

A photograph of a tree-lined path with people walking, overlaid with large white text. The path is paved and leads into the distance, flanked by mature trees with vibrant green leaves. In the background, a person in a blue jacket and another person in a colorful backpack are walking away from the camera. The scene is bright and sunny, with shadows cast on the path.

LIVING WITH WOODS

AALTO ARTS SUMMER SCHOOL 2023



Living With Wood(s)

Welcome to Aalto ARTS Summer School – Living With Wood(s)!

Our main focus here is to help you study the use of wood in designing living environments in balance with nature. This is a unique chance to learn and develop your ideas in an international, multidisciplinary context and experience hands-on work in high-quality workshops of Aalto University.

The content of the summer school courses was created in collaboration with academics from this year's partner universities: Parsons School of Design, The Oslo School of Architecture and Design, Singapore University of Technology and Design, Tecnológico de Monterrey, Politecnico di Milano, Royal College of Art, Academy of Fine Arts in Warsaw, Delft University of Technology and École nationale supérieure de paysage.

The initiative's aim is to invite international students to the Aalto University in order to build capacity for collaboratively solving the big challenges of our time. Teaching will be implemented through co-teaching both on-site at the Otaniemi campus and online.



Course Handbook

In this course handbook you can find all important information related to the summer school. The instructions for the group design project can be found at the end of this handbook.

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Learning Activities

credits: 6 ects = 162 study hours

The Pre-assignment

The summer school was kicked off with presentations of the pre-assignments. The students will present their background research into the campus and the themes and concepts related to the summer school. Other groups' pre-assignment materials will be available for you to study.

Face-to-face teaching sessions

The mornings will be dedicated to **lectures, workshops and seminars** led by academics from the world's leading design and technology universities.

Group task: the design project

The main assignment of this course is a group design project. Most afternoons are dedicated to **group work, production work at the ARTS workshops, tutoring and feedback** sessions, which will finally lead to an exhibition at the Väre building lobby on the last day of the summer school.



The summer school provides:

- HSL-travel card for the two weeks

The travel cards need to be picked up on Monday 7.8.2023 08:00 from the [HSL service point](#) at the Helsinki main railway station (underground). Meet with summer school coordinator Venla Luukkonen at the service point and call if you cannot find the place: +358 50 4733594. Venla pays for all the travel cards so make sure you do not pay anything when picking up the card. Simply say that the travel card for two weeks is paid by Aalto University.

- Aalto ID

You have already received and activated your Aalto user that gives you access to your Aalto email and the course's [MyCourses](#) platform. All course materials and the submissions of assignments are added to MyCourses.

- Access tokens to the campus

On Monday 7.8. you will have a chance to activate your access tokens to the Aalto University campus. You can use your HSL-travel card as an access token or pick up a separate key tag from the lobby service. You can activate your access token online at: idm.aalto.fi. The Väre lobby service will help you activating your access token if needed.

- Free printing on campus

You can print A4 or A3 sheets in color for free on campus. You can print on "secureprint" printers on school computers or by sending the file to mobileprint@aalto.fi. The student assistants will instruct you on the printer use.



Accommodation

The accommodation is paid by Aalto for the duration of the summer school. The students are staying in individual rooms at [Unihome Töölö Towers](#) in Helsinki, a 10-minute metro ride away from the campus.

The rooms are available at 15:00 on Sunday 6.8. and the check-out is on Saturday 19.8. by 11:00. If you want to arrange extra nights at your own expense, you can contact the hotel directly and find your reservation under your name:

Töölö Towers

Pohjoinen Hesperiankatu 23 A

00260 Helsinki

Reception open daily 8.00-22.00

reception@unihome.fi

+358 (0)2941 24555

A photograph of a group of people in a meeting room. A man with grey hair and glasses is seated at a table, looking towards a woman with blonde hair who is gesturing with her hand. Other people are visible in the background, some with backpacks. The scene is set in a room with a whiteboard.

TEACHING STAFF
of the Summer School

AALTO Summer school team



Pekka Heikkinen

Teacher in charge



Pirjo Sanaksenaho

Head of Department of
Architecture



Aada Taipale

Co-teacher



Jaakko Torvinen

Co-teacher



Matti Jänkälä

Co-teacher & Coordinator
+358505749091



Venla Luukkonen

Coordinator
+358 50 4733594



Iina Ekholm

International relations
manager



Emma Johansson

Teaching assistant
+358503389414



Tiina Ojala

Teaching assistant
+358503391481



Nikolai Fabricius

Teaching assistant
& Civil servant

Summer school teaching team



Emilia Weckman
Aalto University



Tommy Lindgren
Aalto University



Tomek Rygalik
Aalto University



Sarianna Salminen
Aalto University



Katariina Väättä
Aalto University



Laura Zubillaga
Aalto University



Elisa Lähde
Aalto University



**Cynthia Lawson
Jaramillo**
Parsons, The New School



Caroline Dionne
Parsons, The New School



Jeongki Lim
Parsons, The New School

Summer school teaching team



**David Sánchez
Ruano**

Tecnológico de Monterrey



**Carlos Cobreros
Rodríguez**

Tecnológico de Monterrey



**James Christopher
Postell**

Politecnico di Milano



Ute Groba

The Oslo School of
Architecture and Design



Mattias F Josefsson

The Oslo School of Architecture
and Design



Paweł Jasiewicz

Academy of Fine Arts in
Warsaw



Christine Yogiama

Singapore University of
Technology and Design



Kenneth Tracy

Singapore University of
Technology and Design



Simon Boudvin

École Nationale Supérieure
de Paysage



Otaniemi Campus

The summer school takes place at the Aalto University campus in Otaniemi. The campus metro station “Aalto University” is a 10-minute metro ride from downtown Helsinki. The summer school will take place mainly in the following buildings:

Paja

“Paja” is Finnish for workshop. The Paja building is located at the Otaniemi campus in the address **Metallimiehenkuja 4**, across the street from the Alvar Aalto designed Learning Center. Paja will be the main base of operations during the summer school. The building contains:

Workshop: The construction workshop is located on the 2nd floor of the building. The wood workshop is suitable for various scales of woodworking all the way up to construction of small buildings and pavilions. In addition to the machine halls, there is a possibility use a laser cutter and various hand tools at the workshop.

Studios: The studio spaces for students’ group work are located on the 3rd floor of the building. The studio is the space where the tutoring sessions and shorter mid-reviews are held.

Väre

Väre is the main building of Aalto ARTS. During the summer school, lectures and longer reviews will be held in the **lecture room F102** in the main lobby of the building. The final exhibition of the summer school will take place in the Väre lobby. The building is connected to the shopping mall and metro station and contains multiple student restaurants. The basement of the building contains the Aalto ARTS workshops of which the summer school is using laser cutting and 3D-printing if necessary.

A young man with short brown hair is wearing large grey headphones with the brand name 'WURTH' and 'Super 11' visible. He is wearing an orange and black plaid shirt over a dark blue t-shirt. He is focused on his work, looking down at a piece of light-colored wood he is cutting on a band saw. The saw has a yellow vertical frame and a blue adjustment block. The workshop background is slightly blurred, showing various tools and equipment. The text 'TIME TABLE of the Summer School' is overlaid on the left side of the image in a white, sans-serif font.

TIME TABLE
of the Summer School

Schedule

- Joint program
- Excursion
- Review
- Lecture
- Tutoring
- Team working
- Social program
- Free time

6 Aug 7 Aug 8 Aug 9 Aug 10 Aug 11 Aug 12 Aug 13 Aug 14 Aug 15 Aug 16 Aug 17 Aug 18 Aug 19 Aug

Morning Sessions

	8:00 HSL cards	8:00 Bus leaves from Paja											
	9:00 Pre-assignment presentations		9:00 Lectures	9:00 Mid-review 1	9:00 Lectures			9:00 Lectures		9:00 Mid-review 3	9:00 Lectures	9:00 Team working	
		10:00 Evo Forestry School	11:15 Tutoring	10:15 Team working	11:15 Team working			11:15 Tutoring	8:00 Bus leaves from Paja 09:00 Westas sawmill at Koski	10:15 Team working	11:15 Tutoring		

Lunch Break (12.00-13.00)

Lunch Break (12.00-13.00)

11:00 Check out from the Hotel

Afternoon Sessions

15:00 Check in at the Hotel	13:00 Key cards	18:00 Arriving back to Otaniemi	13:00 Team working	13:00 Team working	13:00 Mid-review 2	12:30 Bus leaves to Nuuksio from Töölö Towers	13:00 Team working	13:00 Nikari Oy KWUM	13:00 Team working	13:00 Team working	17:00 DL for posters	13:00 Final review
	Campus tour & workshop orientations		13:00 Team working	16:00 Tutoring			13:00 Team working		15:00 Fiskars Village Onoma exhibition	16:00 Tutoring		
17:00 Woodcha Kucha			Voluntary: 17-20:00 Workshops open	Voluntary: 17:30 Visit to the Aalto House	Voluntary: 17-20:00 Workshops open		Voluntary: 17-20:00 Workshops open	18:00 Arriving back to Otaniemi	Voluntary: 17-20:00 Workshops open	Voluntary: 17-20:00 Workshops open	17:00 Closing Party in Väre Lobby	

Schedule

Morning Sessions

Sunday 6 Aug

Monday 7 Aug

Tuesday 8 Aug

Wednesday 9 Aug

Thursday 10 Aug

Friday 11 Aug

08:00 Pick up travel cards
Place: HSL-service point

9:00 Pre-assignment presentations: Concepts & Site Analysis
11:30 Design Project introduction

Place: F102 (Väre)

8:00 Bus leaves from Paja

10:00 Evo Forestry School

9:00 Lecture (Caroline Dionne & Cynthia Lawson Jamarillo)

Place: F102 (Väre)

11:15 Tutoring
Check point 1

Place: Studio (Paja)

9:00 Mid-review 1

Place: Studio (Paja)

10:00 Team working
Discussion on next steps

Place: Paja

9:00 Lecture (James Christopher Postell)
10:00 Lecture (Mattias F Josefsson)

Place: F102 (Väre)

11:15 Team working

Place: Paja

Lunch Break (12.00-13.00)

15:00 Check in at the Hotel

Place: Töölö Towers

17:00 Summer School introduction

17:30 Woodcha Kucha

18:30 Get-together with the student groups

Place: F102 (Väre)

13:00 Pick up key cards from Väre lobby service

Campus tour & workshop orientations.

Place: Väre lobby

16:00 Bus leaves from Evo

18:00 Arriving back to Otaniemi

13:00 Team working

16:30 Voluntary tutoring: end of day check up

Place: Paja

Voluntary:
17-20:00 Workshops open

20:00 Enjoy life outside campus

13:00 Team working

Place: Paja

16:00 Tutoring
Check point 2

Place: Studio (Paja)

Voluntary:
17-20:00 Workshops open

17:30 Visit to the Aalto House

13:00 Mid-review 2

Place: F102 (Väre)

Voluntary:
17-20:00 Workshops open

20:00 Enjoy life outside campus

Afternoon Sessions

Free time

Progress of the student projects

Morning Sessions

Sunday 6 Aug

Monday 7 Aug

Tuesday 8 Aug

Wednesday 9 Aug

Thursday 10 Aug

Friday 11 Aug

Pre-assignment presentations

Goals

- Learning from the background research
- Introduction to the design project brief

Evo

Goals

- Gathering visual / material diary of the forest

Tutoring - Check point 1

Check up

- Site selected
- Design goal defined
- Concepts selected
- Scale / scales in focus defined

Mid-review 1

Check up

- SWOT of site
- Design goal
- Key concepts
- Preliminary design
- Desired impact

Team working

Goals

- Finishing the material for the mid-review 2
- Cleaning up Paja

Woodcha Kucha

Goals

- Group division for the design project
- Getting to know the group members
- Selecting the group members who will use the workshops

Campus tour / Team working

Goals

- Selecting the site that the group works on
- Defining the design approach and the framing of the project
- Selecting the concepts the group will work with
- Selecting the scale / scales the group will focus on

Team working

Goals

- Developing the work based on the feedback
- SWOT analysis of the site
- Framing the design goal
- Defining the key concepts related to design
- Assessing the desired and caused impact of the design

Team working

Goals

- Developing the work based on the feedback
- Selecting the final site, concepts and design goal

Tutoring - Check point 2

Check up

- Final site, concepts, design goal
- Developed design and impact assessment

Mid-review 2

Check up

- Final site
- Final concepts
- Final design goal
- Developed design
- Developed impact assessment

Wrap up and instructions for the following week

Afternoon Sessions



Social Program for the students:
**Weekend trip to Nuuksio
Natural Park**
12 August – Saturday

During the weekend the students will have a break from the summer school academic work and enjoy **social program in the Nuuksio national park** in Espoo. There are two activities reserved in Nuuksio: landscape maintenance or a guided nature walk.

The landscape maintenance activity is a piloted program of regenerative tourism by Haltia Lake Lodge. The students will be introduced to traditional ways of maintaining natural areas and cultural landscapes. The students can try out cutting hay and constructing structures that provide habitat for other species. Haltia Lake Lodge is inviting press to participate in the piloting of the activity and students can inform the summer school if they are willing to be photographed by the press.

The nature walk includes a guided tour to the forests of the national park with introduction into forest conservation, nature activities and everyman's rights.

The students will stay over night at the Haltia Lake Lodge and there is a dinner and sauna reserved for the evening. The Haltia Lake Lodge lounge bar is open until 23:00 and the students can bring with them their own snacks and drinks. There is no grocery store in Nuuksio so your own food should be bought from Helsinki. There is a **sauna** reserved for the evening and the students should bring their own swimsuits and the towels from their hotel rooms in Nuuksio.



Social Program for the students:
**Weekend trip to Nuuksio
Natural Park**
12 August – Saturday

About Nuuksio:

<https://www.visitespoo.fi/en/best-in-espoo/nuuksio-national-park/>

<https://haltia.com/en/>

Saturday 12.8.

12:30 Bus leaves from Töölö Towers

13:00 Arrival at Nuuksio

14:00 Nuuksio activities start

16:30 Rooms available

18:00 Dinner at Villa Solvalla

21.30 Sauna (bring towels from hotel rooms
and swimsuit)

Sunday 13.8.

12:00 Check out from Haltia Lake Lodge

12:15 Bus leaves from Nuuksio

Schedule

Monday 14 Aug

Tuesday 15 Aug

Wednesday 16 Aug

Thursday 17 Aug

Friday 18 Aug

Saturday 19 Aug

Morning Sessions

9:00 Lecture (**Christine Yogiaman & Carlos Cobreros Rodríguez**)
Place: F102 (Väre)

11:15 Tutoring
Check point 3
Place: Studio (Paja)

8:00 Bus leaves from Paja
09:00 Westas sawmill at Koski

9:00 Mid-review 3
Place: Studio (Paja)

10:00 Team working
Discussion on next steps
Place: Paja

9:00 Lecture (**Jeongki Lim David Sánchez Ruano**)
Place: F102 (Väre)

11:15 Tutoring
Check point 5
Place: Studio (Paja)

9:00 Team working
Place: Paja

11:00 Check out from the Hotel
Place: Töölö Towers

Afternoon Sessions

13:00 Team working
16:30 Voluntary tutoring:
end of day check up
Place: Paja

13:00 Visit
Group 1: Nikari Oy
Group 2: KWUM
15:00 Fiskars Village
Onoma exhibition
17:00 Bus leaves from Fiskars

13:00 Team working
Place: Paja

16:00 Tutoring
Check point 4
Place: Studio (Paja)

13:00 Team working
17:00 DL for posters
Place: Paja

13:00 Final review
Place: Väre lobby

Free time

Voluntary:
17-20:00 Workshops open
20:00 Enjoy life outside campus

18:00 Arriving back to Otaniemi

Voluntary:
17-20:00 Workshops open
20:00 Enjoy life outside campus

Voluntary:
17-20:00 Workshops open
The Night of the Arts

17:00 Closing Party in Väre Lobby

Lunch Break (12.00-13.00)

Progress of the student projects

Monday 14 Aug

Tutoring- Check point 3

Check up

- Final design
- Submission plan for final presentation: list of material to be produced

Team working

Goals

- Finalizing the design
- Designing the presentation plan and poster layout
- Producing versions of the final material
- Presenting the design, site and material strategies through texts, diagrams and illustrations

Tuesday 15 Aug

Fiskars

Goals

- Gathering visual / material diary

Wednesday 16 Aug

Mid - review 3

Check up

- Presentation plan & poster layout
- Versions of the final material

Team working

Discussion on next steps

Team working

Goals

- Finalizing the presentation plan and poster layout

Tutoring - Check point 4

Check up

- Presentation plan & Layout, final material

Thursday 17 Aug

Tutoring - Check point 5

Final instructions for the review

Team working

Goals

- Finalizing poster material
- Posters sent to print at 5pm
- Finalizing the models

Friday 18 Aug

Team working

Goals

- Finalizing the exhibition material
- Installing the exhibition
- Cleaning up Paja

Final review

Presentation

- Final material

Saturday 19 Aug

Morning Sessions

Afternoon Sessions



TEACHING SESSIONS

SOME



Designing With Others: Life Beyond Extraction and Commerce

Cynthia Lawson Jaramillo, Caroline Dionne

Wednesday August 9th

How might creative makers reconsider use and function in service of inclusion, belonging, and sustainability? How are design processes transformed when designers are not at the center? How might communities be part of design projects not just as “people with needs”? And how might explorations with wood be useful to prototype those imagined futures? In this session, Professors Dionne and Lawson Jaramillo will guide students through these questions and more with an interactive lecture of case studies, a hands-on workshop, and a side of theory. Drawing from examples and literature in artistic / architectural / design practices, indigenous knowledge, and ecosystems of inclusion and justice, together we will establish the foundations for the summer school projects to exist beyond a transactional designer-user space, and move towards platforms of equity and inclusion.



From the Woods to the Wood, and From the Wood to the Furniture

James Postell

Friday August 11th

This lesson will be presented in 3 parts.

- The first part explores processes and operations that involve harvesting and transporting trees in the woods to the mill for making wooden products for the market (i.e., lumber, veneer, laminated or composite boards).
- The second part highlights the anatomy of a tree and presents descriptive terms and characteristics of lumber, veneer, laminated and composite boards.
- The third part presents interior-furniture projects designed to link and highlight content from the first two parts of the lesson.



Where is the starting point and the finishline of a tree?

Mattias F. Josefsson

Friday August 11th

For the lingonberry, a tree makes the perfect forest floor. For photosynthesis, a leaf is the receptor. For the bird, a branch means a home. For the person seeking shade, a grove means just that. For the boulevard, the tree exaggerates the direction. For the mountains, the forest means a connecting continuous landscape. For the vikings, the ash Yggdrasil, meant something for the nine worlds.

The forest might be deep and unfathomable, without a sense of direction or movement. At points the gaze does not penetrate, but gets lost in the tree canopies. At the same time, the woods could be narrow; it could feel boundless when reaching a clearing hinting of an infinity. Still, we have entered the forest at a point or at a specific tree, suggesting that it has an end. A forest can feel like home, but at the same time, a tree could manifest a shape you have never seen before. Where does a forest end and where does a tree start?



Biophilia – Biophilic Design

Christine Yogiama & Carlos Cobreros

Monday August 14th

The session will be held jointly and collaboratively between Professor Christine Yogiama from SUTD and Professor Carlos Cobreros from Monterrey. The purpose of the session is to introduce the topic "Biophilia" and Biophilic Design and the possible application to the different projects that are being developed within the ARTS Summer School.

The following points will be specifically addressed: Intro to biophilia; Biophilic design and its benefits; Biophilic Design - Biophilic Cities: Biophilic Patterns and their application; Urban Biophilia Indicator; Biophilic Potentialities; Psychological Effects of biophilic environments; BioMimicry Design; Bio-Fabrication.

Pre-reading before the session:

Cobreros et al. Improving Psychological Well-Being in Urban University Districts through Biophilic Design

Cobreros et al. Re-signifying Domestic Space in Times of Confinement Based on Biophilic Design

(texts available in MyCourses > Materials > Pre-reading > Biofilia)



Design For More-than-humans: Biomimetic And Multi-species Interactions

David Sánchez Ruano & Jeongki Lim

Thursday August 17th

Over the past four decades, design disciplines have taken on a new role in solving environmental and climate change problems. Although there is a human-centered position to develop better processes, services, experiences, and technologies to solve these problems, most of the time, they make us an extractive, selfish, and less human species. Increasingly the uniqueness of humanity is challenged by the latest advancement in natural and computer science. So, what would happen if we went beyond a human-centered design? How can we question the supremacy of the human over the nature, and redefine the human in relation to other species, ecosystems and technologies. This session seeks to develop empathy skills and expand design reasoning to create projects that promotes interaction with other species. Intersections of biomimicry, ethology, and post-humanism strategies will be fundamental. If we are willing to co-create with the more-than-human world, the ethic and aesthetic of regeneration need to follow a symbiotic dynamic that contributes to the flourishing of the web of life.



GROUP TASK
the Summer School
design project



Aim

The aim of the two-week workshop is to study the use of wood in design interventions related to living environments (ex. architecture, landscape architecture, interior architecture, design etc.) with the aim of causing no net loss in the natural environments. During the two weeks students will produce design proposals for developing new and existing living environments on the Otaniemi campus that are in balance with nature and the wellbeing of humans and other species.

The material used in focus during the summer school is wood. Through the projects the students will study the sustainable sourcing and use of wood. Wood is a biobased and renewable material. In its natural form wood is a healthy material with no substances that are harmful to people or the environment. However, trees and forests are not only material banks for construction. They provide a habitat for other species and serve vital functions in ecosystems. Sourcing of wood material and wooden construction can cause harm to the environment. The students should study what, if any, is the sustainable way to extract wood from forests and how should it be used in construction to enable new trees to grow back in its place?

The students will work in groups of 4-5 representing various disciplines and institutions. The groups are encouraged to produce designs utilizing the expertise of the various disciplines. The groups will design new or develop existing living environments using wood and in balance with nature. The design brief is open, and the students can find their own approach to living environments. The design solutions can range from student housing to pavilions and recreational areas in the public space.

Groups:

Group 1

Jimin Hong	(Aalto)
Priscila Davila Paez	(Monterrey)
Parisa Mah	(Parsons)
That Mhu Khin	(SUTD)

Group 2

Maribel Salazar	(Aalto)
Tomy Gallo	(Versailles)
Samuele Sala Veni	(Polimi)
Lim Pei Ying	(SUTD)
Jose Pedro Aguirre Lopez	(Monterrey)

Group 3

Helena Vuola	(Aalto)
Daniela Morales Sánchez	(Monterrey)
Jiayu Wu	(Polimi)
Divya Agarwal	(Delft)

Group 4

Aino Nissinen	(Aalto)
Persephone Cooper	(RCA)
Wang Yi Wei	(SUTD)
Christina Sund	(AHO)
Daniela Lozano Rodríguez	(Monterrey)

Group 5

Susanna Lumme	(Aalto)
Zixiang Zhang	(RCA)
Katharine Kim	(Parsons)
Janna van der Jagt	(Delft)

Group 6

Maisa Johansson	(Aalto)
Subin Seol	(RCA)
Józef Karzeł	(WAW)
Emilie Boyard	(Versailles)

Group 7

Kazuma Miyajima	(Aalto)
Daniel Sikorski	(WAW)
Gijs Wels	(Delft)
Sara Fein	(Parsons)
Hannah Summer Lee I-Rei	(SUTD)

Group 8

Reetta Kanervo	(Aalto)
Paweł Odrowąż-Sypniewski	(WAW)
Yetunde Sapp	(Parsons)
Camilla Indelicato	(Polimi)

Group 9

Henry Lång	(Aalto)
Hanju Seo	(RCA)
Duchna Łosiak	(WAW)
Emile Waterkeyn	(SUTD)

Group 10

Maite Santos Alcocer	(Parsons)
Emma Michel	(Polimi)
Barnaba Perepiłyś	(WAW)
Ng Ming Liang	(SUTD)

Two members from group 10 will get the in-depth introduction to the wood workshop.



Hands-on work

The students will have the wood workshops in their use during the summer school, providing the possibility to build scale models or mock-ups and study the material in practice. The students are encouraged to use hand-on work and models as part of their design process and to use the workshops throughout the process.

Each group selects one student from their group that will receive the wood workshop orientation in the beginning of the two weeks on campus. In addition to this every group has one Aalto student who has also received the workshop orientation. These two students can utilize the heavy machinery in the machine halls during the workshop opening hours. The other group members will be introduced to using the hand tools and can participate in producing models etc. outside the machine halls.

The workshops are open 9-20:00 with staff available to assist. The students can ask the staff to use the larger machinery for them if they do not feel comfortable using them independently after the workshop orientation. Only students who have received the orientation can use the equipment in the machine halls.

The students are not encouraged to work at the workshops after 5pm when the summer school program officially ends. However, if the students are in the middle of a process, they can use the evening slots at the workshop to complete their work. The workshops should always be cleaned after they are used and there is 15 minutes before the closing time reserved for clean up every day.



Site

The site of the design projects is the Otaniemi campus. Otaniemi campus is located in the City of Espoo at the border of Helsinki. The campus is located between the Laajalahti bay, Laajalahti nature reserve and the Keilaniemi and Tapiola neighborhoods.

The area of the campus under investigation during the summer school is marked in the map on the left with the thick red line. The southern limit of the campus is the Kuusisaarentie street and in the west the Ring I highway. In the north the campus is bordered by the Laajalahti nature reserve. The students can define where to draw the border of the campus across the nature reserve in their investigations.

The student groups will produce new living environments to the Otaniemi campus. The students can define their own approach to living environments: are the spaces designed for humans or other species? The students will select their own site that they will focus on. The students will define the boundaries of the site where their design interventions are placed.

The design interventions can range from areal plans to landscape design, buildings to urban interventions or human scale spatial interventions to products. Even if the students are designing products or furniture, these should be presented in the context of the campus on a site or sites of the students' choosing. The sites can be located on empty lots, attached to existing buildings or in recreational areas.

The students should study the site and by conducting a SWOT analysis and reflect on the impact of their design on the site and its immediate surroundings.



Scales

The groups will work on three / four scales:

L: area / landscape / ecosystem services

M: site / building / structure

S: detail / product / human or non-human scale

} XL: Global perspective
(how does the project respond
to global challenges?)

The global scale presents how the work is responding to global challenges. The groups are not expected to produce architectural drawings or designs in this scale, but the global scale represents the mission statement of the design. The global perspective should be present in all three other scales in terms of the global responsibility.

The area scale considers the whole Otaniemi campus area. In this scale the students can focus on urban design, landscape development or campus wide ecosystem services for example.

The mid scale considers a selected site on the campus. The scale can focus for example on a building or a structure and its immediate surroundings.

The smallest scale focuses on details, interior architecture, furniture design or products. In this scale the students can present details of structures or one to one mockups of products for example.

Each group determines how much they focus on each scale, but all three scales should be considered in the final design proposal.



Scales: example S scale

Design goal: Insect hotel to provide habitat for pollinators

L: campus wide network of the insect hotels

M: studies of the immediate surroundings

S: 1:1 mockup of the insect hotel

XL: How to provide habitat for pollinators in urban areas through scalable and replicable solutions?

In this example a group focuses on the small scale. The group will design an insect hotel that can be replicated and placed around the campus. The group will make a 1:1 mockup of the hotel and produce material mostly in the detail scale. The group will study the material properties and assembly of the hotel.

In addition to the small scale the group will produce studies of the immediate surroundings of the insect hotel and the qualities of the habitat around it in 1:100 scale on a selected site on campus. The group will study the placement of the hotels and the conditions that make it an optimal habitat for pollinators. In the large scale the group will produce areal plans of the campus in 1:5000 showcasing the positioning of the hotels and the networks they create.



Impact

The groups should be mindful of the impact of their designs. The impact of the projects during the summer school are assessed in terms of **biodiversity** and **sustainable sourcing of materials**. In addition to these the groups can assess the impact of their designs for example in terms of the social impact or carbon footprint as they see appropriate. However, this is not required within the limited time frame of the summer school.

The designs should aim to cause no net loss of natural environments on campus. Impacts caused on the habitat of other species should be compensated or in the best cases balanced with a net positive impact. The groups can determine their net impact on the natural environments of the campus.

Methods of compensation can include providing new habitats in the form of green roofs or planting new trees or urban forests. However, special consideration should be placed on the quality of these new habitats, as "green" surface does not necessarily harbor biodiversity. Methods of regeneration that have net positive impact can include opening up paved surfaces or transforming grasslands into meadows for example.

The impacts should be managed and compensated within the campus area. For example, if a design requires a tree to be cut down on campus the group should study how to compensate this with in Otaniemi and if simply planting a new tree compensates the lost habitat provided by an old fully grown one. If soil needs to be removed from the site to lay down foundations for a building for example, the land masses should be relocated elsewhere within the campus. Additionally, construction waste from demolition etc. should be managed within the campus area. The wood material for the constructions does not have to be sourced from with in the campus area but the groups should study how many trees need to be cut down to produce the materials for the design and how long does it take for new trees of such dimensions to grow back in Finnish forests?

Final material



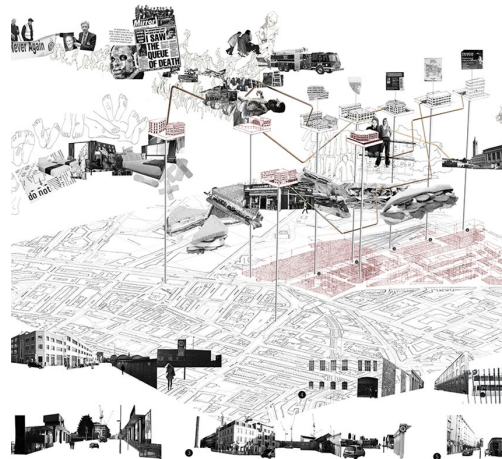
CONCEPT MODELS

- Illustrating the concept of the design
- Mockups of wooden joints, structures, furniture etc.



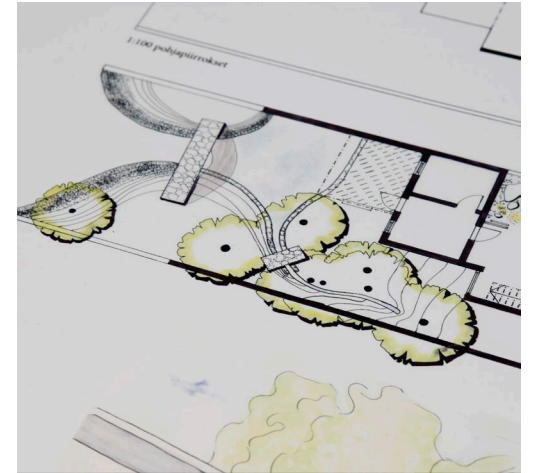
SCALE MODELS

- Illustrating the design in scale
- Of a selected part of the design:
 - area / landscape
 - site / building
 - detail / product / space



CONCEPT POSTER

- Illustrating the challenge the project is responding to
- Illustrating the concepts used in the design (design for disassembly, regenerative design etc.)
- Illustrating the design, site and material strategies



DESIGN POSTER

- Illustrating the design proposal
- Required material
- Additional material



Output

The groups will produce 2-3 posters and at least 2 scale models showcasing their project. The following material is required to be featured in the final output but outside of this the students are free to showcase their work as they see best.

Required material:

- One concept model / mockup
- One scale model of the design
- One poster showcasing the concepts
- One poster showcasing the design proposal, including at least:
 - Main visualization (can be a good photo of a scale model)
 - Area plan 1:5000
 - Floorplan 1:100-1:200
 - Detail or zoom in 1:1 or 1:10-1:50
 - Written description (max 2000 characters)

Additional material (depending on the groups' preference)

- Sections
- Elevations
- Visualizations
- Diagrams



Concept model / Mock-up

The concept model is an abstract model describing the group's concept. The model does not have to be in scale or a "realistic" representation of the design. The model should display the idea behind the group's project.

The groups can make concept models that represent the design strategies of the design, for example "design for disassembly".

Instead of concept models the groups can also produce mock-ups of the design. These can include for example mock-ups of wooden joints or furniture for example. Mock-ups can be also one to one models of a product, an insect hotel for example.

Scale model

The scale model represents the design proposal in scale. The scale model should represent the design with the correct proportions but can be stylized in terms of the material or the detail level.

The groups can decide what scale or part of the design they want to focus on with their scale model. The scale model can represent area, site or detail level designs. Area level models can represent a part of the campus for example with building masses and area level interventions. Site level models can represent for example a building or a structure with its immediate surroundings. Detail models can represent for example a room in scale or a detail section of a structure.

The groups can decide the scale and material used for their models.



Concept poster

The concept poster should present the group's analysis of the site and the local and global challenges that the work is responding to. The poster should present the "mission statement" of the projects and the strategies to reach it. The content of the concept poster can be presented through texts or illustrations. Each group can produce one vertical A1 poster of the concept. The concept poster should include the following:

Design strategy

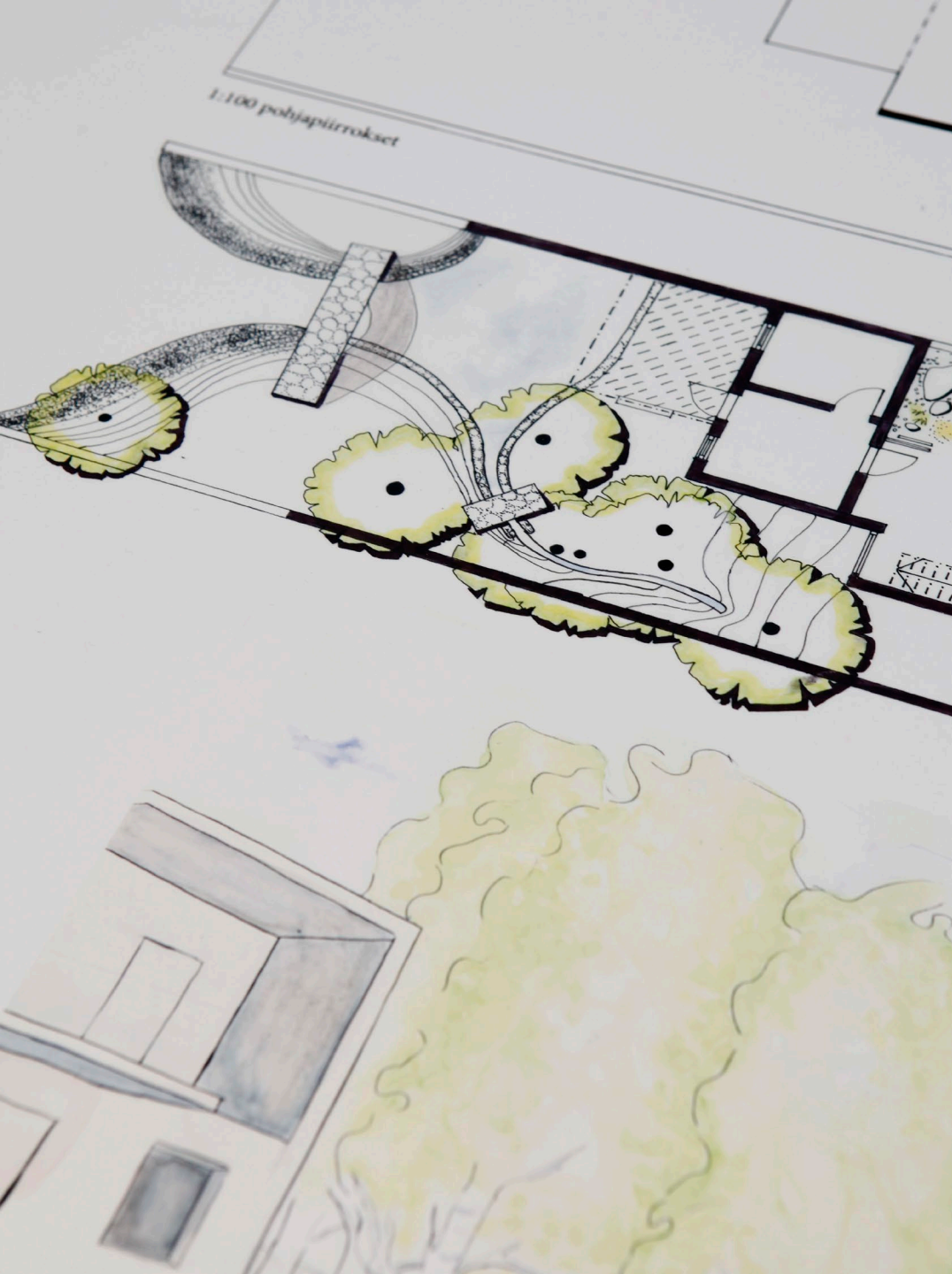
The groups should present what are the global challenges that the project is responding to and how? What are the key concepts related to the project? The groups should evaluate the global impact of their designs. The impact can be related to the biodiversity or the sustainable sourcing of materials. The evaluations of the impact do not have to be exact measurements but rather reflections on the project.

Site strategy

The site strategy should present the group's approach to the site of their choosing. The posters should present the location and the framing of the site under investigation. The groups should present a SWOT analysis of their site and the site-specific challenges and opportunities they are responding to. The groups should present their approach to the site and reflect the impact of their approach on the site and locally: How are the interventions touching the ground? Is there a need to dig to the ground or remove soil? How is the construction impacting the site?

Material strategy

The groups should present what materials they are using, how is the material sourced, processed and treated. How does the material age as it is used? The material strategy does not have to go into exact details but rather present the aim of the group. Is the aim that the aim to use wood in its natural form? How much waste wood is produced in the making of the components?



Design Poster

The design poster should illustrate the group's design proposal and what spatial interventions are planned on campus. The poster should illustrate how the group is considering the different scales from area to site to detail scale.

Each group can make 1-2 design posters. The posters should be in vertical A1 format.

Required material

- Main visualization (can be a good photo of a scale model)
- Area plan 1:5000
- Floorplan 1:100-1:200
- Detail or zoom in 1:1 or 1:10-1:50
- Written description (max 2000 characters)
- Name of the project

Additional material

- Sections
- Elevations
- Visualizations
- Diagrams



Process models and material

The groups are encouraged to conduct hands on work at the workshops throughout the two weeks, not only to produce the final models. The summer school does not place value only on the final product but rather the groups are encouraged to save and exhibit the models, sketches and other material throughout their process.

Rather than focusing only on the final design and material, the groups are encouraged to test out their ideas and develop their thinking. The groups can find their own ways to best illustrate and exhibit their designs. The visual style of the presentation material is free for the students to choose. The goal should be simply to communicate the designs and ideas in an understandable way. All material and artefacts produced during the two weeks are valuable and can be exhibited as part of the final exhibition.

Visual / material diary

On the excursions the students are encouraged to gather material such as photographs or artefacts. The material gathered on the excursions or on campus can be exhibited in the final exhibition as part of the group's process. The material can deal with the forests, wood construction or the campus for example.

When gathering material in forests for example the groups should be mindful of the wellbeing of the environment: living trees or plants should not be harmed.

Reviews

Mid-review 1 Thursday 10. Aug

In five groups (2 groups per 3 teachers)

10 minute presentation + 20 min discussion per group

Material

- Concept model
- Sketches
- Design description text (max 2000 characters)
- Presentation (4 slides at least)
 1. Concepts
 2. Site
 3. Design
 4. Key words

Mid-review 2 Friday 11. Aug

All groups together

10 minute presentation + 10 min discussion per group

Two pre-determined teachers will comment

Material

- Developed concept model
- Preliminary scale model of the design
- Design description text (max 2000 characters)
- Presentation (4 slides at least)
 1. Concepts
 2. Site (site strategy)
 3. Design (design strategy)
 4. Key words

Mid-review 3 Wednesday 16. Aug

In five groups (2 groups per 3 teachers)

10 minute presentation + 20 min discussion per group

Material

- Versions of all the final material

Final review Friday 18. Aug

All groups together

10 minute presentation + 10 min discussion per group

Two pre-determined teachers will comment

Final material

- Concept model
- Scale model
- Concept poster
- Design poster
- Material from throughout the process
 1. Visual / material diary
 2. Process models



Submitting the Material

Submitting the material for mid reviews.

The slides and texts for each review should be submitted to MyCourses by 9pm the evening before the review. Hand drawn sketches and models can be brought directly to the review. The students can select what material they bring to the tutoring sessions, and these do not have to be submitted in MyCourses.

Submitting the final material

The posters have to be submitted to MyCourses **on Thursday 17.8. by 5pm**. The student assistants will print the posters on Thursday evening. The groups will have time to work on the models and set up the exhibition until 12:00 on Friday 18.8.

The groups should **submit their publication material by Friday 18.8. 12:00** to MyCourses. The publication material includes:

- Description text of the work
 - Word document format (not a pdf)
 - max 2000 characters
 - The students should name their project
- All the visual material including plans, diagrams, renderings and other images as separate files
 - PDF or image file format (jpg or png)



ENJOY THE SUMMER SCHOOL!