

KIT FOR A BIT

ARCHITECTURAL ASSEMBLAGE AND LEISURE

Architecture Design Option Studio
MIT Department of Architecture
Fall 2024
Tu + Th 1-5p

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KIT FOR A BIT: Architectural Assemblage and Leisure is part of a sequence of studios interested in flexible architectures that are adaptable to change over time. The studio asks students to design a future-ready building that incorporates material temporalities in both ecologically responsible and culturally rich ways. To this end, students will be designing a kit-of-parts architecture for a 30 year recreation center in Governor's Island in New York.

Materially, **KIT FOR A BIT: Architectural Assemblage and Leisure** will focus on long span architectures, with precedents ranging from greenhouse kits, to timber warehouses, to modular panel systems, to flat pack buildings and other parts-thinking architectures. We will be paying particular attention to the assemblage techniques, the planometric approaches, the conditioning systems and the auxiliary building components that make these systems particularly adaptable to future change.

Programmatically, **KIT FOR A BIT: Architectural Assemblage and Leisure** will focus the bulk of the semester on public recreation and exercise, looking into the relationship between our bodies and all scales of the material and digital environments in which we leisure. We will be designing an architecture for physical enjoyment, combining the indoor and outdoor, the collective and the solo experience, from the court to the locker room, creating spaces where the bodily and the architectural come together through materials, objects and social protocols. These are often spaces designed to withstand wear and tear, sweat, friction, impact, heavy equipment or exposure to the elements, often requiring the use of durable and robust materials,

making it all the more important to design them through future-flexible methods. Our cohort will be visiting gyms, sporting clubs, recreation centers, public parks, courts and fitness studios. We will be exercising together. Students will be designing a kit-of-parts for a recreation center for 30 years, however, they will be challenging their kit's adaptability and capacity for reassembly by introducing alternative programs to their designs.

Architecturally, **KIT FOR A BIT: Architectural Assemblage and Leisure** will closely study the clever tectonics, the equipment and the assemblage protocols of readymade construction systems with the distinct design challenge of imbuing these otherwise utilitarian systems with social appeal, body readiness and most importantly, a polyvalent futurity. In all our design approaches we will continue to favor material experimentation while advocating for ingenuity in assemblage, layering and modularization. The kit will need to be a replicable system and not a one-off design.

Digitally, **KIT FOR A BIT: Architectural Assemblage and Leisure** will combine the physical with the digital. Spaces of leisure often incorporate digital components ranging from immersive sound systems, remote workouts, digital trainers, point-of-view track shots on your treadmill, obstacle course simulations to interactive technologies. The studio will dedicate a small but distinct portion of the semester to the incorporation of these mediums to the projects. Students enrolled in this studio will have access to the media production equipment, from greenscreen systems to XR gear, available through the faculty's Lab.

KIT FOR A BIT: Architectural Assemblage and Leisure will be traveling to Governors Island in New York City (Nov 7-10), per invitation from the [Institute for Public Architecture \(IPA\)](#) where we will be staying for 3 nights / 4 days. The IPAs Headquarters and residences are located on the Block House which is a historically landmarked building in the exceptional context of Governor's Island. Also a historically landmarked island which is within 5 min. Ferry distance from NYC yet undeveloped. The island is a national park whose only tenants are a spa, a dance club and luxury camping ground and the only full time tenants are the guests and residents of IPA. Students will have the unique opportunity to be, in addition to the luxury campers, the only overnight residents of this protected island. Governor's Island will also serve as the site for the studio projects this semester.

KIT FOR A BIT: Architectural Assemblage and Leisure is not interested in team evangelism, in body exclusionary fitness paradigms, in gargantuan stadiums for global attraction, nor is it interested in elite performance oriented training but rather in the design of spaces and protocols for physical activity, public play, collective well-being, inclusive embodiment and spaces that make having a body, feel good.

KIT FOR A BIT: Architectural Assemblage and Leisure is organized around 4 exercises, all of which will be cumulative and will culminate in the development of a replicable architectural system and a site specific proposal that will serve as a testing site for the kit. The bulk of the production for the studio will be a detailed model and a video for a collective mixed media final installation. The work of the semester will be cumulative.

X1: We will begin to design our architectural kits by researching existing ones. Each student will select a readymade structural system to begin with. These hyper-standardized products are often presented as entirely utilitarian and often presume a mono-use audience. In doing so, they fail to see the myriad of possibilities in their design outcomes and uses.

X2: We will be using material and programmatic experimentation to alter these given systems. This component of the semester will produce two final outcomes: a quick research video and a mock up model.

X3: In this section, students will introduce a program that is specifically for bodily leisure into their architectural kits.

X4: For the final assignment students will learn a number of mixed medium video and digital simulation techniques in order to create an immersive and physical experience of their designs. We will be using easy-access, low learning-curve technologies, such as live green screen key-outs and quick animations which will culminate in a mixed medium installation for their final review.

KIT FOR A BIT: Architectural Assemblage and Leisure as a design studio, proposes a set of themes but also a way of working. Students will be engaged as designers, first and foremost, designers who are thoroughly interested in the matter of architecture. Weekly readings will be provided but we will be spending the bulk of our time making and prototyping.

We will be meeting Tues + Thurs from 1-5pm. This studio accommodates most digital skill levels. The course welcomes SMarchs students.



Rec Center

CALENDAR:

IMPORTANT LINKS	WEEK	DATE	IN CLASS	EXERCISE
Xavi Aguirre Contact:	1	Th 9/5	STUDIO INTRO - GETTING TO KNOW EACH OTHER	X1
https://mit.zoom.us/my/aquirrexa	2	Tu 9/10	FIRST IDEAS	X1
Email: xaguirre@mit.edu		Th 9/12		X1
	3	Tu 9/17		X1
		Th 9/19		X2
	4	Tu 9/24		X2
		Th 9/26		X2
	5	Tu 10/1		X2
		Th 10/3	X1 + 2 - REVIEW	X2
	6	Tu 10/8		X3
		Th 10/10		X3
	7	Tu 10/15	STUDENT HOLIDAY (NO STUDIO)	X3
		Th 10/17		X3
	8	Tu 10/22	X3 - MIDREVIEW	X3

		Th 10/24		X3
	9	Tu 10/29		X3
		Th 10/31		X3
	10	Tu 11/5		X3
		Th 11/7	STUDIO TRIP 11/7 - 11/10	X3
	11	Tu 11/12		X4
		Th 11/14		X4
	12	Tu 11/19		X4
		Th 11/21		X4
	13	Tu 11/26		X4
		Th 11/28	THANKSGIVING (NO STUDIO)	X4
	14	Tu 12/3		X4
		Th 12/5		X4
	15	Tu 12/10	FINAL REVIEW	X4



Kit-of-parts

COURSE LINKS:

- Course Communications, Course information, assignments briefs, and submission deadlines will be distributed via the shared [Course Bulletin Board](#) and loaded onto the shared [Google Folder](#). Coursework submissions will also occur via this [Google Folder](#).
- Updates to the course schedule and content will be sent via email to your MIT email address, Students are responsible for checking email regularly throughout the course.

- Students are also encouraged to email the instructor and/or TA with any questions, concerns, or requests that may arise during the course. In addition there is a **Miro Board** that will be used to share tutorials.

COURSE INFORMATION:

- Students are required to have discernable progress on their projects every studio session.
- Generally the studio is organized to have pin-ups and deadlines on Tuesdays, Workshops and tutorials on Thursdays and Site visits and software support a few Thursday with your Teaching Assistant.

SOFTWARE PRIORITIES:

- A number of introductory tutorials are made available through the **Miro Board**. Students are expected to find any additional software knowledge they might need to get desired outcomes on their work.
- Your TA will be available for technical support. Students are welcome to take this opportunity to learn more advanced tools like Blender but there will be no technical support offered for those and these students will need to inform their instructor of these intentions.
- The Miro board tutorials cover the following topics:
 - Simple Rhino animation
 - Photoshop GIF animation
 - Aftereffects
 - Premiere video editing w/ greenscreen keying
 - Rhino - Sketchup warehouse workflows
 - OBS screen recording
 - Enscape real time rendering / Enscape camera setup
 - Virtual Reality through Enscape
 - OBS and live green screen key out

FABRICATION PRIORITIES:

- We will be making detailed models:
 - 3d printing
 - Laser cutting
 - Light woodworking
 - Light metalworking
 - Be open to work with experimental materials

TRAVEL:

- **Local:** To create first hand knowledge of the dynamics and materialities in these spaces as well as to create a bond among studio participants, the studio will be making a series of small local and semi-local visits to different spaces of leisure. On a few occasions, we will be exercising together.
- **Site visit:** We will be traveling to Governors Island in New York City (Nov 7-10), per invitation from the Institute for Public Architecture (IPA) where we will be staying for 3 nights / 4 days. The IPAs Headquarters and residences are located on the Block House which is a historically landmarked building in the exceptional context of Governor's Island. Also a historically landmarked island which is within 5 min. Ferry distance from NYC yet undeveloped. The island is a national park whose only tenants are a spa, a dance club and luxury camping ground and the only full time tenants are the guests and residents of IPA. Students will have the unique opportunity to be, in addition to the luxury campers, the only overnight residents of this protected island. Governor's Island will also serve as the site for the studio projects this semester.



Governor's Island

MATERIALS:

- <https://archshops.mit.edu/materials.php>
- Each student will have between \$100 - \$140 for material refundables.

READINGS:

[How Buildings Learn ' What happens after they are built' - Stewart Brand](#)

[How to build your own living structures - Ken Isaacs](#)

[Disassembly guide with a focus on case studies - How to](#)

[Radical Matter - rethinking materials for a sustainable future by Kate Franklin and Caroline Till](#)

[Gold's Gym by Ann Bergen](#)

[Work, Body, Leisure by Marina Otero Verzier](#)

[Unbuilding: Salvaging the Architectural Treasures of Unwanted - Bob Falk](#)



CLASS OBJECTIVES:

- Design experimentation: The willingness to try new suggested techniques and follow through with the research and self-teaching that is required to make these experimentations successful.
- Critical Research and Representation: The ability to comprehend and construct abstract relationships between the multiple scales of elements in architectural design and their implications. This includes a range of media used to articulate information including writing, investigative skills, speaking, and designing.
- Communication Skills: Ability to convey information and listen effectively.
- Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards.
- Visual Communication Skills: Ability to engage new forms of representational media to convey essential formal concepts at each stage of the design process.
- Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

GRADES:

Grades will be based on a combination of individual work, group work, and class participation. Course grading will be allocated as follows: Assignment 1: 10%

Assignment 2: 10%

Assignment 3: 10%

Assignment 4: 10%

Assignment 1 Final 10%

Assignment 2 Final 10%

Assignment 3 Final 15%

Assignment 4 Final 15%

Participation 10%

COURSE CLIMATE:

- In this course we will learn from each other as well as from the faculty and the syllabus. In order to do that we must engage each other with respect and must have as a goal to engage all kinds of learners. The tone of the course aims to be fun and open-minded.
- The course is designed for you to simultaneously advance your research interests as well as develop new representational skills. You will be treated as a designer who wants to engage the topics of the studio, through the act of designing. To that end, you are expected to push yourself towards acquiring new skills and engaging unfamiliar tools of production.
- Share responsibility for including all voices in the conversation. If you tend to have a lot to say, make sure you leave sufficient space to hear from others. If you tend to stay quiet in group discussions, challenge yourself to contribute so others can learn from you.
- This is a reminder to all of us to work together to actively construct and maintain the classroom as spaces of mutual respect and safe spaces: “A place where anyone can relax and be fully self-expressed, without fear of being made to feel uncomfortable, unwelcome, or unsafe on account of sex, race/ethnicity, sexual orientation, gender identity or expression, cultural background, age, or physical or mental ability; a place where the rules guard each person's self-respect and dignity and strongly encourage everyone to respect others.”
(<http://www.advocatesforyouth.org/storage/advfy/documents/safespace.pdf>, pg. 67)

ATTENDANCE POLICY:

- Students are required to attend all class sessions and to be well prepared. Students must be in attendance for the entire class session or their allotted time.
- Students are expected to be attentive and respectful of the presenter(s) in class.
- Students who miss deadlines due to valid extenuating circumstances may submit their required work at a later date, as agreed upon with the instructor. University regulations limit such circumstances to serious personal illness and death in the family. Unexcused late work will not be accepted, incomplete projects will be evaluated in relation to their degree of completion, and a student will be allowed to present such work only with instructor approval.
- Participation will be evaluated through engagement in class discussions, a positive disposition to experimentation, responsiveness to instructor/TA feedback, and positive attendance.
- Missing work will be counted as 0% and significantly impact average grade. Late work will not be accepted, except in extenuating circumstances.
- Specific grading criteria for each assignment will be distributed in assignment briefs. Final assignment grades will be informed by progress in sub-assignment submissions.
- The criteria below is quoted from <http://catalog.mit.edu/mit/procedures/academic-performance-grades/#gradestext>
A Exceptionally good performance demonstrating a superior understanding of the subject matter, a foundation of extensive knowledge, and a skillful use of concepts and/or materials.
B Good performance demonstrating capacity to use the appropriate concepts, a good understanding of the subject matter, and an ability to handle the problems and materials encountered in the subject.
C Adequate performance demonstrating an adequate understanding of the subject matter, an ability to handle relatively simple problems, and adequate preparation for moving on to more advanced work in the field.
D Minimally acceptable performance demonstrating at least partial familiarity with the subject matter and some capacity to deal with relatively simple problems, but also demonstrating deficiencies serious enough to make it inadvisable to proceed further in the field without additional work. Some departments require students with D-level performance in certain prerequisite subjects within the departmental program to do additional work, or to retake the prerequisite, before proceeding with the follow-on subject.
F Failed. is grade also signifies that the student must repeat the subject to receive credit.
Note that the MIT internal grading system includes plus (+) and minus (-) modifiers for use with the letter grades A, B, and C for all academic subjects (except advanced standing exams). These modifiers appear only on internal grade reports. They do not appear on transcripts and are not used in calculating term or cumulative grade-point averages. The MIT grading system for external purposes does not include modifiers.

PERSONAL CONDUCT:

- Instructors, TAs, and students in this course are expected to act responsibly, ethically, and with respect for the dignity of all others, both within and outside the classroom. Issues relating to personal conduct, including discrimination and harassment, will be taken extremely seriously.
- Students should take the time to become familiar with MIT's major policies on personal conduct, which can be found here: <https://policies.mit.edu/policy-topics/conduct-and-community-standards>

ACADEMIC INTEGRITY:

- Fundamental to the academic work you do at MIT is an expectation that you will make choices that reflect integrity and responsible behavior. Students should take time to become familiar with the Institute's policies regarding academic integrity, which can be found here: <https://integrity.mit.edu/>.

GRADSUPPORT:

- As a graduate student, a variety of issues may impact your academic career including faculty/student relationships, funding, and interpersonal concerns. Office of Graduate Education (oge.mit.edu), GradSupport provides consultation, coaching, and advocacy to graduate students on matters related to academic and life challenges. If you are dealing with an issue that is impacting your ability to attend class, complete work, or take an exam, you may contact GradSupport by email at gradsupport@mit.edu or via phone at (617) 253-4860.

DISABILITY ACCOMMODATION AND ACCESS SERVICES:

- MIT is committed to the principle of equal access and an inclusionary environment. Students who need any form of accommodation are encouraged to speak with the instructor as early as possible. Students who need disability accommodations are encouraged to speak with Disability and Access Services (studentlife.mit.edu/das), prior to or early in the semester so that accommodation requests can be evaluated and addressed in a timely fashion. If you have a disability and are not planning to use accommodations, it is still recommended that you meet with DAS staff to familiarize yourself with their services and resources.
- Contact Disability and Access Services with any questions at 617-253-1674 or via email das-student@mit.edu. Due to the themes covered in this studio, we will be visiting gyms and will be engaging in exercise together. Students will be asked to submit a confidential survey to their faculty to let them know of any factor that may affect their participation. Please include any factor that may affect your comfort with engaging in any collective exercise or exercise environments. Your faculty will make their best effort to accommodate these or find alternatives.
- This studio will be getting active together. This means we will be visiting and utilizing several area gyms together. Your faculty's main goal here is to create a learning environment where our moods can be uplifted by leaving the computers behind but if there are any discomfort and difficulties around these activities please let your faculty know. These can be any factors that may cause personal hesitation to group dynamics, privacy and/or nature of the activities.