (Get Out Day!) <ul style="list-style-type: none"> • Systems 	Walk / Up-Down / Scales / Systems Assignment due Monday (4/6)
Week 2		
Monday 4/6	<ul style="list-style-type: none"> • Presentation (Pitch) of weekend assignment • Quiet work time or social work time on system and functions of interest 	<ul style="list-style-type: none"> • Systems/values worksheets for Wednesday.
Wednesday 4/8	<ul style="list-style-type: none"> • Pickle exercise • SPEED DATING! • Teams chosen by end of class 	<ul style="list-style-type: none"> • Drawing as Understanding team work. • Nature journal entry due
Friday 4/10	<ul style="list-style-type: none"> • Biological Strategy to Design Strategy 	Come up with 3-4 ideas for Sat
Saturday 4/11	Field Trip (Get Out Day!) <ul style="list-style-type: none"> • Using Nature as an Evaluative Mirror 	Develop first ideas for Monday
Week 3		
Monday 4/13	<ul style="list-style-type: none"> • Pitch team problem / system / function / strategy / context • ...gestate... • What is your open-ended process? • Create team plan 	<ul style="list-style-type: none"> • Team plan for Wednesday. • 3-5 sets of ideas for Wednesday including drawing as understanding • Nature Journal Entry Due
Wednesday 4/15	<ul style="list-style-type: none"> • Desk crits • ITERATE! 	<ul style="list-style-type: none"> • Walking as gestation and idea generation. Bring back to team on Friday. • Nature Journal Due
Friday 4/17	<ul style="list-style-type: none"> • Sketch to understand / explain • Studio pin up at 3pm. 	<ul style="list-style-type: none"> • Decision time. Pick, iterate. • 5 cycles for Monday.
Week 4		
Monday 4/20	<ul style="list-style-type: none"> • Desk crit day with guest experts • Hand out midterm expectations 	<ul style="list-style-type: none"> • Team self assessment after desk crits for Wednesday • Pinpoint expert interviewees for Wednesday

Wednesday 4/22	<ul style="list-style-type: none"> •Desk crits •team plan for midterm due at 3pm 	Nature Journal Entry Due
Friday 4/24	<ul style="list-style-type: none"> •Peer pin ups 	
Week 5		
Monday 4/27	Work work work	
Wednesday 4/29	MIDTERM	
Friday 5/1	<ul style="list-style-type: none"> •Review of Deliverables •Team plan due at 4 	<ul style="list-style-type: none"> •story board for pitch
Week 6		
Monday 5/4	<ul style="list-style-type: none"> • Story boards due Done at 4 for Carl Stinetz	
Wednesday 5/6	<ul style="list-style-type: none"> • Working on deliverables and Pitch 	
Friday 5/8	<ul style="list-style-type: none"> • Peer pin up • Team plan revisit 	
Week 7		
Monday 5/11	Desk crits	
Wednesday 5/13	Every component of deliverables at 40%	
Friday 5/15	Pitch Due	
Week 8		
Monday 5/18	Desk crits	
Wednesday 5/20	Second Midterm 100% everything	Outside reviewers and peer review
Friday 5/22	Team assessment <ul style="list-style-type: none"> •Plan of action due at 3pm. 	Teams give each other feedback
Week 9		
Monday 5/25	Memorial Day No class	
Wednesday 5/27	Desk crits	
Friday 8/29	WORK	