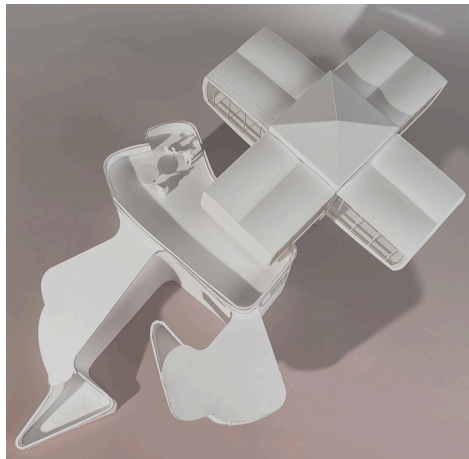


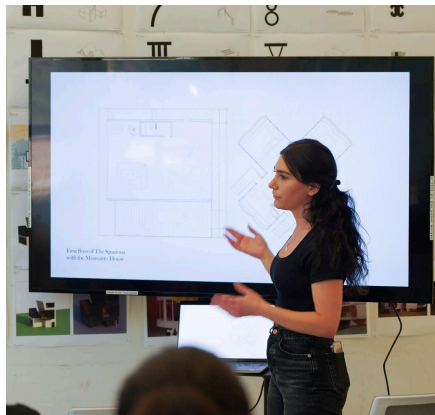
ARCH&UD 103: INTRODUCTION TO ARCHITECTURAL DESIGN STUDIO
UCLA AUD JumpStart 2025

SYLLABUS



UCLA AUD JumpStart Student Work 2024

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 2024

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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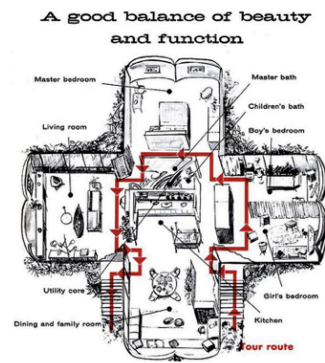
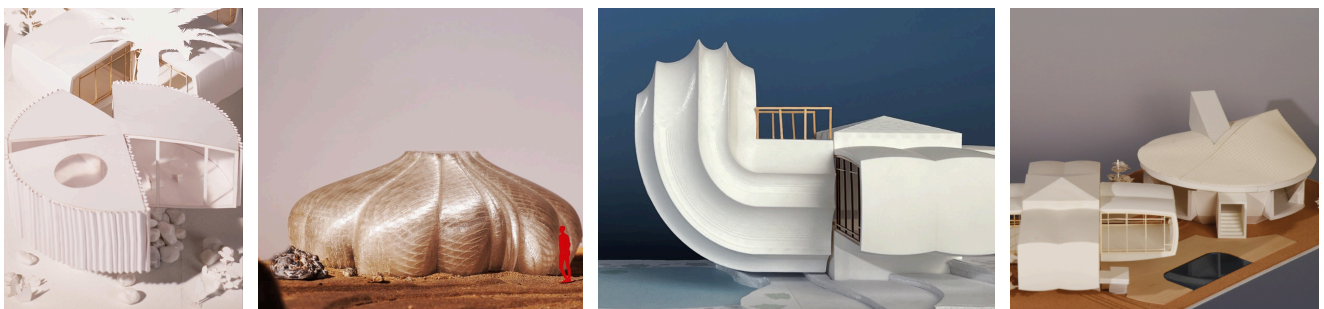


Photo credit: Yesterland

OVERVIEW AND TOPIC:



2023 & 2024 JumpStart Student Work

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: Monsanto House As-Built
- A2: Domestic Types: Building a Formal Vocabulary
- A3: Plastic Fantastic ADU

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 the viability of using 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.

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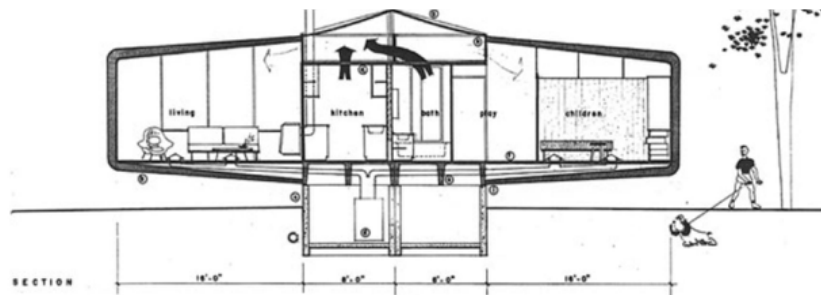
Inspired by such a forward-thinking, experimental approach to the design of dwelling, students will be tasked with unfolding new spatial and formal arrangements comprising re-imagined parts that stimulate creatively framed passages and transitions within the dwelling landscapes of today.

OBJECTIVES:

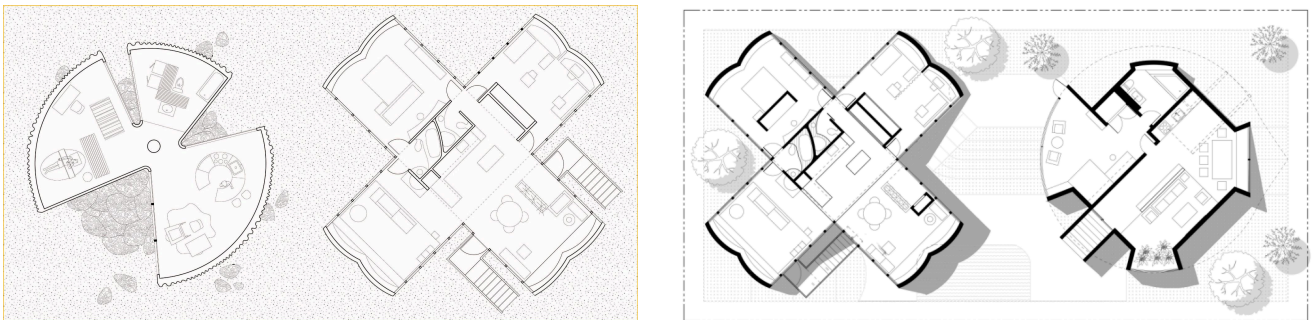
JumpStart is a summer design studio that introduces students to conceptual and technical facilities essential to the study of architecture as a discipline. The course will inspire students to engage in idea-driven design.

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



UCLA AUD JumpStart Student Work 2023 & 2022

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

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UCLA AUD JumpStart Studio 2024

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:

JS24_AssignmentNumber_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.

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UCLA Summer Institutes

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Interior views of The House of the Future living room and children's spaces. Photo credit: Yesterland

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Areeba Naeem, M.Arch I Student, Summer Programs Assistant Director areebanaeem@g.ucla.edu

Faculty Team:

TBD

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

Monsanto Plastics. "House of the Future." *Ekistics*, vol. 5, no. 28, 1958, pp. 14-17. JSTOR

Plastics: Monsanto House of the Future (MHFO), 1987 by Stephen Phillips

Architectural Evolution and Engineering Analysis of a Plastics House of the Future by Hamilton, Goody, Dietz, Heger, McGarry, MIT, Whittier, Gigliotti, and Monsanto Chemical Company, 1957.

Banham, Reyner "Los Angeles: The Architecture of Four Ecologies", 1973.

Banham, Reyner "A Home is Not a House", *Art in America*. 1965, volume 2, NY:70-79.

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

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Building an ADU, Guidebook to Accessory Dwelling Units in the City of Los Angeles by City Lab UCLA, 2017.

Los Angeles's Standard Plan Program for ADUs Takes Aim at the Housing Crisis by Jessica Ritz, 2021.

SO-IL Proposes Prefabricated "Pebble House" For The Los Angeles Accessory Dwelling Units Scheme by Palak Shah, 2021.

Approved ADU Standard Plans by LADBS

Low-Rise: Housing Ideas for Los Angeles <https://www.shariflynych.com/6-plex>



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 Monsanto House by drawing in two dimensions: one floor plan, one section, one elevation, and one isometric. Through a series of online films and virtual tours, students will first familiarize themselves with the house and will then use measured drawings to confirm details and dimensions. In the next step, students will pull apart the prefabricated components of the house to generate an exploded isometric drawing. By analyzing and dissecting the Monsanto House, students will learn the basics of orthographic projection and architectural drawing conventions, which will be useful tools for designing and documenting their own projects in subsequent assignments.

In **Exercise A2**, students will follow a step-by-step design process to generate three-dimensional forms that can serve as the basis for their final projects. Starting with a guiding grid, students will first generate several iterations of door, window, and roof conditions that are derived either from the Monsanto House or from other more familiar sources. The resulting drawings – a vocabulary of domestic types – will be precise, abstract, and unique for each student. The drawings will then be combined, overlapped, copied, multiplied, rotated, and trimmed to generate new 2D compositions that are further abstracted and no longer familiar. Subsequently, students will spatialize these compositions by converting them into three dimensional forms following techniques introduced during studio workshops and tech seminar sessions, as well as in conversation with instructors. In the final step, students will interpret and respond to the studio's overarching theme of plasticity, generating a concept for making final adjustments to the forms.

In **Exercise A3**, each student will convert their final massing into an accessory dwelling unit (ADU) for the Monsanto House, which will be placed in the front of a typical Los Angeles lot (55' x 110'). Students will study how their ADUs relate to the ground plane and to the Monsanto House. Working iteratively, students will generate drawings and physical models that describe the concept of their projects. Finally, they will incorporate a specific program while speculating on the future of living, materiality, and methods of assembly.