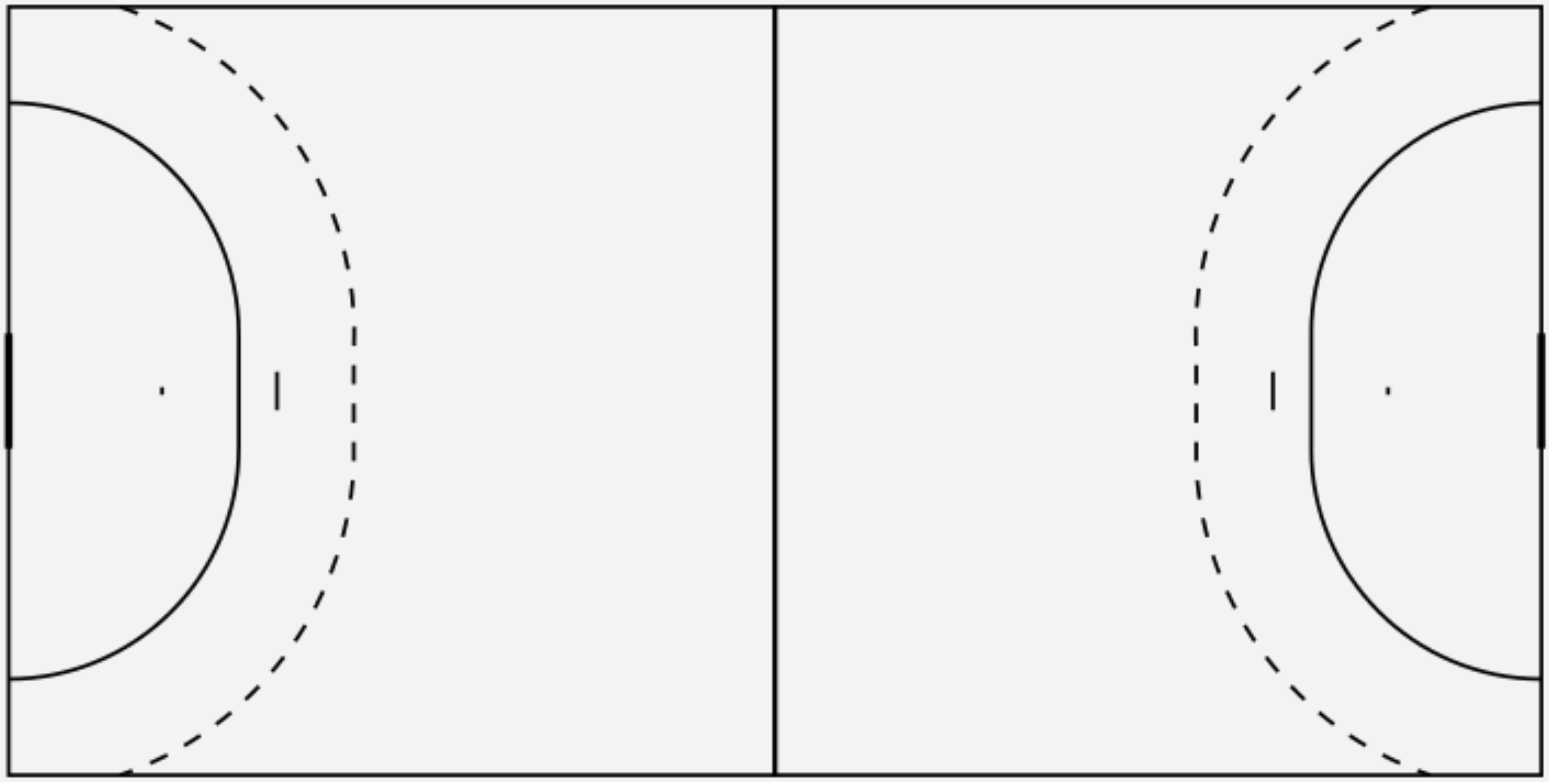
KIT FOR A BIT

ARCHITECTURAL ASSEMBLAGE AND LEISURE

Architecture Design Option Studio MIT Department of Architecture Fall 2023 Tu+Fr 1-5p (some Th 1-5p)	Xavi L. Aguirre xaguirre@mit.edu Office Hours TBD @ 1042-M TA: Laura-India Garinois liag@mit.edu



BRIEF:

KIT FOR A BIT: Architectural Assemblage and Leisure is part of a series of interrogations at the intersection of architectural material temporality and programming that looks into how architecture adapts to changing programmatic motivations and how we as designers, can devise architectural techniques that incorporate those temporalities in both ecologically responsible and culturally rich ways. This semester we will focus on the relationship between our bodies and all scales of the material and digital environments in which we leisure, with particular attention to the design of architectures geared towards exercise and recreation. We will span from products to architecture and landscape. We will be designing spaces for physical enjoyment, whether indoor and outdoor, collectively or alone, spaces where the bodily and the architectural come together through materials, objects and social protocols. Gyms, sporting clubs, courts, parks, these spaces are 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 responsible material strategies that allow for their use and reuse. Architecturally then, this studio will use assemblage, layering, found materials and modularization to design futureproof architectural kits. Given the program, the design challenge will be to imbue these kits with social appeal, with body readiness and engagement.

In addition, leisure environments often combine the physical and the digital, with their immersive sound systems, remote workouts, digital trainers, Point of View track shots, obstacle course simulations or interactive technologies. The studio will dedicate a generous portion of the semester to incorporating a couple of these mediums to the projects.
The studio is not interested in team evangelism, in stadiums for global attraction, nor is it interested in elite performance oriented training or body exclusionary fitness practices but rather in the design of spaces and objects for congregation, play, collective health, inclusive embodiment and relaxation.

The studio is divided into 3 major components:

Component 1: **The kit:** We will begin to design our architectural kits by researching existing ones. Each student will select a base structural kit to begin with. These readymade kits are often hyper-standardized, presented as complete products, 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. We will be using our keen design sensibilities as well as our individual programs to alter these given systems. This component of the semester will produce two final outcomes: a quick research video and a physical model.

Component 2: **The use:** In this section, students will introduce a program that is specifically for bodily leisure into their architectural kits. The specifics and scale of this use are up to each student's interests. Exercise environments can often be spaces where the normative reign. In this studio, however, you will challenge these standardizations by adapting the designs to the more idiosyncratic: the bodily. You will do this at all scales while maintaining an ecological sensibility towards responsible material life cycles. The outcomes of this exercise may vary depending on the student's interests and scale of inquiry and may range from products to the more architectural.

Component 3: **The digital:** 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 your design. We will be using easy-access, low learning-curve technologies, such as live green screen key-outs, quick animations and virtual reality to be able to embody each student's designs. This assignment will culminate in a mixed medium installation for their final review, where students, with help from the instructor, will produce an interactive installation that will include their physical models and the digital simulation which guests and visitors will interact with. This assignment accommodates most digital skill levels.

The work of the semester will be cumulative.

KIT FOR A BIT: Architectural Assemblage and Leisure as a design studio, Kit for a Bit 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 material and digital experimentation. Weekly readings will be provided but we will be spending the bulk of our time making and prototyping. Many days we will be on the go, working in the XR Lab.

As a cohort, we will visit different recreational and leisurely architectural environments throughout the Boston area, we will be visiting an installation in Yale's Schwaztman center and we will even be exercising together. However regional our visited precedents, students are welcome to situate their project anywhere in the world. The course is happy to admit SMArchS students.

INTRO VIDEO: https://youtu.be/Awg7azdOHTM

CALENDAR:

IMPORTANT LINKS	WEEK	DATE	IN CLASS	EXERCISE
Xavi Aguirre Contact:	1	Fr. 9/8	COURSE INTRO - GETTING TO KNOW EACH OTHER	X1a - Gather info
https://mit.zoom.us/my/aguirrexla	2	Tu 9/12	X1a - SHARE RESEARCH - GROUP THEN INDIVIDUAL DESK CRITS	X1a - Gather info
Email: xaguirre@mit.edu		Fr 9/15	DESK CRITS	X1a - Gather info
TA: Laura-India Garinois	3	Tu 9/19	GROUP MINI WORKSHOP - EASY ANIMATION	X1b - Gather info
liag@mit.edu		Fr 9/22	STUDENT HOLIDAY	X1b - Gather info
	4	Tu 9/26	REVIEW	X1b - Gather info
		Fr 9/29	TRAVEL	X2 - Gather parts
	5	Tu 10/3	GROUP MINI WORKSHOP - MAKING	X2 - Gather parts
		Fr 10/6	TRAVEL	X2 - Gather parts
	6	Tu 10/10	STUDENT HOLIDAY	X2 - Gather parts
		Fr 10/13	GUEST INSTRUCTOR	X2 - Gather parts
	7	Tu 10/17	REVIEW	X3 - Alter parts
		Fr 10/20	GUEST INSTRUCTOR	X3 - Alter parts
	8	Tu 10/24	YALE TRAVEL	X3 - Alter parts
		Fr 10/27	MINI WORKSHOP - MAKING	X3 - Alter parts
	9	Tu 10/31		X3 - Alter parts

		Fr 11/3	GUEST LECTURE	X3 - Alter parts
	10	Tu 11/7	ELECTION DAY - MID REVIEW	X4 - Alter info
		Fr 11/10	WORKSHOP - XR LAB	X4 - Alter info
	11	Tu 11/14		X4 - Alter info
		Fr 11/17	PIN-UP - XR LAB	X4 - Alter info
	12	Tu 11/21		X4 - Alter info
		Fr 11/24	INSTITUTE HOLIDAY	X4 - Alter info
	13	Tu 11/28	PIN-UP - XR LAB	X4 - Alter info
		Fr 12/1		X4 - Alter info
	14	Tu 12/5	PENULTIMATE REVIEW	X4 - Alter info
		Fr 12/8		X5 - Final Installation
	15	Tu 12/12	FINAL REVIEW	X5 - Final Installation

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 Fridays 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 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

- In addition, you may choose to experiment with:
    - Blender
    - Aftereffects
    - V-ray
    - Lumion
    - Lidar scans
    - To add people / avatars:
        - Mixamo
        - Photoshop 3d
        - Renderpeople.com

FABRICATION PRIORITIES:

- 3d printing
- Laser cutting
- Light woodworking
- Light metalworking
- Be open to work with experimental materials

TRAVEL:

- 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.
- Each student will have between $100 - $140 for material refundables. In addition, each student will have between $160 - $250 for travel and to pay for entry into different gyms..

MATERIALS:

- **https://archshops.mit.edu/materials.php**

READINGS:

READINGS	TYPE	LOCATION
Accumulation - E-flux	Collection of articles	Link
How Buildings Learn ' What happens after they are built' - Stewart Brand	Lecture	Link

Crafted Images - Aude-Line Dulière	Article / Lecture	Link
Disassembly - How to	Manual	Link
Disassembly guide with a focus on case studies - How to	Manual	Link
Subtraction - Keller Easterling	Article	Link / Drive
Views from the Plastisphere - Heather Davies	Article	Link
The 3D additivist cookbook - Heather Davies	Collection of articles	Link
Radical Matter - rethinking materials for a sustainable future by Kate Franklin and Caroline Till	Book	
Non-extractive architecture - Space Caviar	Book	Intro in Drive
Waste & Want: A social History of trash - Susan Strasser	Book	
Unbuilding: Salvaging the Architectural Treasures of Unwanted - Bob Falk	Book	Drive
PostGrowth : Life After Capitalism by Tim Jackson	Book	
Wasted: When trash becomes treasure - Katie Treggiden	Book	
Climate Lockdown	Instagram Account	Link
How to build your own living structures - Ken Isaacs	Manual	Link
Life and death in the anthropocene - Heather Davies	Article	Drive
The Devil is in the details	Article	Drive
Being plastic - Holland	Article	Drive
The uses of decorating - Nicholas Korody	Book	Drive
Black hole catalog - Nick Korody	Lecture	Link
Styrofoam - Ang Li	Lecture	Link
Postcommodities...Architecture after stuff	Symposium	Link
Gold's Gym by Ann Bergen		
Work, Body, Leisure by Marina Otero Verzier		
Practices paperback series: Raving by McKenzie Wark / Running by Lindsey Freeman / Juggling / Fly-fishing		
'Cultural Resistance' by APRDLSP in E-Flux		
Crafted Images - Aude-Line Dulière		

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.