

USC School of Architecture

University of Southern California School of Architecture
Landscape Construction: Performance Approaches
Landscape Architecture 541B, 3 units, Spring 2019 Semester

Location	Watt Hall (WAH), 212 University of Southern California
Time	Tuesday 9AM-11:15AM
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

Intent

The intent of this course is to provide students with tools and knowledge that might help them design, execute, and maintain high performance landscapes; that is landscapes that exceed normative practices and provide infrastructural, multi-faceted, or somehow exceptional social and physical services.

Class Structure

Lectures

Lectures will provide background materials and develop the major themes of the course. Readings will correspond with lecture materials. 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 basic necessities.

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.

Office Hours

Meetings after class on Tuesday are best. If possible, please let me know ahead of time.

Assignments

Systems Report & Presentation (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construction methods are often distributed among individuals, firms, and literature, and many of the existing texts are out of date or lacking precise know-how.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 and relevant to design. Present information to inspire future designs and provide 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 our design composition.

Requirements & Guidelines

- If you are lacking an idea, try to find a question that relates to the topic of the class lecture that week.
- Presentations will last 12 minutes and be conducted 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 or class topics or otherwise not suitable. 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.), up to a grade per week late.
- Presentations should be formatted as stand-alone reports on your subject. Major points and ideas should be clear without your verbal presentation.

- Presentation must be uploaded in PDF format the day after the presentation.
- You must include and discuss at least two case studies or examples relevant to your topics –you may not focus on a single project, but rather explore a topic with multiple examples. You may not use case studies included in the required books or previously presented during class (by the professor or other students).
- Make sure you answer your question on the last slide! Make sure your answer is useful for landscape architecture design.

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

After each field trip you will create a diagram of the project and describe a system or process that defines it. The idea is to create a document that could serve as a design guideline for future similar project. 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!

Grading of Systems Notebook Assignments:

33% will be based on the quality and accuracy of your research and representation.

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? Does it capture a system idea and innovation?

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 Systems Diagram 15% Grade

This will be based on a previous Field Diagram. See handout for more information on this assignment.

Readings & Discussion & Participation (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 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. One comment is required for each reading “section”.

After you post online on blackboard, briefly respond to at least two other students' comments.

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.

Comments must be posted in the DISCUSSIONS section of blackboard on Monday by 6PM. Late submissions will receive no credit. This is to allow the discussion leaders to review the class materials prior to discussion. See blackboard under DISCUSSIONS for more information.

Base Map Warmup Assignment, 3% Grade

See handout.

Grading

Grading is based on the following: Field Diagrams 54% (9%*6); Report/Presentation, 18%; Final Project 15%; Readings / Discussion / Participation 10%; Base Map Warmup Assignment 3%

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

Date	Class of 13	Content	Reading & Discussion	Student Presentation	Assignment (due in class)
1/8	1	Introduction			
1/15	2	L1 Digestive	Posted on Blackboard under Discussions	N/A	Performance Mapping Reading Response
1/22	3	Field Trip A Vista Hermosa			
1/29	4	L2 Fluid	Posted on Blackboard	Student Presentations	Field Trip Diagram 1 Reading Response
2/5	5	Field Trip B Madrona Marsh			
2/12	6	L3 Stratify	Posted on Blackboard	Student Presentations	Field Trip Diagram 2 Reading Response
2/19	7	Field Trip C USACE, Los Angeles River			
2/26		L4 Volatile	Posted on Blackboard	Student Presentations	Field Trip Diagram 3 Reading Response
3/5	8	Field Trip D Echo Park			
3/12		SPRING BREAK!			
3/19	9	L5 Translate	Posted on Blackboard	Student Presentations	Field Trip Diagram 4 Reading Response

3/26	10	Field Trip E Occidental Solar Array			
4/2	11	L6 Grooming	Posted on Blackboard	Student Presentations	Field Trip Diagram 5 Reading Response
4/9	12	Field Trip F Trust for Public Lands			
4/16	13	L7 Launch	Posted on Blackboard	Student Presentations	Field Trip Diagram 6 Reading Response
4/23		Final Assignment Pin Up		Student Presentations	Final assignment 1 st draft pin-up

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, 3rd Edition. 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.

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/>

Attendance

Attendance will be conducted each morning. As per USC School of Architecture guidelines, students may miss one class without adverse consequences. Missing more than one class will result in 1/3 of a letter grade deducted per missed class over one. Students over 10 minutes late will be considered tardy and this will detrimentally effect their 10% participation grade. 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.

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* Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/scampus-part-b/>. 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>.

Support Systems:

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call

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

<https://engemannshc.usc.edu/counseling/>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://engemannshc.usc.edu/rsvp/>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

Bias Assessment Response and Support

Incidents of bias, hate crimes and micro-aggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>