ELEMENTS & PRINCIPLES
+3 PROGRAM / CORE STUDIO 2

INTRODUCTION
In the first year, the traditional emphasis on “project-based” learning has been replaced by “concept-based” learning, substituting many smaller, “branded” exercises of shorter duration, with very limited but clear pedagogical goals, for the more typical long-term design projects that try to address too many issues. These assignments are presented as questions to be answered by the students through practicing related skills; they distill key concepts for deeper understanding but also sequentially combine to add up to a disciplinary intuition broader than any single project could hope to foster. They are designed to be both challenging and fun—like architecture itself—and to offer the instructors the maximum latitude to use their own experiences to add relevance and elaboration. This is accomplished by ensuring that the briefs for these exercises are clear and complete as possible, which in turn instills confidence that the bases are covered, so the instructors are free to riff in direct reaction to the student performance.

The spring semester studio, ARCH-505B: Elements and Principles, builds upon architectural fundamentals initiated in the fall semester studio by examining topics of greater complexity and depth. Consequently, the pedagogy focuses not only on developing proficiencies in skills and technique, but also on the point of contact between conceptual thinking, perceptual effect, and critical form-making and representation. The semester is organized around three design research projects that focus on fundamental architectural elements as well as on the relationship between form, phenomenon, and performance. The Façade, the Window, and the Room are used as vehicles to examine topics such as 2- and 3-D spatial organizational principles, various approaches to form generation, and the relationship between digital software and hardware as tools for imagining, modeling, and fabricating form and space.
The clarity of the overall structure is as important as the quality of the individual projects. Assembled in this way, the exercises make the pedagogical arc visible to the students as a series of discrete steps. It allows students to feel they are part of an identifiable program, to know their position at any time in the sequence and understand how each step related to the previous and next steps. They can “put it all together in their own minds. Incidentally, this provides a mental map of the discipline itself and encourages them to retain this awareness in their later semesters, so when they get to their final thesis year, they are prepared to think at that level about their place in the discipline. In contrast, the traditional project-based pedagogy compresses too many variables and factors into each step/project for this to happen.

COURSE CONTENT
The 505B studio will have a dual emphases: A. continuing to build upon the critical foundation inaugurated in 505A, particularly as it pertains to the study of architectural fundamentals; and, B. introducing topics of increasing complexity and depth. These include:

- Developing a comprehensive understanding of the various components of an architectural idea along with a capacity to synthesize these components into critical architectural concepts and proposals;
- Acquiring greater proficiency working with fundamental architectural elements, relationships and principles as well as contemporary ideas;
- Developing an analytical and intuitive awareness and understanding of various approaches to design research including using architectural precedents tactically and critically in the formation of an architectural idea;
- Acquiring proficiency in an expanded range of spatial organization strategies, approaches to form generation and, techniques of representation;
- Developing a method of working that focuses on the relationship between form generation and embodied experience.

NAAB STUDENT PERFORMANCE CRITERIA (SPC)
As part of your process this semester, you will demonstrate your ability to integrate the following NAAB Student Performance Criteria. To pass the course, your design work must demonstrate at least a minimum level of competence in each of these areas.

You can read more about each criterion at http://www.naab.org/accreditation/2009_conditions.aspx.

A.1 Professional Communication Skills: to write and speak effectively and use representational media appropriate for both within the profession and with the general public.
Demonstrated in: Projects 1.0, 2.0, 2..5 & 3.0

A.2 Design Thinking Skills: to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
Demonstrated in: Projects 1.0, 2.0 & 3.0

A.4 Architectural Design Skills: to effectively use basic formal, organizational, and environmental principles and the capacity of each to inform two- and three-dimensional design.
Demonstrated in: Projects 1.0, 2.0, & 3.0

A.5 Ordering Systems: to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
Demonstrated in: Projects 1.0, 2.0 & 3.0

A.6 Use of Precedents: to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.
Demonstrated in: Projects 2.0, 2.5 & 3.0
SEMESTER STRUCTURE / PROJECT SUMMARY
There will be three design research projects and a representation project over the course of the semester. The first three projects will each be four weeks in duration and serve as an introduction and foundation to principles and techniques that will be applied to and integrated in the fourth and final project, which will be approximately six weeks in length.

Project 1.0
Porosity, Modulation and Flat Depth: Variable Facade
Monday, Jan. 7 – Friday, Feb. 01
Duration: 4 weeks

Project 2.0
Threshold, Passage, Room: Light, Space, Movement and Phenomena
Monday, Feb. 04 - Friday, Mar. 01
Duration: 4 weeks

Project 2.5
Representation: Chromatic and Atmospheric Space
Friday, Mar. 01 - Friday Mar. 08
Duration: 1 week

Project 03
Dialogues Between Inside and Outside
Monday, Mar. 18 - Friday, May 01
Duration: 6.5 weeks

STUDIO STRUCTURE
The studio meets M-W-F from 2:00 to 5:50 p.m. Students are required to be in studio during these hours productively engaged in individual and group design activities. Each of the individual studio sections will follow the same program, schedule and grading system. There will be several guest lectures over the course of the semester. Attendance to these lectures is mandatory and students are responsible for understanding the material presented.

CALENDAR

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>ACTIVITY</th>
<th>PROJECT</th>
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<tbody>
<tr>
<td>01</td>
<td>M 01/07</td>
<td>Studio introduction &amp; organization; fieldwork</td>
<td>Project 1.0 introduced</td>
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<tr>
<td></td>
<td>W 01/09</td>
<td>Desk or small group crits</td>
<td>Part 1.1 &amp; 1.2 due</td>
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<td></td>
<td>F 01/11</td>
<td>Desk or small group crits</td>
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<td></td>
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<td>Lecture: Monica Ponce de Leon</td>
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<tr>
<td>02</td>
<td>M 01/14</td>
<td>Desk or small group crits</td>
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<td></td>
<td>W 01/16</td>
<td>Desk or small group crits</td>
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<td></td>
<td>F 01/18</td>
<td>Mid-review in paired groups [TBC]</td>
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<td>Lecture: Amy Murphy &amp; Mark Shiel - Why Ruscha</td>
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<td>03</td>
<td>M 01/21</td>
<td>Holiday: Martin Luther King’s Birthday [Studio doesn’t meet.]</td>
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<td></td>
<td>W 01/23</td>
<td>Desk or small group crits</td>
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<td></td>
<td>F 01/25</td>
<td>Desk or small group crits</td>
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<td>Lecture: WAI Architecture Think Tank</td>
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<tr>
<td>04</td>
<td>M 01/28</td>
<td>Desk or small group crits</td>
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<td></td>
<td>W 01/30</td>
<td>Desk or small group crits</td>
<td></td>
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<tr>
<td></td>
<td>F 02/01</td>
<td>Final Review</td>
<td>Project 1.0 due</td>
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</tbody>
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05 M 02/04 Proj. 2.0 introduced
W 02/06
F 02/08

06 M 02/11
W 02/13
F 02/15

07 M 02/18 Holiday: President’s Day [Studio doesn’t meet.]
W 02/20
F 02/22

08 M 02/25 Lecture & Reception: USC Generation Next 2019
W 02/27 Proj. 2.0 due; Proj. 2.5 introduced
F 03/01

09 M 03/04 Proj. 2.5 due
W 03/06
F 03/08

10 M 03/11 Spring Recess
W 03/13 Spring Recess
F 03/15 Spring Recess

11 M 03/18 Proj. 3.0 introduced
W 03/20 Lecture: Kunle Adeyemi [TBC]
F 03/22

12 M 03/25 Lecture: Charles Waldheim
W 03/27
F 03/29

13 M 04/01 Lecture: Teddy Cruz/Fonna Forman
W 04/03
F 04/05

14 M 04/08 Lecture: Brooks + Scarpa
W 04/10
F 04/12

15 M 04/15 Lecture: Natalie Escobar Castrillon
W 04/17
F 04/19

16 M 04/22 Final PPT presentations due
W 04/24
F 04/26 Classes End
Sat 04/27 -
T 04/30 Study Days

17 M 04/29
W 05/01 ARCH-505b Final Review
Architecture as an encyclopedia and taxonomy of disciplinary knowledge. 

**STUDIO BIBLIOGRAPHY**


**ORGANIZATION AND PARTICIPATION**

Studio meeting hours are Monday, Wednesday and Friday from 2:00PM to 5:50PM. Be on time. Anticipate needing to stay late, and avoid planning other activities following studio.

All-studio lectures will occur occasionally during studio hours. You are strongly encouraged to attend the School of Architecture lectures on Wednesday evenings, as well as interesting lectures at other nearby institutions.

Studio participation is critical to both individual and collective success. When not actively engaged with your instructor, be working in studio and available for spontaneous discussions and feedback.

Documentation is critical as a record of your process and a demonstration of your graphic and written communication skills. You will produce a portfolio that documents the work of this studio, to be submitted following final presentations for evaluation by the studio faculty.

You are required to submit a digital portfolio at the conclusion of the semester. Review with your instructor a selection of the best images including drawings, photographs and PPT presentations, and label using the naming and formatting protocols that will be given. This is the official USC School of Architecture archive of your work, which also offers the opportunity to have your work considered for future school publications and NAAB reaccreditation.

Keep your digital collections organized so references such as Blackboard downloads and research materials are easy to find. Keep your hard-copy materials organized too, preferably in a binder.

**CLASS ATTENDANCE**

Attendance at all studio sessions, including lectures, reviews, and field trips, is required. Not being in class within the first 10 minutes is considered tardy, three of which constitute an absence. Failure to be present for the entire class session, unless approved by your instructor, may count as an absence.

Personal illness, family emergency, pre-approved academic reason, or religious observance may be excusable; notify your instructor of such situations as soon as possible and before the affected class session.

Unexcused absences from more than three classes will result in the lowering of your final grade one full letter grade. False representation of your attendance is a violation of the University’s ethics policy.

Acceptance of late work may only be considered for excused absences, at the discretion of your instructor.

**STUDIO PROTOCOL**

You are strongly encouraged to make the studio your primary workspace in order to benefit from the interactive studio environment, informal discussions and the exchange of ideas with your classmates.

You are expected to work a minimum of two hours outside of class for each hour of scheduled studio time; this is a minimum of 24 hours a week in addition to the 12 hours of studio.
Project requirements will be distributed in writing. Daily or weekly assignments may be given verbally or in writing and may differ somewhat from section to section. Timely completion of all assignments is crucial to your success.

Reviews are among the most important elements of your architectural education, so be present, attentive, engaged and participating at each review.

Maintain a healthy, safe, collective working environment in studio. Respect your peers, so at a minimum:

If you want to listen to music, use headphones - at all hours.
Keep mobile phones turned off during studio and especially during reviews.
Respect others’ equipment, work products and workspace.
Studio hours are not mealtimes and the studio is not a lunchroom; please eat elsewhere.
Internet use during studio is for direct studio purposes only.
Don’t cut on vulnerable surfaces such as floors, desks and drawing boards. Use a cutting mat.
Don’t use spray paint, spray adhesive, or other noxious products in the studio or on campus.
Watch for unusual activities and unfamiliar faces and be mindful of your surrounding as a general precaution.
Do not prop studio doors open. If you observe any suspicious activities and/or need security personnel, contact the University’s Department of Public Safety (DPS) at (213) 740-4321.

READINGS
Recommended and required readings have been prepared for this course and will accompany each project. These texts will be distributed and/or posted on USC Blackboard over the course of the semester. You are responsible for completing all readings. Theoretical, historical and referential contexts are significant factors in the making of thoughtful and critical architecture.

EVALUATION AND GRADING
Each phase of the semester’s production will be evaluated and graded based on the following distribution:

Studio Participation & Preparation: 10%
Project 1: 25%
Project 2: 25%
Project 2.5: 10%
Project 3: 25%
Project Books / Digital Archive: 5%

Unsatisfactory performance warnings will be issued when work does not meet minimum requirements. University guidelines relative to plagiarism pertain to original design work; you are expected to do all your own design and presentation work. Receiving substantial assistance, or appropriating another’s design work, will be treated as plagiarism.

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://web-app.usc.edu/scampus/university-governance/. 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/.

RELIGIOUS OBSERVANCES
The University recognizes the diversity of our community and the potential for conflicts involving academic activities and personal religious observation. The University provides a guide to such observances for reference and suggests that any concerns about lack of attendance or inability to participate fully in the course activity be fully aired at the start of the term. As a general principle students should be excused from class for these events if properly documented and if provisions can be made to accommodate the absence and make up the lost work. Constraints on participation that conflict with adequate participation in the course and cannot be
resolved to the satisfaction of the faculty and the student need to be identified prior to the drop/add date for registration. After the drop/add date the University and the School of Architecture shall be the sole arbiter of what constitutes appropriate attendance and participation in a given course. Any student concerned about missing class for a recognized religious holiday should bring this matter up with your instructor in the first week of classes. A list of recognized religious holy days may be found at: http://orl.usc.edu/religiouslife/holydays/.

DISABILITY ACCOMMODATIONS
The University of Southern California is committed to full compliance with the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA). As part of the implementation of this law, the University will continue to provide reasonable accommodation of academically qualified students with disabilities so those students can participate fully in the University’s educational programs and activities. Although USC is not required by law to change the “fundamental nature of essential curricular components of its programs in order to accommodate the needs of disabled students,” the University will provide reasonable academic accommodations. The specific responsibility of the University administration and all faculty serving in a teaching capacity is to ensure the University’s compliance with this policy.

The general definition of a student with a disability is any person who has “a physical or mental impairment which substantially limits one or more of such person’s major life activities,” and any person who has “a history of, or is regarded as having, such an impairment.” Reasonable academic and physical accommodations include but are not limited to: extended time on examinations; substitution of similar or related work for a non-fundamental program requirement; time extensions on papers and projects; special testing procedures; advance notice regarding book lists for visually impaired and some learning disabled students; use of academic aides in the classroom such as note takers and sign language interpreters; early advisement and assistance with registration; accessibility for students who use wheelchairs and those with mobility impairments; and need for special classroom furniture or special equipment in the classroom.

Obtaining Accommodations:

General: 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 your studio instructor 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.

Physical Accommodations: DSP will work with classroom scheduling, the course instructors and their departments, and the students to arrange for reasonable accommodations.

Academic Accommodations: Students seeking academic accommodations due to a physical or learning disability should make the request to the course instructor prior to or during the first week of class attendance, as well as registering with DSP as early in the semester as possible. Course instructors will require that a student present verification of documentation when academic accommodations are being requested.

WRITING CENTER
For assistance with academic writing, students may wish to take advantage of the Writing Center maintained by USC. Evaluation of paper clarity, organization, syntax and grammar is available by appointment, free of charge. If you’d like to improve your writing and your ability to communicate your ideas, consider using this valuable resource. See their website at http://dornsife.usc.edu/writingcenter/ for more information.

SUSTAINABILITY INITIATIVE
The School of Architecture has adopted the 2010 Initiative for Sustainability, which includes the following language:

“The design should engage the environment in a way that dramatically reduces or eliminates the need for fossil fuel.”

This intention impacts our design process in a number of ways, including: orientation of buildings and site development to minimize negative environmental force impacts and take
advantage of positive ones building modestly: providing the minimum space necessary to handle required programmatic needs maximum practical use of daylighting; careful use of orientation and provision of control/shading mechanisms to handle associated heat loads maximum practical use of passive solar techniques for heating and cooling maximum practical use of natural ventilation techniques; selection of hybrid systems for ventilation, heating and cooling which permit this.

No school can lay a claim to Sustainability sensitivity that does not institute and vigorously pursue a recycling program. This recycling program is in force at all times. We pledge to provide adequate, well-marked recycling containers for each section and to provide a posted, printed recycling protocol so you know what goes where.

ACCREDITATION STATEMENT
The USC School of Architecture’s five-year Bachelor of Architecture program and their two-year and three-year Master of Architecture program are accredited by the National Architectural Accrediting Board (NAAB). All students can access and review the NAAB Conditions of Accreditation (including the Student Performance Criteria) on the NAAB Website, http://www.naab.org/accreditation/2009_conditions.aspx.