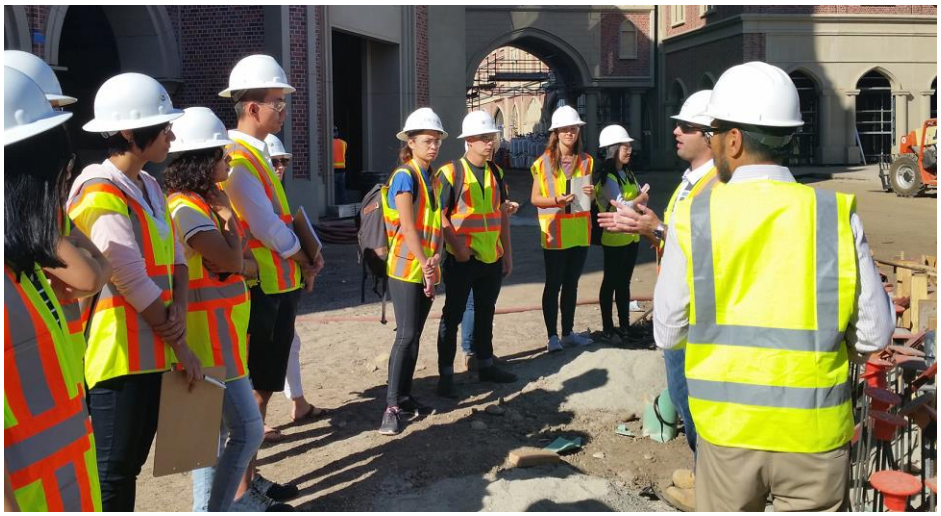
USC School of Architecture

Architecture 635 Landscape Construction Assembly and Documentation
Fall 2018

Class Location: Harris 102
Instructor: Esther Margulies ASLA
3 units Tuesdays and Thursdays 8:30 to 9:50 am Additional time for field trips will be announced.
Office hours: Tuesdays at 10 am or By Appt.

Contact Information:
Email: emarguli@usc.edu



This course builds an understanding of landscape materials and assemblies, construction documents and sequencing. Students will learn the content and organization of construction documents and specifications. Lectures, site visits and field trips will provide opportunities for students to observe multiple approaches to the use of site materials. Students will develop a resource of site construction details and assemble a site construction document package of drawings as a final assignment.

The semester will begin with the development of basic construction document set organization, drawings and specifications. Subsequent sessions will include lectures describing the qualities, characteristics and uses of typical site construction materials and systems. In field trips and assignments students will draw construction details derived from observable conditions and reference materials.

The mid term assignment will engage students in research on innovative and emerging materials and construction techniques. Students will also research a unique site construction detail in a built project to understand the materials used, how they are assembled and site specific parameters.

All assignments will be turned in via Blackboard. The final project will be due on or before the final exam date for this class. All students are expected to observe the class attendance policy and attend all classes unless they provide an acceptable excuse for their absence.

Readings and class announcements will be distributed via blackboard.
The syllabus may be updated periodically throughout the semester.

Course Grading

Construction Detail Assignments 30%

Mid term Research Assignment 20%

Site Specific Research Project 15%

Final Construction Drawing Set 25%

Class Attendance and Participation 10%

Class Attendance and Additional Work Requirements
Attendance at all class meetings and field trips are mandatory. Students must notify the instructor and request to be excused prior to the class meeting time. Students are expected to spend a minimum of 6 hours of additional work time each week outside of class time to complete readings and assignments.

Specific content and presentation requirements for all assignments and reviews will be provided.

Required Skills:
This course will require hand drawing, Auto CAD drafting and illustrations.

Software
MS Office or equal, Adobe Creative Suite, Auto CADD PC version. Students must have the program installed on their laptops. All mac users must have bootcamp and use the PC version of Auto Cad https://www.autodesk.com/education/free-software/featured

Required Materials
Hand sketching materials – pencils, eraser, markers, colored pencils, water color paints etc.
Measuring tape
Laptops will be required in class for Cad lessons
Final Project large scale construction drawing plots

Class Schedule

Date	Lecture Topics and Field Trips	Readings and Assignments
Tues Aug 21	1. Class Introduction i. Syllabus review ii. Expectations iii. Academic Integrity 2. Construction Document Structure i. Plans, Details, Specifications	
Thurs Aug 23rd	**Lecture Base and Layout Plans** – Drawing conventions, symbols, notes and strategies **Site Materials observations – Watt Courtyard**	**Reading -**Construction document set standards and strategies Hopper p. 4 - 10
Tues Aug 28th	**Cad Workshop I** • Base Drawings • Layers • Line weight • Hatching File Set up and Page Set up	**You must have Auto Cad on your laptop and be ready to use it for this class.**
Thurs August 30th	**CAD Workshop II** • Text • Dimensions • Plotting	**Assignment 1 – Measured Drawings Base and Layout Plan for Watt Courtyard Due Thursday Sept 6th**
Tues Sept 4th	**Cad part 3 , Layout comments** **Field Trip –** Materials Observations USC Hahn Plaza and The Village	
Thurs Sept 6th	**Lecture : Cast in Place Concrete Paving, Curbs and Stairs –** Properties, Qualities, Considerations **Conc Paving Documentation Methods:** Plan, detail and specification conventions and standards	**Reading** Hopper p. 266 – 284 Yglesias Concrete p. 5 – 21 **Assignment 2 –** Cast in place concrete paving, curb and stair details selected site Due Thursday Sept 13th in Class
Tues Sept 11 th	**Lecture: Natural Stone** Properties, Qualities, Considerations	**Reading** Yglesias Stone p. 101 – 114

	Natural Stone Documentation Methods: Plan, detail and specification conventions and standards	
Thurs Sept 13 th	**Lecture: Masonry and Stairs –** Properties, Qualities, Considerations **Pre Cast Masonry Documentation Methods:** Plan, detail and specification conventions and standards	**Reading** – **Masonry** Hooper P. 261 – 265 , 506 – 511 **Reading** – Yglesias Masonry p. 49 – 62 **Assignment 3 –** Natural stone and masonry paving details Due Tuesday Sept 18th in class
Tues Sept 18th	**Lecture: Walls –** Structural materials, finish treatments, soil mechanics, sub drainage design considerations	**Reading – Walls** Hopper p. 172-184, 285 – 303
Thurs Sept 20th	**Field Trip to Observe Paving and Walls Location TBA**	**Assignment 4 Observing walls** – sketch assignment. See Blackboard Assignment is due Tuesday Sept. 25th
Tues Sept 25th	**Walls Documentation Methods:** Plan, detail and specification conventions and standards.	**Assignment 5** – **Selected Site Wall details**, enlarged plans and coordination. Due Tuesday Oct 2nd in class
Thurs Sept. 27th	**Lecture: Metals –**Materials, Shapes, finishes and design considerations. **Field walk to observe metals MNH and USC Expo perimeter**	**Reading – Metals** **Hopper p. 304 – 322, 512 – 523** **Yglesias Metals p. 34 – 48** **Review Hopper p. 273 – 284, latest edition US ADA Codes**
Tues Oct 2nd	**Lecture: Metals –** Metal Assemblies Drawing Conventions	**Assignment – 6** USC Fence Assignment Due Tuesday October 9th in Class
Thurs Oct 4th	**Lecture: Wood –**Railings, decks, other structures materials, finishes, Assemblies	**Reading** – Wood Construction Hopper p 323 – 337, 524 – 531 Yglesias p. 115 - 129
Tues Oct 9 th	**Wood Construction Documentation Methods:** Plan, detail and specification conventions and standards **Introduce Mid Term Research Topics and Assignment**	**Assignment 7** –Wood construction details Due Tuesday Oct 18th in class.
Thurs Oct 11 th	**Mid Term Assignment Research Project in Class Advising**	
Tues Oct 16 th	**Mid Term Assignment presentations**	

Thurs Oct 18 th	**Lecture – Water Features** – equipment, finishes, code requirements, water treatment options. **Field Walk**	**Reading** – Water Features Hopper p. 255 – 258 Yglesias p. 87 – 100
Tues Oct 23 rd	**Lecture - Irrigation Basics** – point of connection, system equipment, materials standards, planting and grading coordination	**Reading** – Irrigation Hopper p. 249 - 253
Thurs Oct 25 th	**Lecture – Site Lighting** – Design intent, equipment, coordination	**Reading** – Landscape Lighting Hopper p. 338 - 347
Tues October 30st	**Site Specific Details Assignment Intro**	**Assignment – Research Project**
Thurs Nov 1st	**Work Session Research Projects**	**Assignment – Research Project work**
Tues Nov 6th	**Research Project Presentations I**	**All Research Papers due start of Class Nov 6th**
Thurs Nov 8 th	**Research Project Presentations II**	
Tues Nov 13 th	**Lecture – Planting Plans and General Notes** – Symbols, schedules, details, specs and coordination	**Reading** –Review reference sets Planting documentation
Thurs Nov 15 th	**Work Session Final Assignment and Workshop**	
Tues Nov 20 th	**Work Session–** Final Project Documentation and Intervention Construction Package	**Assignment** –Materials plan and schedules final site design, sketch details Due Tues. Nov 27st in Class.
Thurs Nov 22nd	NO CLASS THANKSGIVING	
Tues Nov 27 th	**Lecture / Workshop** **CD Preparation Session**	
Thurs Nov 29th	**Class Meeting** - Q & A site details and documentation individual reviews	Meetings with students to review progress and discuss interventions
Final Assignment Due Dec 11th at 6:30 pm	**Final Project Due Assigned Exam Date**	Must be turned in on Blackboard and hard copy

Bibliography

Required Text Books

Hopper, Leonard Landscape Architectural Graphic Standards Student Edition, Wiley and Sons, 2007, Hoboken, NJ

Yglesias, Caren, The Innovative Use of Materials in Architecture and Landscape Architecture: History, Theory and Performance, McFarland, Jefferson, North Carolina 2014 – Available on line via USC Electronic Library

Additional Sources:

Dines, Nicholas, Time Saver Standards Concise Site Construction Details Manual, McGraw Hill, NY NY, 1999

Hutchison, Edward, Drawing for Landscape Architecture Sketch to Screen to Site, Thames & Hudson, NY,NY 2011

Sauter, David, Landscape Construction, Thompson Delmar Learning, Clifton NJ, 2005

Thallon, Rob and Jones, Stan, Graphic Guide to Site Construction, The Tauton Press, Newtown, Conn. 2003

Walker, Theodore D., Site Design and Construction Detailing, Van Nostrand, NY, NY. 1992

Zimmermann A, Constructing Landscape: Materials, Techniques, Structural Components. 2nd, rev. and expand ed. Basel: Birkhäuser; 2011.

Required Software: AutoCad 2018

Guest Lecturers

TBD

Grading Scale

Course final grades will be determined using the following scale

A	95-100
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	59 and below

USC Critical Dates

Classes Begin	Mon	August 20
Labor Day	Mon	September 3
Thanksgiving Holiday	Wed-Sun	November 21-25
Classes End	Fri	November 30
Study Days	Sat-Tue	December 1-4
Exams	Wed-Wed	December 5-12

Statement on Academic Conduct and Support Systems

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://adminopsnet.usc.edu/department/department-public-safety. This is important for the safety of the 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 http://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.html provides 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.

Attendance Policies

School of Architecture Attendance Guidelines 2013

The School of Architecture's general attendance policy is to allow a student to miss the equivalent of one week of class sessions (three classes if the course meets three times/week, etc) without directly affecting the student's grade and ability to complete the course. If additional absences are required for a personal illness/family emergency, pre-approved academic reason/religious observance, the situation should be discussed and evaluated with the faculty member and appropriate Chair on a case-by-case basis. For each absence over that allowed number, the student's letter grade may be lowered up to one full letter grade (some instructors might vary the consequences such as only being worth 1/3 letter grade etc).