ARCH 104: History and Theory of Architecture, Technology, and Innovation

The first course in a series of seminars comprising the Bachelor of Science in Architecture + Inventive Technologies major, this class is intended to offer students a basic understanding of the history and theory of architecture and architectural product design. This is an introductory history and theory course regarding both the history of modern architecture and the inventive technologies that have shaped it, as well as the theoretical positions that have informed its present condition and potential trajectories. Technology and innovation will be explored as operative agents that have shaped the history of architecture and associated design disciplines, and as instrumental to the production of social, political, economic, and environmental conditions mediated by the built environment. Students will examine significant innovations and new technologies within architecture and the impact they have had on the profession, as well as on associated fields of design, construction, heritage conservation, building science, landscape architecture, and urbanism. Theoretical constructs framing the development of design technologies and their cultural situations will orient the topics explored in this course.

Learning Objectives

— Be able to demonstrate basic knowledge of the history and theory of innovation and technology in the fields of architecture, design, building construction, and associated fields through reading responses and essay assignments.

— Demonstrate understanding of the relationship between design and culture through reading responses and essay assignments.
— Demonstrate understanding of the impact that the built environment and spatial design have on the world through reading responses and essay assignments.

— Demonstrate understanding of the potential and the necessity for technology and innovation to shape the future of architecture and associated fields through reading responses and essay assignments.

Prerequisite(s):
None

Co-Requisite(s):
None

Concurrent Enrollment:
None

Recommended Preparation:
None

Course Notes
[Course Notes include important information on the course that will not appear elsewhere in the syllabus. This may include the style of the course/teaching, such as flipped, case-based, project-based, etc.]

Communication
Students should contact their respective assigned CA with any questions regarding assignments, Blackboard, TurnItin via Blackboard, etc.

Technological Proficiency and Hardware/Software Required
Blackboard: Blackboard will be the main platform for turning in assignments and accessing resources.

Software: Students will be required to have access to, and be proficient in, 2D and 3D drafting, modeling, and graphics software. Adobe Illustrator, Adobe Acrobat, Rhino, Solidworks, and Autocad are commonly used. Students will be expected to be proficient in Rhino, Autocad, and Adobe products. Solidworks help will be provided in the classroom.

USC Technology Rental Program
If you need resources to successfully participate in your classes, such as a laptop or internet hotspot, you may be eligible for the university’s equipment rental program. To apply, please submit an USC Technology Rental Program Application.

USC Technology Support Links
Blackboard help for students
Software available to USC Campus

Required Materials
Optional Materials

Description and Assessment of Assignments

1. **Attendance and Participation: 15%**
   Students are responsible for attending each lecture. Students will be expected to participate in in-class discussions. Students should come to class prepared to discuss the readings.

2. **Written Reading Responses (6 required responses): 60%**
   Students will be expected to submit a brief, 400-word commentary that responds to the required readings every other week, resulting in 6 total reading responses. Responses must utilize the primary arguments expressed in the readings and apply them to contemporary cultural themes that impact communities through the built environment. These current events may be current conversations, debates, themes, or news in the disciplines of architecture, urbanism, landscape architecture, engineering, spatial politics, spatial justice, mapping, interior design, interior architecture, exhibitions, art, etc. or might be current news stories shaped by the built environment. Reading responses are due roughly every two weeks on the dates shown in the syllabus. Reading responses will be submitted via Blackboard.

3. **Final Paper: 25%**
   For the final exam, students are expected to develop a concentrated **1500-word essay** (minimum 1400 to maximum 1600 words) that answers the question of how to make the profession of architecture more ‘relevant’ based on the Whitney Young Jr. quote. Students must generate an original thesis statement regarding the social responsibility of the architecture profession for the next 50 years. This thesis statement must exemplify conceptual understanding of the relationship between architecture and context, landscape, art, people, and culture.

   Students must support their thesis by utilizing at least three readings from class and at least three lectures from the course. Students must then apply their thesis in an analytical way, supported by the weekly themes and readings, to at least one current event that impacts communities through the built environment. The current event may be a current conversation, debate, theme, or news in the disciplines of architecture, urbanism, landscape architecture, engineering, spatial politics, spatial justice, mapping, interior design, interior architecture, exhibitions, art, etc. or might be a current news story that in some way relates to the built environment (for example, the ways that recent protest organizers have used the city as a site for their protest). These current events must relate in some way to the built environment to be counted, and the ways in which they relate to the built environment must be made clear in your argument.

Participation

Students will be required to participate in group discussions, critiques, and presentations. Continual failure to participate will result in a deduction to participation grade.
Grading Breakdown

Table 1: Grading breakdown template

<table>
<thead>
<tr>
<th>Assignment</th>
<th>% of Grade</th>
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</thead>
<tbody>
<tr>
<td>Attendance/Participation</td>
<td>15%</td>
</tr>
<tr>
<td>Reading Responses</td>
<td>60%</td>
</tr>
<tr>
<td>Final Exam or Paper</td>
<td>25%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
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</table>

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

Course-specific Policies (Assignment Submission, Grading Timeline, Late work, and Technology)

Assignment Submission
Assignments will be submitted through Blackboard.

Late work
**Late Assignments:**
Late submission of assignments will result in a deduction of at least one letter grade.
Unexcused absences on exam days can lead to a student receiving a “0” for that assignment.

Technology in the classroom

Academic integrity
Please see USC Statement on Academic Conduct and Support Systems
Attendance
The class is only as good as the thoughts discussed by the people there to discuss them. We are a small group. We should care about the experience of the other students each week as much as our own interests. Therefore, it is important that students come to every class on time and participate.

This class follows the School of Architecture Attendance Guideline, posted on Blackboard and at: http://arch.usc.edu/sites/default/files/info/faculty/soa_attendance_guideline.pdf.

Summary: One absence will not affect grade, but more than one absence or more than two tardies will begin to inform final grade for course.

Classroom norms

Establishing a safe space and a space of respect:

- This course, and its lectures and meetings, is a space of empathy and safety.

- This course, and its lectures and meetings, is also a space where diverse thoughts and feelings are valid and should be respected.

- This course, and its lectures and meetings, is a space to explore diverse texts, places, events, and ideas that might sometimes feel uncomfortable for us to discuss. We want this to be a supportive environment where we can explore difficult problems together.

- There is a limit to all of our knowledge (students, faculty, and CAs included). We’re all going to make mistakes, especially regarding cultures and ideas that are less familiar to us, and that’s okay; we’re all here to learn from each other.

- We should be willing to acknowledge that there are limits to our knowledge that may express unintended biases. We should endeavor to learn from others in an effort to widen our knowledge and empathy.

- We should be respectful and patient with one another (and with ourselves) through this learning process

Sharing of course materials outside of the learning environment
USC has a policy that prohibits sharing of any synchronous and asynchronous course content outside of the learning environment.
SCampus Section 11.12(B)
Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been
displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).

Course evaluation
Course evaluations occur at the midterm point in the course and at the end of the course. It is important to fill out these course evaluations to give a review of the students’ experience in the class.

Course Schedule: A Weekly Breakdown

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics/Daily Activities</th>
<th>Readings and Homework</th>
<th>Assignment Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to Course</td>
<td></td>
<td></td>
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<tr>
<td>Aug. 23-27</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sept. 13-17</td>
<td></td>
<td>Ellen Lupton &amp; J. Abbott Miller, Editors. The ABC’s of Triangle, Square, Circle: The Bauhaus</td>
<td></td>
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<tr>
<td>Week</td>
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</tbody>
</table>
| **Week 7** Oct. 4-8 | 1960’s-1970s: Designing for the Future  
| **Week 8** Oct. 11-15 | Fall Recess  
<table>
<thead>
<tr>
<th>Week</th>
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<th>Readings and Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prepare for Reading Response 5</td>
<td>Jun’ichiro Tanizaki, excerpt from In Praise of Shadows Sedgewick: Leete’s Island Books, 1977, pg. 12-23</td>
</tr>
<tr>
<td>Week</td>
<td>Topics/Daily Activities</td>
<td>Readings and Homework</td>
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<tr>
<td><strong>Week 14</strong></td>
<td>Thanksgiving Break - No Class</td>
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<tr>
<td>Nov. 22-26</td>
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<tr>
<td><strong>FINAL EXAM</strong></td>
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</table>
Sample Bibliography:


*Architectural Products* (bimonthly magazine)


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 Part B, Section 11, “Behavior Violating University Standards” 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, policy.usc.edu/scientific-misconduct.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call studenthealth.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 suicidepreventionlifeline.org
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) 740-9355(WELL), press “0” after hours – 24/7 on call studenthealth.usc.edu/sexual-assault
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) - (213) 740-5086 | Title IX – (213) 821-8298 equity.usc.edu, titleix.usc.edu
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298 usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity lTitle IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs - (213) 740-0776 dsp.usc.edu
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 Campus Support and Intervention - (213) 821-4710 campussupport.usc.edu
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
dps.usc.edu, emergency.usc.edu
*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
dps.usc.edu
*Non-emergency assistance or information.