Landscape Construction: Performance Approaches
ARCH 535 // Fall Semester, 2014 // Tuesday 9am-11:50am // HAR 115a
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Intent

The intent of this course is to provide students with the tools and knowledge to negotiate and expand the operative boundaries of the field of landscape architecture. Executing new landscape performances and managing complex sites requires an active and dynamic knowledge base and expertise – a foundational approach rather than expertise of a fixed body of knowledge. In this class, contemporary built landscapes are re-imagined and re-presented as complex living systems, rather than as static, decorative spaces. The class presumes that knowledge of actual landscape material systems and natural systems are the key to realizing innovative, higher performance, and more valuable built landscapes. Field visits and examinations of site are a key aspect of furthering this knowledge. Also, as there are few resources for advanced landscapes strategies, students are expected to participate in the collation and representation of expertise, through system diagramming. The class also examines related issues, including the communication of advanced landscape systems, scales of interventions, and general philosophies of site reclamation and sustainability. Course time will be divided between topical lectures followed by discussion and field observation.

Class Structure

Lectures
Lectures will provide background materials and develop the major themes of the course. Readings will correspond with lecture materials. Extensive discussion and exercises will follow.

Field Visits
Field visits will include existing parks, potential parks, construction sites, and specialized landscapes. Students are expected to make observations and diagram site systems. The field trip is listed in the syllabus and will be subject to change. Sites may or may not have basic amenities and will require covered shoes and attire appropriate for outdoor exploration. Students will be expected to provide their own transportation and provide for basic necessities.

Office Hours
Wednesdays 1-2PM. *Please email me ahead of time to reserve a time. I will not always be there unless someone makes a reservation.*

Assignments

Living Systems Presentations (1 presentation) 18% Grade
Because knowledge and technical expertise of advanced construction methods are often distributed among individuals, firms, and literature, and many of the existing texts are out of date or lacking precise know-how, it is vital that students learn how to stay abreast of current technical advances by reviewing contemporary literature and publications. Students must prepare a presentation that answers a question (that they compose) about a particular landscape architecture technology, method or material, including case studies (unless otherwise approved by instructor).

Example Presentation "Questions":
What is the best ways to avoid or remedy compacted soils?
How does LEED mandate sustainable landscape architecture?
When is a sub-surface wetland better than a surface wetland?
What are the aesthetic and cultural qualities of X technology?
What are the critical design constraints for Y technology?
What is the design and construction process for Y type of project?

What are the best case studies of X technology / Z type of case study and what can learn from them in terms of their potential or future landscape architecture designs?

Answer a question that you think is interesting and try to provide information that is useful for both inspiring future designs and providing the necessary foundation knowledge for design (as landscape architects we don't need to know ALL the nuts and bolts of a system – primarily just the ones that influence the design composition).

Requirements

- Presentations will last approximately 15 minutes and be presented throughout the semester.
- You will be asked to provide references and include a bibliography that must include at least two contemporary sources (within the 2000s) from peer-reviewed journals or magazines.
- You are required to submit your "question" and consult with instructor in class two weeks prior to presentation. I may reject a "question" if it is too similar to a previous presentation. If you do not submit an acceptable question on time your grade will be penalized by one increment for each day late (A -> A-, B + -> B, etc.).
- Presentation must be uploaded in PPT format the day after the presentation.
- You must discuss at least two case studies or examples relevant to your topics – you may not focus on a single project or technology, but rather explore a topic with multiple examples.

Field Sketchbook (7 sketches) 6% Grade
For each visit you are required to add content to a field sketch notebook. At minimum notebook should contain a sketch of a major system observed, some particular observations about the visit, and should be legible / attractive to the instructor. You will post your notebook entries in class following each visit and submit a copy of them at the end of the semester. Your notebook should demonstrate that you have made their own observations and judgements beyond what was presented.

Systems Notebook: Field Visits Assignment (1 diagram) 12% Grade
In addition to your sketchbook, based on your presentation order you will be assigned to one field trip where you will are required to diagram a major component of the system and create a set of design guidelines for designing a similar sort of system – a systems notebook diagram. What are critical elements of knowledge that would be helpful? What are dimensions or sizing components. You will be required to do additional background research (unless you ask enough questions!). You are welcome to coordinate your research and inquiries with other students, but each of you must make your own diagram. Grade will be based on quality of diagram and information presented. **The 1st version of the assignment is due at the next class and the final at the next field trip after you conducted your research (or if you are assigned the last field trip, on the day of the final).**

Systems Notebook: Case Study Systems Assignments (3 diagrams) 36% Grade
The primary research of landscape systems and technologies will be based on case studies. Students will be required to conceptually isolate and describe a system or performance embedded within a case study (ideally built). These studies should focus on systems and performances that can inform further innovation in other projects rather than describing the whole project itself. For each system you will create a diagram to express the system as per the prescribed formats and requirements. Each diagram must be based on a precedent diagram and typology. You are required to submit three case Case Study Systems. The 1st version of each diagram is due two weeks after the lecture (1st lecture after). The final version 4 weeks after the lecture (2nd lecture after).

See handouts for more information on Systems Notebook assignments.

Grading of Systems Notebook Assignments:

33% will be based on the quality of your research and content.
33% will be based on whether it successfully communicates an interesting idea. Is it possible for someone to understand the system you are trying to explain?
33% will be based on your ability to establish a high quality and rigorous graphic identity (use consistent fonts, line weights, call outs, rain, align elements, etc.). What is the overall graphic quality of your diagram?

Final Project: Systems Diagram (1 redesigned diagram) 15% Grade
Based in part on a precedent diagram, critically assess and revise one Systems Notebook Diagrams. See handouts for more information on this assignment.

Readings & Discussion (1 leadership role / readings and responses for every lecture) 10% Grade
It is important that students become versed in existing literature on the subject. Prior to class meetings all students are required to compose questions and briefly explain why they are asking this particular question. This is required for each reading "section". Additionally there will be up to two class discussion leaders who will be expected to provide (split between leaders) reading summaries (posted on blackboard) and lead class discussion. Readings, not in the recommended text to purchase, will be provided to students (all readings for the first week will be provided).

Questions must be posted in the DISCUSSIONS section of blackboard on Monday by 5PM. Late submissions will be penalized. This is to allow the discussion leaders to review the class materials prior to discussion. Bring printed copies to class. See blackboard under DISCUSSIONS for more information.

Reading summaries by the discussion leader are due in class and should be posted to the DISCUSSIONS discussion folder after class.

Grading
Grading is based on the following: Presentations, 18%; Systems Notebook, 48%; Field Sketch Notebook 4%; Final Project 15%; and participation, 10% (Readings and Discussion), 3% Performance Mapping + Diagram Precedents.

Class Schedule (Subject to Change based on field trip scheduling):

Date	Class of 15	L- Lecture Content F- Field Visit	Reading Response Due & Discussion	Student Presentation	Posted Assignment *due in next class
9/26	1	L- Culture and Performative Potential, Recovering Landscape			Performance Mapping*
9/2	2	L- Urban Eco Systems L- Communication / Diagramming	Posted on Blackboard under Discussions		Diagram Precedents*
9/9	3	Field Trip A			Systems Notebook: Field Visit
9/16	4	L1–Fluid	Posted on Blackboard	Student Presentations (1,2,3)	**Group A** Case Study System Notebook #1
9/23	5	Field Trip B			Systems Notebook: Field Visit
9/30	6	L2- Digestive	Posted on Blackboard	Student Presentations (4,5,6,7)	**Group B** Case Study System Notebook #1

Date	Class of 15	L- Lecture Content F- Field Visit	Reading Response Due & Discussion	Student Presentation	Posted Assignment *due in next class
10/7	7	Field Trip_C			Systems Notebook: Field Visit
10/14	8	L3-Stratify	Posted on Blackboard	Student Presentations (8,9,10)	**Group A** Case Study System Notebook #2
10/21	9	Field Trip_D			Systems Notebook: Field Visit
10/28	10	L4-Launch	Posted on Blackboard	Student Presentations (11,12,13,14)	**Group B** Case Study System Notebook #2
11/4	11	Field Trip_E			Systems Notebook: Field Visit
11/11	12	L5-Volatile & Translate	Posted on Blackboard	Student Presentations (15,16,17)	**Group A** Case Study System Notebook #3
11/18	13	Field Trip_F			Systems Notebook: Field Visit
11/25	14	L6-Grooming	Posted on Blackboard	Student Presentations (18,19,20,21)	**Group B** Case Study System Notebook #3
12/2	15	Field Trip_G			Systems Notebook: Field Visit

Bibliography

Required Texts (Reading every other week. Also available on reserve in Library):

Margolis, Liat, and Alexander Robinson. Living Systems: Innovative Materials and Technologies for Landscape Architecture. Berlin: Birkhauser, 2007.

Thompson, William J. and Sorvig, Kim. Sustainable Landscape Construction: A Guide to Green Building Outdoors, 2nd Edition. Island Press, 2007.

Useful Texts:

(alphabetical by author)

Brady, Nyle C. and Ray R. Weil. Elements of the Nature and Properties of Soils. Upper Saddle River: Pearson Hall, 2004.

Calkins, Meg. Materials for Sustainable Sites. Hoboken: John Wiley & Sons, 2009.

Dunnet, Nigel, and Andy Clayden. Rain Gardens: Managing water sustainability in the garden and designed landscape. Portland: Timber Press, 2007.

Dunnet, Nigel, and Noël Kingsbury. Planting Green Roofs and Living Walls. Portland: Timber Press, 2008.

Kirkwood, Niall, editor. Manufactured Sites: Rethinking the Post-Industrial Landscape. New York: Spon Press, 2001.

Lyle, John Tillman. Regenerative Design for Sustainable Development. John Wiley & Sons, Inc., 1994.

Marsh, William M. Landscape Planning: Environmental Applications 4th Edition. John Wiley & Sons, Inc., 2005.

McLeod, Virginia. Detail in Contemporary Landscape Architecture. London: Lawrence King Publishing, Ltd., 2008.

Reed, Peter, editor. Groundswell. Berlin: Birkhauser, 2005.

Sauter, David. Landscape Construction. Clifton Park, NY: Delmar Cengage Learning, 2011.

Spirn, Anne Whiston. The Granite Garden: Urban Nature and Human Design. Basic Books, 1984.

Strom, Steven and Nathan, Kurt. Site Engineering for Landscape Architects, John Wiley & sons, Inc, 1998.

Trowbridge, Peter J., and Nina L. Bassuk. Trees in the Urban Landscape: Site Assessment, Design, and Installation. Hoboken: John Wiley & Sons, 2004.

Tufte, Edward. Envisioning Information. Graphics Pr., 1990.

Werthmann, Christian. Green Roof: A Case Study. New York: Princeton Architectural Press, 2007.

Yeang, Ken. Ecodesign: A Manual for Ecological Design. London: Wiley-Academy, 2006.

Useful Website:
LAF: Landscape Performance Series
http://lafoundation.org/research/landscape-performance-series/

Miscellaneous

Attendance Policy
The School of Architecture's attendance policy is to allow a student to miss the equivalent of one week of class sessions (ONE class if the class meets once a week, etc) without directly affecting the student's grade and ability to complete the course (this is for excused absences for any confirmed personal illness/ family emergency/religious observance or for any unexcused absences). For each absence over that allowed number, the student's letter grade can be lowered up to one full letter grade.

Statement for Students with Disabilities
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

Statement on Academic Integrity
USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. Scampus, the Student Guidebook, contains the

Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: http://www.usc.edu/dept/publications/SCAMPUS/gov/
Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/.

Accreditation
The Master of Landscape Architecture degree program includes three curricula. Curriculum +3 for students with no prior design education and Curriculum +2 for students admitted with advanced standing have full accreditation by the Landscape Architecture Accreditation Board. Curriculum +1.5 for students with advanced placement is a post-professional study and is not subject to accreditation. Information about landscape architecture education and accreditation in the United States may be found on-line at http://www.asla.org/Education.aspx.

535 Summary of Assignments. See handouts and syllabus for important additional information.

SYSTEMS NOTEBOOK 48% of Grade! 12% each diagram!

Diagrams as per template. See below for due dates.

(1)
Field Trip
(signup)

FIELD TRIP SIGNUP & DATE:
_____
_____
_____

1ST VERSION DUE:
1 week after field trip.
FINAL DUE: 2 weeks after field trip, at next field trip.

Grading
33% Research and content.
33% Successful communication of an idea.
33% Graphic Quality

See handout for more information.

WHICH GROUP ARE YOU IN? --->
(see syllabus for dates)

(3)
Caset Studies
(Groups A & B)

*TOPIC:*_____
*1st DUE:*_____
*FINAL DUE:*_____

*TOPIC:*_____
*1st DUE:*_____
*FINAL DUE:*_____

*TOPIC:*_____
*1st DUE:*_____
*FINAL DUE:*_____

1ST VERSION DUE:
2 weeks after lecture (next class).
FINAL DUE: 4 weeks after lecture (2nd class after lecture)

Group A will do case studies on Fluid, Stratify, and Volatile / Translate.

Group B will do case studies on Digestive, Launch, and Grooming.

FIELD SKETCHBOOK 4% of Grade!

Submit copy of page after each field trip (@ next class).
Submit copy of entire sketchbook at final review.
7 Field Trips Total, 7 Notebook Sketches Required
Grading based on clarity of observation and ability of sketch to communicate idea, richness of information, and general graphic quality.

A	B	C	
D	E	F	G

PRESENTATION 18% of Grade!

Sign Up for Time

*SIGN UP TIME:*_____
*QUESTION DUE:*_____
(submit question two weeks before)

TOPIC MUST BE APPROVED
Submit your "question" for approval to instructor (via email) two weeks before presentation before the end of the day (tuesday night). Failure to do so will result an incremental grade loss each day late.

Grading
33% Did you Answer the "question" clearly?
33% Quality of Research
33% Presentation Quality, verbal and PPT and ability to follow assignment (bibliography, etc.)

FINAL ASSIGNMENT 15% of Grade!

Instead of Final Exam, Final due date TBD

Re-do one of your Systems Notebook Diagrams in a larger format for a professional, presentation quality diagram.

Grading
25% Improvements over previous.
25% Communication Effectiveness
25% Content
25% Graphic Quality

See handout for more information.

READING & DISCUSSION 10% of Grade!

Done in preparation for each class lecture!
Sign up for time to lead discussion.

LEADER SIGN UP DATE:
_____
OTHER DISCUSSION LEADERS:
_____
_____
_____

If you are NOT a discussion leader this week:
Read the reading posted on blackboard and submit "questions" online by 5PM the night before the lecture. Repond to another question on blackboard.

If you ARE a discussion leader this week:
Read all the readings.
Split the reading summaries between the leaders (post these on blackboard before the end of the lecture day).
Read all class "questions" and bring to class. Use these to direct discussion!

Grading
Submit questions for all readings, as assigned.
Lead a good discussion as a discussion leader and submit reading summary.