Join us for an architecture experience at UCLA, the #1 Public University. Led by AUD Summer Programs Director Julia Koerner, JumpStart is a four-week summer studio which engages students in a wide range of activities, from intensive design exercises, individual feedback sessions, and small group discussions, to studio-wide presentations, and reviews. The program is open to students from all backgrounds and carries 6 UC credits. To participate in JumpStart, students must hold a high school diploma (or equivalent). To supplement studio activities, weekly lectures from UCLA faculty and notable guest designers will explore the many facets of idea-driven design, as well as urban and design culture in Los Angeles.

UCLA AUD JumpStart Studio 2023

MONSANTO HOUSE OF THE FUTURE

The Monsanto House of the Future, built in 1957 in Anaheim, California is an ultra modern 20th century prefabricated house. During the ten year period while on display in Disneyland’s Tomorrowland, more than twenty million visitors toured the house to explore and experience the future of the plastic fantastic living.

Photo credit: Yesterland

“Modern life demands, and is waiting for, a new kind of plan, both for the house and the city.” — Le Corbusier

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OVERVIEW AND TOPIC:

Designing an ADU to the Monsanto House on a typical LA 100’x 50’ lot. Students will speculate on architectural form, space, order and material innovation through a study and transformation of a portion of the Monsanto House of the Future comprising three stages:

A1: Examine and Document
A2: Scale, Rotate, Multiply, Array and Transform, Copy, Move, Delete
A3: Isolate and Elaborate

In this introductory studio, students will explore and materialize formations and constituents of architectural thresholds and kit of parts, in three phases, by first analyzing one of Los Angeles most futuristic prototypes, The Monsanto House of the Future of 1957. Following that, students will then: multiply and situate those components within simple geometric arrays as a vehicle for further speculations on architectural space, form, order, and the inter-relationships of objects and fields. Concurrently students will transform a zone within that array (comprising at least two adjacent components,) and rethink construction logics through idea-driven model-making in preparation for the third and final stage of the studio. That last step will entail the isolation of that zone for final documentation. Each design phase will include both digital and analog two-dimensional and three-dimensional representation.

BACKGROUND:

The Monsanto House of the Future was sponsored by Monsanto Company, exhibited by Walt Disney and designed by MIT architecture faculty Marvin Goody and Richard Hamilton to test plastic as an affordable material to mass-produce modular homes. At the time it was a visionary mission to explore the medium, assembly techniques and the form. The house was built completely out of plastic, eight feet above the ground with the utility core in the center and four U shaped cantilevering spaces each measuring two hundred and fifty square feet.
Inspired by such a forward-thinking, experimental approach to the design of dwelling, students will be tasked with unfolding new spatial and formal arrangements comprising re-imagined parts that stimulate creatively framed passages and transitions within the dwelling landscapes of today.

**OBJECTIVES:**

JumpStart is a summer design studio that introduces students to conceptual and technical facilities essential to the study of architecture as a discipline. The course will inspire students to engage in idea-driven design.

Students will:
- Produce architectural representation via orthographic projections.
- Develop digital models of existing and original designs.
- Build analog models using manual and digital fabrication tools.
- Learn to use 2-D and 3-D modeling and drawing software: Rhinoceros and Adobe Illustrator
- Communicate architectural ideas effectively across formats.
- Nourish those ideas with broader cultural thematics.

Section and Exploded Axonometric Drawing: Monsanto House of the Future / Marvin Goody and Richard Hamilton

**ORGANIZATION:**

Students will be assigned an instructor and technical support instructor and studio space. Studio time will be supported by several weekly lectures given by faculty and guest designers exploring many facets of idea-driven design. Software and fabrication tool tutorials will be provided each week as relevant to assignments.

The course is organized around design studio culture, which comprises a range of activities from desk critiques, to small group discussions, to studio-wide pin-ups, to final reviews with a panel of guest critics. Students’ thoughtful production of design work in-between such activities is essential and should respond to the new materials and skills provided by instructors.

**CREDIT HOURS:** 6 units of UC credit
POLICIES & PROCEDURES

Attendance

Attendance is mandatory during class time, dialogs, lectures, reviews, pin-ups, tutorials, and workshops. If you do not present your work at reviews, you will not receive credit for the studio. In the scenario of distant learning, some tutorials and lectures will be recorded and offered asynchronously. Students are expected to not miss more than 2 classes in order to receive credit. Three unexcused absences will result in a failing grade.

Work Culture and Absences

Students in the in-person program are required to work in the studio. In the scenario of distant learning, students will work from home. All technical equipment needed for the course such as a laptop, and drawing material will need to be acquired by the participants prior to the start of the course. A document outlining these requirements will be made available prior to the opening of the course registration.

All activities requiring absence from studio meetings i.e. purchasing materials or running project-related errands) should be scheduled outside of studio hours. Leaving in the middle of, or prior to the end of regularly scheduled studio times will result in an absence.

Grading

Course grades will be determined based upon the quality of work produced, improvement over the course, completion of project requirements, participation, attendance, attitude and ethical conduct. Any questions regarding grades or policies should be directed to your instructor or to the program director. A passing grade in the course requires dedicated completion of all projects. Incomplete work will not be evaluated. Grades will not be issued prior to the completion of archiving procedures.

Archiving

At the conclusion of the summer program you will be asked to archive your work. There will be time to do so the morning before your final review. You will not receive your grade until these files are submitted. Save all of your files to the 2024 Student Work folder.
Submit your individual photo or drawing files in 300 DPI JPGs with the following names:
JumpStart_2024_YourInstructorsLastName_YourLastName_01.jpg

Student Privacy

This program uses video recording or other personal information capture for the purpose of facilitating the course and/or test environment. Pursuant to the terms of the agreement with UCLA, the data is used solely for this purpose and any vendor is prohibited from disclosing this information. UCLA also does not use the data for any
other purpose. Students may not distribute recordings or other instructional materials provided as part of remote learning by faculty, teaching assistants, or invited guests.

**UCLA Summer Institutes**

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UCLA Architecture and Urban Design, 1317 Perloff Hall, Los Angeles, CA 90095  
email: summer@aud.ucla.edu

**Films and Interviews:**

- Monsanto’s Plastic “Home of the Future” at Disneyland (1957)
- Reyner Banham Loves Los Angeles (1972)
- Buster Keaton One Week (1920)
- Déambulatoire no.7
- David Umemoto’s Sculptures are Studies on Brutalism

**Readings and Articles:**

- F30: What the house of tomorrow can teach us today by Jean Thilmany  
- Environmental Infrastructures: From Bubbles to Territories by Lola Sheppard, 297-300.
- The figure-ground diagram
- Concrete poetry: the architectural sculptures of David Umemoto by Harriet Lloyd-Smith
- David Umemoto’s Architecture Sculptures

Construction images of The Monsanto House of the Future under construction in 1957 in Disneyland, California

EXERCISES:

In **Exercise A1**, each student will analyze the whole building by drawing 2D: one floor plan, one section and one elevation. A series of online films and virtual tours through the house will help familiarize students with the house in its totality and to confirm (through measured drawings) details and dimensions. In the next step students will pull apart Monsanto House to define prefabricated elements by creating an exploded isometric. After analyzing and dissecting Monsanto House, students will then preselect one zone in plan or in section to manipulate in exercise A2.

In **Exercise A2**, each student will first double their respective zones of study in a digital model by copying that zone and then applying one or more 3-dimensional transformations (i.e. bend, overlap/ move, scale/ rotate, multiply, stretch, mirror, array, delete and so on in conversation with instructors.) to parts of the segments. This initial multiplication will be further compounded with a geometrically driven, plan-based exercise wherein students will situate clones of the zone in an array bounded by 50’ x 50’ x 25’ the invisible box hovering over the building footprint of Monsanto House.

In **Exercise A3**, each student will further elaborate on their final massing/array in the typical 55’ x 110’ Los Angeles lot through additional drawings, atmospheric perspectives, and physical models. These representations will form a suite of artifacts describing a conceptually charged place at once both derivative of the Monsanto House and altogether new. Students will assign a specific program to their segment while speculating on ADU future living, materiality and methods of assembly.