USC School of Architecture

University of Southern California School of Architecture

Landscape Construction: Performance Approaches

Landscape Architecture 541B, 6 units // Spring 2017 Semester

Location	Harris Hall (HAR), 115a University of Southern California
Time	Tuesday 9AM-11:150AM
Instructor	Alexander Robinson, Assistant Professor email: alexander.robinson@usc.edu cell: 747-234-8222 *(for field trip coordination only)*
USC Office	Watt Hall (WAH) 319, 3rd Floor

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 practice rather than expertise of a fixed body of knowledge. In this class, built landscapes are re-imagined and re-presented as complex performance systems, rather than as static, decorative spaces or shades of nature. The class operates inductively, presuming 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 and research. 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, discussion, field observation, and student presentations.

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

Monday or Friday are possible. *Please email me to reserve a time.*

Assignments

Living Systems Presentations (1 presentation) 16% Grade

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, system, method or material, including case studies (unless otherwise approved by instructor).

Example Presentation "Questions":
What is the best ways to remedy compacted soils?
When is a sub-surface wetland better than a surface wetland?
What are ways to treat dry weather run off with landscapes?
How do you incorporate dead wood into a design?
What are the aesthetic and cultural qualities of solar technologies?
What are the critical design constraints for designing porous paving?
What is the design and construction process for a vertical living wall?

Answer a question that you think is interesting. Present information to inspire future designs and provide the a foundation of information for design. Note, 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 15 minutes and be presented throughout the semester. Sign up early and avoid having to deal with it in the beginning!
- 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.

Systems Notebook: Field Visits Assignment (6 diagrams) 9% Grade Each

After each field trip you will create a simple diagram of the project and describe a system or process that defines it. The week prior you will be provided a diagram style and example methodology. Drawings will be printed for pin-up in the next class. You may sketch the diagrams if you wish.

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 revised diagram) 15% Grade
This will be based on a previous Field Visit diagram. See handout 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 class discussion leaders who will 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 50%. 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.

Performance Mapping 5% Grade
See handout from first day.

Grading
Grading is based on the following: Field Trip Diagrams 54% (9%*6); Presentation, 16%; Final Project 15%; Readings / Discussion / Participation 10%; Performance Mapping 5%

Class Schedule (subject to change based on field trip scheduling & guest lecture):

Date	Class of 15	Content	Reading & Discussion	Student Presentation	Assignment (due in class)
1/10	1	Introduction			
1/17	2	L1–Fluid	Posted on Blackboard under Discussions	N/A	Performance Mapping Reading Response
1/24	3	**Field Trip_A** Echo Park			

Date	Class of 15	Content	Reading & Discussion	Student Presentation	Assignment (due in class)
1/31	4	L2- Digestive	Posted on Blackboard	Student Presentations	Field Trip Diagram 1 Reading Response
2/7	5	**Field Trip_B** Madrona Marsh (Torrance!)			
2/14	6	L3-Stratify	Posted on Blackboard	Student Presentations	Field Trip Diagram 2 Reading Response
2/21	7	**Field Trip_C** Metabolic Studio			
2/28	8	L4-Launch	Posted on Blackboard	Student Presentations	Field Trip Diagram 3 Reading Response
3/7	9	**Field Trip_D** Occidental College Solar Array			
3/14		SPRING BREAK			
3/21	10	L5-Volatile & Translate	Posted on Blackboard	Student Presentations	Field Trip Diagram 4 Reading Response
3/28	11	**Field Trip_E** Vista Hermosa			
4/4	12	L6-Grooming	Posted on Blackboard	Student Presentations	Field Trip Diagram 5 Reading Response
4/11	13	**Field Trip_F** Army Corps LA River			
4/18	14	L7–Guest Lecture TBD	Posted on Blackboard	Student Presentations	Field Trip Diagram 5 Reading Response
4/25	15	Final Diagram Pin Up		Student Presentations (if needed)	

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

Statement on Academic Conduct and Support Systems

Academic Conduct

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards*https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct/.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* http://equity.usc.edu/ or to the *Department of Public Safety* http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems

A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.htmlprovides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information http://emergency.usc.edu/*will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.