USC School of Architecture

Arch 535 Landscape Construction: Performance Approaches, 3 units

Semester: Spring 2022 Time: Thursday 9-11:50AM Location: Zoom / Watt Hall WAH 212 & in the Field



Madrona Marsh, Photo by Alexander Robinson

Instructor: Alexander Robinson, Associate Professor Office: Watt (WAH) 319 Office Hours: Tuesdays 2-3PM, slack me to confirm appt. Contact Info: <u>alexander.robinson@usc.edu</u> / 747.234.8222 (for field trips only) I will respond to emails within 24 hours, Monday-Friday or on the Monday following a weekend or holiday break.

IT Help: Dipak Shirke Contact Info: <u>dshirke@usc.edu</u>

Course Description

Contemporary challenges—social and environmental—demand landscape architecture projects perform greater, more diverse and precise services in addition to the typical amenities of a pleasure-ground park. Simultaneously, a shortage of unutilized space challenges the profession to provide even the most basic amenities within increasingly unorthodox sites. Consequentially, landscape architecture has been forced to not only expand what performances it designs, but also innovate how and where. Today, it must seamlessly hybridize basic social services, such as recreation and safety, with complex environmental services, ranging from climate modification to waste management, all within unprecedented post-industrial or active infrastructural sites. This course seeks to prepare students for this complex challenge and extraordinary design opportunity through a performance-oriented survey of innovative designed landscapes and specialized skill building. Through biweekly lectures and discussion, guided field trips, and diagramming exercises students will examine and critique the performance "systems" of innovative landscapes-internationally and locally. Additionally, students will develop a personal area of expertise and share original research with the class. The goal is to construct a platform of perspective, technical knowledge, and field-cultivated experience from which to address the considerable challenge of designing, implementing, and maintaining high performance public landscapes.

Learning Objectives

By the end of this course students will be able to:

- 1. Be able to understand, evaluate, and analyze an advanced landscape system by field observation, research, and the application of various landscape diagramming methods. This practice on field-visited case studies should prepare you to create your own landscape system designs and associated representations.
- 2. Apprise and critique how landscape "perform" both social and ecological/infrastructural services.
- 3. Understand the multitude of challenges necessary to overcome in the design and implementation of advanced landscape performances.
- 4. Be familiar with the breadth of performance opportunities for contemporary landscape architecture.
- 5. Gain a base expertise in a specific topic related to the class. Conduct original research in said topic and communicate it effectively to your peers. Apply knowledge and expertise gained from lectures and other case studies.
- 6. Diagram an advanced landscape system with a variety of diagramming methodologies.

Class Structure

Lectures & Reading

Lectures will provide background materials and develop the major themes of the course. Readings will correspond with lecture materials. Student and instructor guided discussion will follow each lecture.

Fieldwork

The class operates inductively, presuming that knowledge of existing 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. 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 necessities.

https://www.google.com/maps/d/edit?mid=1pomXLQ9HmqytJPB_GfJqrLp8ufpVKYfo&usp=sh aring

Assignments

As there are few resources for advanced landscapes strategies, students are expected to practice developing specific expertise in design related problems. The class will also dedicate a great deal of time to assignments that develop student capacity for the communication and representation of advanced landscape systems.

Assignments

Systems Report/Presentation

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/report that answers a question (that they compose) about a particular landscape architecture technology, system, method or material, that could help us improve high performance design.

Field Systems Diagrams

After each field trip you will create a diagram of the project and describe a system or process that defines it. <u>The idea is to create a document that could serve as a design guideline for future similar project.</u> 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 draw the diagrams by hand if you wish. Everything in the drawing must be drawn by you!

Final Systems Diagram(s)

This assignment will build on your previous Field Diagrams.

Readings & Discussion

It is critical that students become versed in existing literature about performance landscapes. Prior to class meetings all students are required form thoughts on each reading and post to blackboard. Comments should be composed so that they might be useful in discussion in class. They should be approx. two to four sentences long. Share an insight or idea, make a judgement, or formulate an opinion about the subject or the piece itself that might stimulate discussion. During class discussion leaders will ask you to share your comment and elaborate on it. <u>One</u> <u>comment is required for each reading "section".</u> Comments <u>must be posted in the DISCUSSIONS section of blackboard on Monday by 5PM the</u> <u>week before the lecture course</u>. Late submissions will receive no credit. This is to allow the discussion leaders to review the class materials prior to discussion.

After you post online on blackboard, briefly respond to at least two other students' comments by the Friday before the discussion by 5PM.

If you are the class discussion leader for the week, you should also post comments and then read all other comments in preparation for leading class discussion in smaller groups. It is recommended that you print them out and use them in the discussions. Following the discussion, you will post a brief summary of what was discussed in your group (including by who) on blackboard.

Diagram Base & Performance Diagram

See handouts.

Grading

Field System Diagrams, 50% (10%*5)

Report/Presentation, 20%

Final System Diagram(s) 15%

Readings / Discussion / Participation 10%

Diagram Base 5%

Performance Diagram 5%

Class Schedule (subject to change)

Date	Week	Content	Student Presentations	Assignment Due
1/13	1	L0 Introduction	None	
1/20	2	L1 Digestive,	None	Reading response
		Diagramming		Diagram Base
1/27	3	Field Trip 1 Echo Park (9:15AM)		Performance Diagram
2/3	4	L2 Fluid	None	Reading response
				Field Trip Diagram A
2/10	5	Field Trip 2 Metabolic Studio		Field Trip Diagram A Revised
2/17	6	L3 Stratify	Presentations (1-3)	Reading response
				Field Trip Diagram B
2/24	7	Field Trip 3 LA River G2 Parcel		Field Trip Diagram B Revised
3/3	8	L4 Volatile. & Translate	Presentations (4-6)	Reading response Field Trip Diagram C

3/10	9	Field Trip 4 Madrona Marsh		Field Trip Diagram C Revised
3/17	10	Spring Recess!		
3/24	11	L5 Grooming	Presentations (6-8)	Reading response Field Trip Diagram D
3/31	12	Field Trip 5 USC Campus Maintenance Team		Field Trip Diagram D Revised
4/7	13	L6 Launch	Presentations (9-11)	Reading response Field Trip Diagram E
4/14	14	Field Trip 6 Occidental College Solar Array (no diagram req.)		Field Trip Diagram E Revised
4/21	15	Final Assignment Draft Pin Up	Presentations (12-15)	Final Assignment Draft
4/28	16	Final Assignment Draft Pin Up	Presentations (16-18)	Final Assignment Draft
4/30- 5/3 5/10		Study Days Final Exam 8-10AM		

Bibliography

Required Texts

(Reading every other week. Also available on reserve in Library) Margolis, Liat, and Alexander Robinson. <u>Living Systems: Innovative Materials and</u> <u>Technologies for Landscape Architecture</u>. Berlin: Birkhauser, 2007.

Thompson, William J. and Sorvig, Kim. <u>Sustainable Landscape Construction: A Guide to Green</u> <u>Building Outdoors, 3rd Edition</u>. Island Press, 2018. (Available online)

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.

Di Palma V. Wasteland: a History. New Haven: Yale University Press; 2014.

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.

Erell, Evyatar, et al. *Urban Microclimate: Designing the Spaces Between Buildings*, Routledge, 2010.

Kennen K, Kirkwood N. *Phyto: Principles and Resources for Site Remediation and Landscape Design.* First edition. New York, NY: Routledge; 2015.

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 S, Nathan K, Woland J. *Site Engineering for Landscape Architects*. 6th ed. Hoboken, N.J: John Wiley & Sons, Inc.; 2013.

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 <u>http://lafoundation.org/research/landscape-performance-series/</u>

Course Specific Policies

Technology in the classroom

This class focuses on digital work although paper and pencil sketch work might also be done. Therefore, expect to use personal electronic devices (laptops, tablets, and phones) only for the purposes of note taking, researching online, and uploading assignments. Students using a device for purposes not directly related to the class will be asked to put the device away.

Blackboard

USC Blackboard will be utilized for formal announcements (the class as a body will never be emailed directly), conduct discussion, and to share files and other information.

Attendance

Attendance will be conducted each morning. As per USC School of Architecture guidelines, students may miss one class unexcused without adverse consequences. Missing more than one class will result in 1/3 of a letter grade deducted per additional missed class. Students over 10 minutes late will be considered tardy and this will detrimentally affect their 10% participation grade by minus 1% for each tardy. Please be aware that the same rules apply to field trips. Please give yourself extra time to arrive on time and avoid sharing rides with students who will be late. Any student absent (in any form including sleep, technological distraction, or by leaving mid class for a long bathroom/water break) for more than 1/3 of the class time can be considered fully absent.

Course Expenses

The instructor estimates that the cost for travel fares for the five field trips (by a shared Lyft or Uber) could around \$10-15 per field trip, or \$50-75 total.

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 Part B, Section 11, "Behavior Violating University Standards" <u>https://policy.usc.edu/scampus-part-b/</u> Other forms of academic dishonesty are equally unacceptable.

Students are required to submit a certificate for the following online courses: <u>https://libraries.usc.edu/tutorial/academic-dishonesty</u> <u>https://libraries.usc.edu/tutorial/avoiding-plagiarism</u>

Late Assignments

Late assignments will be penalized 1/3 of a letter grade for each 24 hours late from the due date posted on blackboard, up to a whole letter grade.

Support Systems

Student Health Counseling Services - (213) 740-7711 – 24/7 on call engemannshc.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call <u>suicidepreventionlifeline.org</u>

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 – 24/7 on call engemannshc.usc.edu/rsvp

Free and confidential therapy services, workshops, and training for situations related to genderbased harm.

Office of Equity and Diversity (OED) | *Title IX - (213) 740-5086* equity.usc.edu, titleix.usc.edu

Information about how to get help or help a survivor of harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following protected characteristics: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations.

Bias Assessment Response and Support - (213) 740-2421

studentaffairs.usc.edu/bias-assessment-response-support

Avenue to report incidents of bias, hate crimes, and microaggressions for appropriate investigation and response.

The Office of Disability Services and Programs - (213) 740-0776 <u>dsp.usc.edu</u>

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710 studentaffairs.usc.edu/ssa

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101 diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call <u>dps.usc.edu</u>, <u>emergency.usc.edu</u>

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call <u>dps.usc.edu</u>

Non-emergency assistance or information.